# 01

# PUNTE EVOLUTE
## HIGH PERFORMANCE DRILLS

**A.01.01**

**Guida alla selezione dell'utensile** **04-14**
Tool selection guide

**A.01.02**

**Gamma prodotti** **15-119**
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# PUNTE EVOLUTE
HIGH PERFORMANCE DRILLS

# A.01.01

## Guida alla selezione dell'utensile
Tool selection guide

| | **Descrizione famiglia prodotto** | Family product description |
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## ▸ HSS-Co

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| RECORD HD<br>p. 08 | **Punte in HSS-Co idonee alla foratura di acciai generici, ghise e materiali non ferrosi.**<br>HSS-Co drills suitable for drilling steels, cast irons and non-ferrous materials. |
| RECORD HD i<br>p. 08 | **Punte in HSS-Co con refrigerazione interna idonee alla foratura di acciai generici ed alto legati, acciai inossidabili, ghise e materiali non ferrosi.**<br>HSS-Co drills with internal coolant suitable for drilling general and high alloy steels, stainless steels, cast irons and non-ferrous materials. |
| RECORD EVO. VA<br>p. 08 | **Punte in HSS-Co idonee alla foratura di acciai inossidabili, leghe di Titanio.**<br>HSS-Co drills suitable for drilling stainless steels, titanium alloys. |

## ▸ HSS-Co-8%

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| NEW RECORD HX<br>p. 08 | **Punte in HSS-Co-8% idonee alla foratura di materiali di acciai ad alta resistenza superiori ai 1200 N/mm².**<br>HSS-Co-8% drills suitable for drilling steels with tensile strength above 1200 N/mm². |

## ▸ HSS-Co-PM

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| RECORD PM<br>p. 09 | **Punte in HSS-Co-PM idonee alla foratura di acciai e ghise.**<br>HSS-Co-PM drills suitable for drilling steels and cast irons. |

## ▸ Metallo Duro Integrale | Solid Carbide

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| RECORD 2S<br>p. 09 | **Punte in metallo duro integrale idonee alla foratura di acciai e ghise.**<br>Solid carbide drills suitable for drilling steels and cast irons. |
| RECORD 2S i<br>p. 09 | **Punte in metallo duro integrale con refrigerazione interna idonee alla foratura di acciai e ghise.**<br>Solid carbide drills with internal coolant for drilling steels and cast irons. |

| | **Descrizione famiglia prodotto** | Family product description |
|---|---|---|

## ▸ Metallo Duro Integrale | Solid Carbide

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|---|---|
| RECORD HP i<br>p. 10 | **Punte in metallo duro integrale ad alto rendimento con refrigerazione interna.**<br>Solid carbide high performance drills with internal coolant. |
| RECORD VA<br>p. 10 | **Punte in metallo duro integrale idonee alla foratura di acciai inossidabili, leghe di Titanio e materiali non ferrosi.**<br>Solid carbide drills suitable for drilling stainless steels, titanium alloys and non-ferrous materials. |
| RECORD VA i<br>p. 10 | **Punte in metallo duro integrale con refrigerazione interna idonee alla foratura di acciai inossidabili, leghe di Titanio e materiali non ferrosi.**<br>Solid carbide drills with internal coolant suitable for drilling stainless steels, titanium alloys and non-ferrous materials. |
| RECORD EVO. TP<br>p. 10 | **Punte in metallo duro integrale idonee alla foratura di acciai temprati.**<br>Solid carbide drills suitable for drilling hardened steels. |
| RECORD DH i<br>p. 11 | **Punte in metallo duro integrale con refrigerazione interna idonee alla foratura profonda di acciai e ghise.**<br>Solid carbide drills with internal coolant suitable for drilling deep holes of steels and cast irons. |
| RECORD DH i ALU<br>p. 11 | **Punte in metallo duro integrale con refrigerazione interna idonee alla foratura profonda di leghe di alluminio e materiali non ferrosi.**<br>Solid carbide drills with internal coolant suitable for drilling deep holes of aluminium alloys and non-ferrous materials. |
| NEW MICRO DRILL<br>p. 12 | **Micro punte in metallo duro integrale idonee alla foratura di acciai, acciai inossidali, ghise e leghe di titanio.**<br>Solid carbide Micro drills suitable for drilling steels, stainless steels, cast irons and titanium alloys. |
| MICRO DRILL i<br>p. 12 | **Micro punte in metallo duro integrale con refrigerazione interna idonee alla foratura profonda di acciai, acciai inossidali e ghise.**<br>Solid carbide Micro drills with internal coolant suitable for drilling deep holes of steels, stainless steels and cast irons. |
| RECORD 4S i<br>p. 12 | **Punte in metallo duro integrale con refrigerazione interna, vano truciolo rettilineo con 4 pattini guida, idonee alla foratura di materiale a truciolo corto come ghise e leghe di alluminio.**<br>Solid carbide drills with internal coolant, straight flute chip with 4 margin lands, suitable for drilling short-chip materials such as cast irons and aluminium alloys. |
| RECORD STL<br>p. 13 | **Punte in metallo duro integrale, profilo STL, idonee per acciai alto legati, acciai inossidabili ferritici, ghise e materiali non ferrosi.**<br>Solide carbide drills, STL geometry, suitable for high alloy steels, ferritic stainless steels, cast irons and non-ferrous materials. |

| | **Descrizione famiglia prodotto** | Family product description |
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## ▸ **Metallo Duro Integrale** | Solid Carbide

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| **RECORD STL i** <br> **p. 13** | **Punte in metallo duro integrale con refrigerazione interna, profilo STL idonee alla foratura profonda di acciai alto legati, acciai inossidabili ferritici, ghise e materiali non ferrosi.** <br><br> Solide carbide drills with internal coolant, STL geometry, suitable for drilling deep holes high alloy steels, ferritic stainless steels, cast irons and non-ferrous materials. |
| **RECORD 3S** <br> **p. 13** | **Punte in metallo duro integrale a 3 eliche per elevati avanzamenti, idonee alla foratura di acciai a truciolo corto, ghise, leghe di alluminio e bronzo.** <br><br> Solid carbide drills, with 3 flutes for high feed rates suitable for drilling short chips steels, cast irons, aluminium and bronze alloys. |
| **RECORD 3BX** <br> **p. 14** | **Punte in metallo duro integrale a 3 eliche per elevati avanzamenti, geometria speciale BX idonee alla foratura di ghise, leghe di Alluminio, materiali non ferrosi e leghe di Titanio.** <br><br> Solid carbide drills, with 3 flutes for high feed rates, special BX geometry suitable for drilling cast irons, Aluminium alloys, non-ferrous materials and Titanium alloys. |

## ▸ **PKD** | PCD

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| **PKD** <br> **p. 14** | **Punte in metallo duro integrale con riporto in diamante policristallino sui taglienti idonee alla foratura di materiali non ferrosi.** <br><br> Solid carbide drills, with polycrystalline diamond coating on cutting edges suitable for drilling non-ferrous materials. |

# PANORAMICA | OVERVIEW

Guida alla selezione dell'utensile | Tool selection guide

| Codice Utensile \| Tool code | | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RECORD HD** | | | | | | | | | | | | | | | | | |
| 6133TN |  | HSS-Co | ≤3xd | HD | 1897 DIN | 130° | TiN | | 1 ÷ 32 | h8 | | | | | - | - | 17 |
| 6143TF |  | HSS-Co | ≤3xd | HD | 1897 DIN | 130° | TiAlN FUTURA | | 1 ÷ 20 | h8 | | | | | - | - | 17 |
| 6208TN |  | HSS-Co | ≤8xd | HD | 338 DIN | 130° | TiN | | 1 ÷ 20 | h8 | | | | | - | - | 19 |
| 6228TF |  | HSS-Co | ≤8xd | HD | 338 DIN | 130° | TiAlN FUTURA | | 1 ÷ 16 | h8 | | | | | - | - | 19 |
| 6248TP |  | HSS-Co | ≤12xd | HD | 340 DIN | 130° | TiN TOP | | 1 ÷ 12 | h8 | | | | | - | - | 21 |
| 6248TF |  | HSS-Co | ≤12xd | HD | 340 DIN | 130° | TiAlN FUTURA | | 1 ÷ 12 | h8 | | | | | - | - | 21 |
| **RECORD EVOLUTION VA** | | | | | | | | | | | | | | | | | |
| 6134TN |  | HSS-Co | ≤3xd | VA | ~1897 DIN | 120-130 140° | TiN | 1835 A | 1 ÷ 20 | h8 | | | - | | | - | 24 |
| 6229TN |  | HSS-Co | ≤8xd | VA | ~338 DIN | 120-130° | TiN | 1835 A | 1 ÷ 20 | h8 | | | - | | | - | 26 |
| **RECORD HD i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | | |
| 6522TN |  | HSS-Co | ≤5xd | HD i | ILIX NORM DIN | 130° | TiN | 1835 E | 5 ÷ 24 | h8 | | | | | | - | 29 |
| **RECORD HX** | | | | | | | | | | | | | | | | | |
| NEW 6205NX |  | HSS-Co 8% | ≤3xd | HX | ILIX NORM DIN | 135° | TiSiN PLUS | | 2 ÷ 12 | h8 | | | | | | | 32 |

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| Codice Utensile \| Tool code | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RECORD PM** | | | | | | | | | | | | | | | | |
| NEW<br>6178NX | HSS-Co PM | ≤3xd | PM | 1897 DIN | 130° | TiSiN | | 2 ÷ 12 | h8 | | | | | - | - | 34 |
| **RECORD 2S** | | | | | | | | | | | | | | | | |
| 6213TN | M.D.I. HM | ≤3xd | 2S | ~1897 DIN | 140° | TiN | | 1,5 ÷ 20 | h7 | | | | | - | - | 37 |
| 6015TF | M.D.I. HM | ≤3xd | 2S | 6537 K DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 39 |
| 6016TF | M.D.I. HM | ≤3xd | 2S | 6537 K DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 41 |
| 6017TT | M.D.I. HM | ≤5xd | 2S | 6537 L DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 43 |
| 6018TT | M.D.I. HM | ≤5xd | 2S | 6537 L DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 45 |
| **RECORD 2S i**<br>**(con fori di lubrificazione interna** \| with internal coolant) | | | | | | | | | | | | | | | | |
| 6011TF | M.D.I. HM | ≤3xd | 2S i | 6537 K DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 47 |
| 6012TF | M.D.I. HM | ≤3xd | 2S i | 6537 K DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 49 |
| 6020TF | M.D.I. HM | ≤5xd | 2S i | 6537 L DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 51 |
| 6021TF | M.D.I. HM | ≤5xd | 2S i | 6537 L DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 53 |

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| Codice Utensile \| Tool code | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RECORD HP i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| 6022TF  | M.D.I. HM | ≤5xd | HP i | 6537 L DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | - | | - | - | - | 56 |
| **RECORD VA** | | | | | | | | | | | | | | | | |
| 6051XB  | M.D.I. HM | ≤3xd | VA | 6537 K DIN | 140° | TiAlN BLUE EVO | 6535 HA | 3 ÷ 16 | m7 | - | | | | | - | 59 |
| **RECORD VA i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| NEW 6050XB  | M.D.I. HM | ≤3xd | VA i | 6537 K DIN | 140° | TiAlN BLUE EVO | 6535 HA | 3 ÷ 14 | m7 | - | | | | | - | 60 |
| 6052XB  | M.D.I. HM | ≤5xd | VA i | 6537 L DIN | 140° | TiAlN BLUE EVO | 6535 HA | 3 ÷ 16 | m7 | - | | | | | - | 61 |
| NEW 6053XB  | M.D.I. HM | ≤8xd | VA i | ILIX NORM DIN | 140° | TiAlN BLUE EVO | 6535 HA | 3 ÷ 16 | m7 | - | | | | | - | 63 |
| **RECORD EVOLUTION TP** | | | | | | | | | | | | | | | | |
| NEW 6014NX  | M.D.I. HM | ≤5xd | TP | ILIX NORM DIN | 140° | TiSiN PLUS | 6535 HA | 3 ÷ 12 | m7 | - | - | | - | - | | 66 |
| **RECORD DH i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| NEW Tech 6025TT  | M.D.I. HM | ≤8xd | DH i | ILIX NORM DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 68 |
| NEW Tech 6026TT  | M.D.I. HM | ≤8xd | DH i | ILIX NORM DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 70 |
| NEW Tech 6027TT  | M.D.I. HM | ≤12xd | DH i | ILIX NORM DIN | 140° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 20 | m7 | | | | - | | | 72 |

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| Codice Utensile \| Tool code | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RECORD DH i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| NEW Tech 6028TT | M.D.I. HM | ≤12xd | DH i | ILIX NORM DIN | 140° | TiAlN FUTURA PLUS | 6535 HE | 3 ÷ 20 | m7 | | | | - | | | 74 |
| 6032TT | M.D.I. HM | ≤15xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 12 | h7 | | | | - | | - | 76 |
| 6034TT | M.D.I. HM | ≤20xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 2 ÷ 12 | h7 | | | | - | | - | 77 |
| NEW 6035TT | M.D.I. HM | ≤25xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 12 | h7 | | | | - | | - | 78 |
| 6036TT | M.D.I. HM | ≤30xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 2 ÷ 12 | h7 | | | | - | | - | 79 |
| 6038TT | M.D.I. HM | ≤40xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 9 | fg6 | | | | - | | - | 80 |
| NEW 6039TT | M.D.I. HM | ≤50xd | DH i | ILIX NORM DIN | 135° | TiAlN FUTURA PLUS | 6535 HA | 3 ÷ 6 | fg6 | | | | - | | - | 81 |
| **RECORD DH i ALU** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| NEW ∅ 6041 | M.D.I. HM | ≤15xd | DH i ALU | ILIX NORM DIN | 137° | - | 6535 HA | 3 ÷ 14 | h7 | - | - | - | | - | - | 83 |
| NEW ∅ 6042 | M.D.I. HM | ≤20xd | DH i ALU | ILIX NORM DIN | 137° | - | 6535 HA | 2 ÷ 12 | h7 | - | - | - | | - | - | 84 |
| NEW 6043 | M.D.I. HM | ≤25xd | DH i ALU | ILIX NORM DIN | 137° | - | 6535 HA | 3 ÷ 12 | h7 | - | - | - | | - | - | 85 |
| NEW ∅ 6044 | M.D.I. HM | ≤30xd | DH i ALU | ILIX NORM DIN | 137° | - | 6535 HA | 2 ÷ 12 | h7 | - | - | - | | - | - | 86 |
| NEW 6045 | M.D.I. HM | ≤40xd | DH i ALU | ILIX NORM DIN | 137° | - | 6535 HA | 4 ÷ 5 | h7 | - | - | - | | - | - | 87 |

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| Codice Utensile \| Tool code | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MICRO DRILL** | | | | | | | | | | | | | | | | |
| NEW 6118TF | M.D.I. HM | ≤5xd | MICRO DRILL | ILIX NORM DIN | 140° | TiAlN FUTURA TOP | 6535 HA | 0,1 ÷ 3 | h7 | | | | - | | | 89 |
| **MICRO DRILL i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| NEW Tech 6019TF | M.D.I. HM | ≤5xd | MICRO DRILL i | ILIX NORM DIN | 135° | TiAlN FUTURA TOP | 6535 HA | 0,8 ÷ 3 | h7 | | | | - | | - | 91 |
| NEW Tech 6029TF | M.D.I. HM | ≤8xd | MICRO DRILL i | ILIX NORM DIN | 135° | TiAlN FUTURA TOP | 6535 HA | 0,8 ÷ 3 | h7 | | | | - | | - | 92 |
| NEW Tech 6030TF | M.D.I. HM | ≤12xd | MICRO DRILL i | ILIX NORM DIN | 135° | TiAlN FUTURA TOP | 6535 HA | 0,8 ÷ 3 | h7 | | | | - | | - | 93 |
| NEW 6136TF | M.D.I. HM | ≤15xd | MICRO DRILL i | ILIX NORM DIN | 135° | TiAlN FUTURA TOP | 6535 HA | 0,8 ÷ 3 | h7 | | | | - | | - | 94 |
| NEW Tech 6031TF | M.D.I. HM | ≤20xd | MICRO DRILL i | ILIX NORM DIN | 135° | TiAlN FUTURA TOP | 6535 HA | 0,8 ÷ 3 | h7 | | | | - | | - | 95 |
| **RECORD 4S i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| 6040F5 | M.D.I. HM | ≤5xd | 4S i | ILIX NORM DIN | 130° | TiAlN FUTURA | 6535 HA | 4 ÷ 20 | m7 | - | - | | | - | - | 97 |
| 6040/5 | M.D.I. HM | ≤5xd | 4S i | ILIX NORM DIN | 130° | - | 6535 HA | 4 ÷ 20 | m7 | - | - | | | - | - | 98 |
| 6040/7 | M.D.I. HM | ≤7xd | 4S i | ILIX NORM DIN | 130° | - | 6535 HA | 5 ÷ 20 | m7 | - | - | | | - | - | 99 |
| 6040/L | M.D.I. HM | ≤10xd | 4S i | ILIX NORM DIN | 130° | - | 6535 HA | 5 ÷ 20 | m7 | - | - | | | - | - | 100 |

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| Codice Utensile \| Tool code | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RECORD STL** | | | | | | | | | | | | | | | | |
| **6236TF**  | M.D.I. HM | ≤5xd | STL | 6537 L DIN | 130° | TiAlN FUTURA | 6535 HA | 3 ÷ 12 | h7 | | | | | | - | **102** |
| **6238TF**  | M.D.I. HM | ≤8xd | STL | ~338 DIN | 130° | TiAlN FUTURA | | 3 ÷ 12 | h7 | | | | | | - | **103** |
| **RECORD STL i** (con fori di lubrificazione interna \| with internal coolant) | | | | | | | | | | | | | | | | |
| **6080TP**  | M.D.I. HM | ≤7/8 xd | STL i | ~338 DIN | 130° | TiN TOP | 6535 HA | 5 ÷ 11.5 | h7 | | | | | | - | **104** |
| **6081TP**  | M.D.I. HM | ≤7/8 xd | STL i | ~338 DIN | 130° | TiN TOP | 6535 HE | 5 ÷ 12 | h7 | | | | | | - | **105** |
| **RECORD 3S** | | | | | | | | | | | | | | | | |
| **6126K**  | M.D.I. HM | ≤3xd | 3S | ~1897 DIN | 150° | - | | 3 ÷ 20 | h7 | | | - | - | | - | **107** |
| **6126TF**  | M.D.I. HM | ≤3xd | 3S | ~1897 DIN | 150° | TiAlN FUTURA | | 3 ÷ 20 | h7 | | | - | - | - | - | **107** |
| **6123K**  | M.D.I. HM | ≤4xd | 3S | ILIX NORM DIN | 150° | - | | 3 ÷ 20 | h7 | - | - | | | - | - | **109** |
| **6123TF**  | M.D.I. HM | ≤4xd | 3S | ILIX NORM DIN | 150° | TiAlN FUTURA | | 3 ÷ 20 | h7 | - | - | | | - | - | **109** |
| **6127K**  | M.D.I. HM | ≤4xd | 3S | ILIX NORM DIN | 150° | - | | 3 ÷ 20 | h7 | - | - | - | | - | - | **111** |
| **6001K**  | M.D.I. HM | ≤5xd | 3S | ILIX NORM DIN | 150° | - | | 3 ÷ 20 | h7 | | | - | - | - | - | **113** |

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| Codice Utensile \| Tool code | | Materiale utensile Tool material | Profondità di taglio Cutting depth | Tipologia Type | DIN | Angolo di testa Point angle | Rivestimento Coating | Codolo Shank | Gamma diametri Diameters range | Tolleranza costruttiva Manufacturing tolerance | P | M | K | N | S | H | Pagina utensile Tool page |
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| **RECORD 3BX** | | | | | | | | | | | | | | | | | |
| **6003K** |  | M.D.I. HM | ≤5xd | 3BX | 6537 L DIN | 130° | - | 6535 HA | 3 ÷ 16 | h7 | - | - | | | | - | **115** |
| **6003TF** |  | M.D.I. HM | ≤5xd | 3BX | 6537 L DIN | 130° | TiAlN FUTURA | 6535 HA | 3 ÷ 16 | h7 | - | - | | | | - | **115** |
| **6002K** |  | M.D.I. HM | ≤5xd | 3BX | 6537 L DIN | 130° | - | 6535 HE | 3 ÷ 16 | h7 | - | - | | | | - | **116** |
| **6002TF** |  | M.D.I. HM | ≤5xd | 3BX | 6537 L DIN | 130° | TiAlN FUTURA | 6535 HE | 3 ÷ 16 | h7 | - | - | | | | - | **116** |
| **PKD** | | | | | | | | | | | | | | | | | |
| **6005** |  | PKD | ≤3xd | PKD | 1897 DIN | 120° | - | | 3 ÷ 20 | h7 | - | - | - | | - | - | **118** |
| **6007** |  | PKD | ≤8xd | PKD | 338 DIN | 120° | - | | 3 ÷ 20 | h7 | - | - | - | | - | - | **119** |

# PUNTE EVOLUTE
## HIGH PERFORMANCE DRILLS

# A.01.02

**Gamma prodotti**
Products range

**Le punte in HSS-Co della serie RECORD HD sono progettate in modo specifico per applicazioni generali su acciai e ghise garantendo elevate prestazioni ed affidabilità di processo.**

HSS-Co drills of the RECORD HD series are specifically designed for general applications on steel and cast iron ensuring high performances and process reliability.

# Record HD

**I RIVESTIMENTI TiN E TiAlN CON TECNICA PVD ASSICURANO UN'ELEVATA RESISTENZA ALL'USURA ED UNA RIDOTTA ADESIONE SU ACCIAI A TRUCIOLO LUNGO.**
TiN and TialN coating, with PVD technique, ensure high wear resistance minimizing adhesion on long chip steels.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO ANCHE NEL CASO IN CUI CI FOSSE UNA BASSA PRESSIONE DEL REFRIGERANTE.**
The specific flute and the polished surface ensure better chip evacuation even in case of low coolant pressure.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Better drilling quality thanks to reduced axial forces compared to traditional HSS drills.

**ECCELLENTE RESISTENZA ALLA COMPRESSIONE E TORSIONE IN CONDIZIONI DI LAVORO INSTABILI.**
Excellent resistance to compression and torsion during unstable working conditions.

**OTTIMA CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

**RIDUZIONE DEGLI STEP DI SCARICO TRUCIOLO RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Reduction of peck drilling compared to traditional HSS drills.

ILIX® PRECISION

# RECORD HD

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

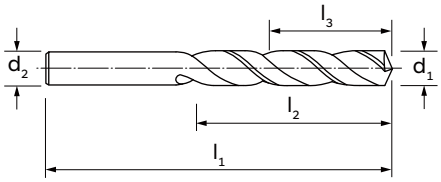
**1897**

**DIN**

≤3xd

130°

P. 122




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | P | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M | M |
| **K** \| **Ghise** \| Cast Irons | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6133TN | 6143TF |
|---|---|---|---|---|---|---|
| **1,0** | 26 | 6 | 5 | 1,0 | ● | ● |
| **1,1** | 28 | 7 | 5 | 1,1 | ● | ● |
| **1,2** | 30 | 8 | 6 | 1,2 | ● | ● |
| **1,3** | 30 | 8 | 6 | 1,3 | ● | ● |
| **1,4** | 32 | 9 | 7 | 1,4 | ● | ● |
| **1,5** | 32 | 9 | 7 | 1,5 | ● | ● |
| **1,6** | 34 | 10 | 8 | 1,6 | ● | ● |
| **1,7** | 34 | 10 | 8 | 1,7 | ● | ● |
| **1,8** | 36 | 11 | 8 | 1,8 | ● | ● |
| **1,9** | 36 | 11 | 8 | 1,9 | ● | ● |
| **2,0** | 38 | 12 | 9 | 2,0 | ● | ● |
| **2,1** | 38 | 12 | 9 | 2,1 | ● | ● |
| **2,2** | 40 | 13 | 10 | 2,2 | ● | ● |
| **2,3** | 40 | 13 | 10 | 2,3 | ● | ● |
| **2,4** | 43 | 14 | 10 | 2,4 | ● | ● |
| **2,5** | 43 | 14 | 10 | 2,5 | ● | ● |
| **2,6** | 43 | 14 | 10 | 2,6 | ● | ● |
| **2,7** | 46 | 16 | 12 | 2,7 | ● | ● |
| **2,8** | 46 | 16 | 12 | 2,8 | ● | ● |
| **2,9** | 46 | 16 | 12 | 2,9 | ● | ● |
| **3,0** | 46 | 16 | 12 | 3,0 | ● | ● |
| **3,1** | 49 | 18 | 13 | 3,1 | ● | ● |
| **3,2** | 49 | 18 | 13 | 3,2 | ● | ● |
| **3,3** | 49 | 18 | 13 | 3,3 | ● | ● |
| **3,4** | 52 | 20 | 15 | 3,4 | ● | ● |
| **3,5** | 52 | 20 | 15 | 3,5 | ● | ● |
| **3,6** | 52 | 20 | 15 | 3,6 | ● | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6133TN | 6143TF |
|---|---|---|---|---|---|---|
| **3,7** | 52 | 20 | 15 | 3,7 | ● | ● |
| **3,8** | 55 | 22 | 16 | 3,8 | ● | ● |
| **3,9** | 55 | 22 | 16 | 3,9 | ● | ● |
| **4,0** | 55 | 22 | 16 | 4,0 | ● | ● |
| **4,1** | 55 | 22 | 16 | 4,1 | ● | ● |
| **4,2** | 55 | 22 | 16 | 4,2 | ● | ● |
| **4,3** | 58 | 24 | 18 | 4,3 | ● | ● |
| **4,4** | 58 | 24 | 17 | 4,4 | ● | ● |
| **4,5** | 58 | 24 | 17 | 4,5 | ● | ● |
| **4,6** | 58 | 24 | 17 | 4,6 | ● | ● |
| **4,7** | 58 | 24 | 17 | 4,7 | ● | ● |
| **4,8** | 62 | 26 | 19 | 4,8 | ● | ● |
| **4,9** | 62 | 26 | 19 | 4,9 | ● | ● |
| **5,0** | 62 | 26 | 19 | 5,0 | ● | ● |
| **5,1** | 62 | 26 | 18 | 5,1 | ● | ● |
| **5,2** | 62 | 26 | 18 | 5,2 | ● | ● |
| **5,3** | 62 | 26 | 18 | 5,3 | ● | ● |
| **5,4** | 66 | 28 | 20 | 5,4 | ● | ● |
| **5,5** | 66 | 28 | 20 | 5,5 | ● | ● |
| **5,6** | 66 | 28 | 20 | 5,6 | ● | ● |
| **5,7** | 66 | 28 | 20 | 5,7 | ● | ● |
| **5,8** | 66 | 28 | 19 | 5,8 | ● | ● |
| **5,9** | 66 | 28 | 19 | 5,9 | ● | ● |
| **6,0** | 66 | 28 | 19 | 6,0 | ● | ● |
| **6,1** | 70 | 31 | 22 | 6,1 | ● | ● |
| **6,2** | 70 | 31 | 22 | 6,2 | ● | ● |
| **6,3** | 70 | 31 | 22 | 6,3 | ● | ● |

01/02 →

ILIX PRECISION

# RECORD HD

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6133TN | 6143TF |
|---|---|---|---|---|---|---|
| **6,4** | 70 | 31 | 21 | 6,4 | ● | ● |
| **6,5** | 70 | 31 | 21 | 6,5 | ● | ● |
| **6,6** | 70 | 31 | 21 | 6,6 | ● | ● |
| **6,7** | 70 | 31 | 21 | 6,7 | ● | ● |
| **6,8** | 74 | 34 | 24 | 6,8 | ● | ● |
| **6,9** | 74 | 34 | 24 | 6,9 | ● | ● |
| **7,0** | 74 | 34 | 24 | 7,0 | ● | ● |
| **7,1** | 74 | 34 | 23 | 7,1 | ● | ● |
| **7,2** | 74 | 34 | 23 | 7,2 | ● | ● |
| **7,3** | 74 | 34 | 23 | 7,3 | ● | ● |
| **7,4** | 74 | 34 | 23 | 7,4 | ● | ● |
| **7,5** | 74 | 34 | 23 | 7,5 | ● | ● |
| **7,6** | 79 | 37 | 26 | 7,6 | ● | ● |
| **7,7** | 79 | 37 | 26 | 7,7 | ● | ● |
| **7,8** | 79 | 37 | 25 | 7,8 | ● | ● |
| **7,9** | 79 | 37 | 25 | 7,9 | ● | ● |
| **8,0** | 79 | 37 | 25 | 8,0 | ● | ● |
| **8,1** | 79 | 37 | 25 | 8,1 | ● | ● |
| **8,2** | 79 | 37 | 25 | 8,2 | ● | ● |
| **8,3** | 79 | 37 | 25 | 8,3 | ● | ● |
| **8,4** | 79 | 37 | 24 | 8,4 | ● | ● |
| **8,5** | 79 | 37 | 24 | 8,5 | ● | ● |
| **8,6** | 84 | 40 | 27 | 8,6 | ● | ● |
| **8,7** | 84 | 40 | 27 | 8,7 | ● | ● |
| **8,8** | 84 | 40 | 27 | 8,8 | ● | ● |
| **8,9** | 84 | 40 | 27 | 8,9 | ● | ● |
| **9,0** | 84 | 40 | 27 | 9,0 | ● | ● |
| **9,1** | 84 | 40 | 26 | 9,1 | ● | ● |
| **9,2** | 84 | 40 | 26 | 9,2 | ● | ● |
| **9,3** | 84 | 40 | 26 | 9,3 | ● | ● |
| **9,4** | 84 | 40 | 26 | 9,4 | ● | ● |
| **9,5** | 84 | 40 | 26 | 9,5 | ● | ● |
| **9,6** | 89 | 43 | 29 | 9,6 | ● | ● |
| **9,7** | 89 | 43 | 29 | 9,7 | ● | ● |
| **9,8** | 89 | 43 | 28 | 9,8 | ● | ● |
| **9,9** | 89 | 43 | 28 | 9,9 | ● | ● |
| **10,0** | 89 | 43 | 28 | 10,0 | ● | ● |
| **10,1** | 89 | 43 | 28 | 10,1 | ● | - |
| **10,2** | 89 | 43 | 28 | 10,2 | ● | ● |
| **10,3** | 89 | 43 | 28 | 10,3 | ● | - |
| **10,5** | 89 | 43 | 27 | 10,5 | ● | ● |
| **10,8** | 95 | 47 | 31 | 10,8 | ● | ● |
| **11,0** | 95 | 47 | 31 | 11,0 | ● | ● |
| **11,2** | 95 | 47 | 30 | 11,2 | ● | ● |
| **11,3** | 95 | 47 | 30 | 11,3 | ● | ● |
| **11,5** | 95 | 47 | 30 | 11,5 | ● | ● |
| **11,8** | 95 | 47 | 29 | 11,8 | ● | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6133TN | 6143TF |
|---|---|---|---|---|---|---|
| **12,0** | 102 | 51 | 33 | 12,0 | ● | ● |
| **12,5** | 102 | 51 | 32 | 12,5 | ● | ● |
| **12,8** | 102 | 51 | 32 | 12,8 | ● | - |
| **13,0** | 102 | 51 | 32 | 13,0 | ● | ● |
| **13,3** | 107 | 54 | 34 | 13,3 | ● | - |
| **13,5** | 107 | 54 | 34 | 13,5 | ● | ● |
| **13,8** | 107 | 54 | 33 | 13,8 | ● | - |
| **14,0** | 107 | 54 | 33 | 14,0 | ● | ● |
| **14,5** | 111 | 56 | 34 | 14,5 | ● | ● |
| **14,8** | 111 | 56 | 34 | 14,8 | ● | - |
| **15,0** | 111 | 56 | 34 | 15,0 | ● | ● |
| **15,3** | 111 | 56 | 33 | 15,3 | ● | - |
| **15,5** | 115 | 58 | 35 | 15,5 | ● | ● |
| **15,8** | 115 | 58 | 34 | 15,8 | ● | - |
| **16,0** | 115 | 58 | 34 | 16,0 | ● | ● |
| **16,5** | 115 | 58 | 33 | 16,5 | ● | ● |
| **17,0** | 119 | 60 | 35 | 17,0 | ● | ● |
| **17,5** | 123 | 60 | 34 | 17,5 | ● | ● |
| **17,8** | 123 | 60 | 33 | 17,8 | ● | - |
| **18,0** | 123 | 62 | 35 | 18,0 | ● | ● |
| **18,5** | 127 | 64 | 36 | 18,5 | ● | ● |
| **19,0** | 127 | 64 | 36 | 19,0 | ● | ● |
| **19,5** | 131 | 66 | 37 | 19,5 | ● | ● |
| **19,7** | 131 | 66 | 37 | 19,7 | ● | - |
| **20,0** | 131 | 66 | 36 | 20,0 | ● | ● |
| **20,5** | 136 | 68 | 37 | 20,0 | ● | - |
| **21,0** | 136 | 68 | 37 | 20,0 | ● | - |
| **21,5** | 141 | 68 | 36 | 20,0 | ● | - |
| **22,0** | 141 | 68 | 35 | 20,0 | ● | - |
| **22,5** | 146 | 72 | 38 | 20,0 | ● | - |
| **23,0** | 146 | 72 | 38 | 20,0 | ● | - |
| **23,5** | 146 | 72 | 37 | 20,0 | ● | - |
| **24,0** | 151 | 75 | 39 | 20,0 | ● | - |
| **24,5** | 151 | 75 | 38 | 20,0 | ● | - |
| **25,0** | 151 | 75 | 38 | 25,0 | ● | - |
| **25,5** | 156 | 78 | 40 | 25,0 | ● | - |
| **26,0** | 156 | 78 | 39 | 25,0 | ● | - |
| **26,5** | 156 | 78 | 38 | 25,0 | ● | - |
| **27,0** | 162 | 81 | 41 | 25,0 | ● | - |
| **27,5** | 162 | 81 | 40 | 25,0 | ● | - |
| **28,0** | 162 | 81 | 39 | 25,0 | ● | - |
| **28,5** | 168 | 84 | 41 | 25,0 | ● | - |
| **29,0** | 168 | 84 | 41 | 25,0 | ● | - |
| **29,5** | 168 | 84 | 40 | 25,0 | ● | - |
| **30,0** | 168 | 84 | 39 | 25,0 | ● | - |
| **31,0** | 168 | 84 | 38 | 25,0 | ● | - |
| **32,0** | 180 | 90 | 42 | 25,0 | ● | - |

02/02

# RECORD HD

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

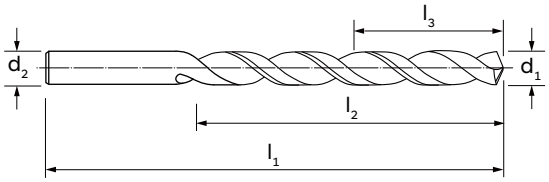
**338**

**DIN**

≤8xd

130°

P. 122




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | P | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M | M |
| **K** \| **Ghise** \| Cast Irons | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6208TN | 6228TF |
|---|---|---|---|---|---|---|
| **1,0** | 34 | 12 | 11 | 1,0 | ● | ● |
| **1,1** | 36 | 14 | 12 | 1,1 | ● | ● |
| **1,2** | 38 | 16 | 14 | 1,2 | ● | ● |
| **1,3** | 38 | 18 | 16 | 1,3 | ● | ● |
| **1,4** | 40 | 18 | 16 | 1,4 | ● | ● |
| **1,5** | 40 | 20 | 18 | 1,5 | ● | ● |
| **1,6** | 43 | 20 | 18 | 1,6 | ● | ● |
| **1,7** | 43 | 22 | 20 | 1,7 | ● | ● |
| **1,8** | 46 | 22 | 19 | 1,8 | ● | ● |
| **1,9** | 46 | 24 | 21 | 1,9 | ● | ● |
| **2,0** | 49 | 24 | 21 | 2,0 | ● | ● |
| **2,1** | 49 | 24 | 21 | 2,1 | ● | ● |
| **2,2** | 53 | 27 | 24 | 2,2 | ● | ● |
| **2,3** | 53 | 27 | 24 | 2,3 | ● | ● |
| **2,4** | 57 | 30 | 26 | 2,4 | ● | ● |
| **2,5** | 57 | 30 | 26 | 2,5 | ● | ● |
| **2,6** | 57 | 30 | 26 | 2,6 | ● | ● |
| **2,7** | 61 | 33 | 29 | 2,7 | ● | ● |
| **2,8** | 61 | 33 | 29 | 2,8 | ● | ● |
| **2,9** | 61 | 33 | 29 | 2,9 | ● | ● |
| **3,0** | 61 | 33 | 29 | 3,0 | ● | ● |
| **3,1** | 65 | 36 | 31 | 3,1 | ● | ● |
| **3,2** | 65 | 36 | 31 | 3,2 | ● | ● |
| **3,3** | 65 | 36 | 31 | 3,3 | ● | ● |
| **3,4** | 70 | 39 | 34 | 3,4 | ● | ● |
| **3,5** | 70 | 39 | 34 | 3,5 | ● | ● |
| **3,6** | 70 | 39 | 34 | 3,6 | ● | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6208TN | 6228TF |
|---|---|---|---|---|---|---|
| **3,7** | 70 | 39 | 34 | 3,7 | ● | ● |
| **3,8** | 75 | 43 | 37 | 3,8 | ● | ● |
| **3,9** | 75 | 43 | 37 | 3,9 | ● | ● |
| **4,0** | 75 | 43 | 37 | 4,0 | ● | ● |
| **4,1** | 75 | 43 | 37 | 4,1 | ● | ● |
| **4,2** | 75 | 43 | 37 | 4,2 | ● | ● |
| **4,3** | 80 | 47 | 41 | 4,3 | ● | ● |
| **4,4** | 80 | 47 | 40 | 4,4 | ● | ● |
| **4,5** | 80 | 47 | 40 | 4,5 | ● | ● |
| **4,6** | 80 | 47 | 40 | 4,6 | ● | ● |
| **4,7** | 80 | 47 | 40 | 4,7 | ● | ● |
| **4,8** | 86 | 52 | 45 | 4,8 | ● | ● |
| **4,9** | 86 | 52 | 45 | 4,9 | ● | ● |
| **5,0** | 86 | 52 | 45 | 5,0 | ● | ● |
| **5,1** | 86 | 52 | 44 | 5,1 | ● | ● |
| **5,2** | 86 | 52 | 44 | 5,2 | ● | ● |
| **5,3** | 86 | 52 | 44 | 5,3 | ● | ● |
| **5,4** | 93 | 57 | 49 | 5,4 | ● | ● |
| **5,5** | 93 | 57 | 49 | 5,5 | ● | ● |
| **5,6** | 93 | 57 | 49 | 5,6 | ● | ● |
| **5,7** | 93 | 57 | 49 | 5,7 | ● | ● |
| **5,8** | 93 | 57 | 48 | 5,8 | ● | ● |
| **5,9** | 93 | 57 | 48 | 5,9 | ● | ● |
| **6,0** | 93 | 57 | 48 | 6,0 | ● | ● |
| **6,1** | 101 | 63 | 54 | 6,1 | ● | ● |
| **6,2** | 101 | 63 | 54 | 6,2 | ● | ● |
| **6,3** | 101 | 63 | 54 | 6,3 | ● | ● |

01/02 →

ILIX PRECISION

# RECORD HD

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6208TN | 6228TF |
|---|---|---|---|---|---|---|
| **6,4** | 101 | 63 | 53 | 6,4 | ● | ● |
| **6,5** | 101 | 63 | 53 | 6,5 | ● | ● |
| **6,6** | 101 | 63 | 53 | 6,6 | ● | ● |
| **6,7** | 101 | 63 | 53 | 6,7 | ● | ● |
| **6,8** | 109 | 69 | 59 | 6,8 | ● | ● |
| **6,9** | 109 | 69 | 59 | 6,9 | ● | ● |
| **7,0** | 109 | 69 | 59 | 7,0 | ● | ● |
| **7,1** | 109 | 69 | 58 | 7,1 | ● | ● |
| **7,2** | 109 | 69 | 58 | 7,2 | ● | ● |
| **7,3** | 109 | 69 | 58 | 7,3 | ● | ● |
| **7,4** | 109 | 69 | 58 | 7,4 | ● | ● |
| **7,5** | 109 | 69 | 58 | 7,5 | ● | ● |
| **7,6** | 117 | 75 | 64 | 7,6 | ● | ● |
| **7,7** | 117 | 75 | 64 | 7,7 | ● | ● |
| **7,8** | 117 | 75 | 63 | 7,8 | ● | ● |
| **7,9** | 117 | 75 | 63 | 7,9 | ● | ● |
| **8,0** | 117 | 75 | 63 | 8,0 | ● | ● |
| **8,1** | 117 | 75 | 63 | 8,1 | ● | ● |
| **8,2** | 117 | 75 | 63 | 8,2 | ● | ● |
| **8,3** | 117 | 75 | 63 | 8,3 | ● | ● |
| **8,4** | 117 | 75 | 62 | 8,4 | ● | ● |
| **8,5** | 117 | 75 | 62 | 8,5 | ● | ● |
| **8,6** | 125 | 81 | 68 | 8,6 | ● | ● |
| **8,7** | 125 | 81 | 68 | 8,7 | ● | ● |
| **8,8** | 125 | 81 | 68 | 8,8 | ● | ● |
| **8,9** | 125 | 81 | 68 | 8,9 | ● | ● |
| **9,0** | 125 | 81 | 68 | 9,0 | ● | ● |
| **9,1** | 125 | 81 | 67 | 9,1 | ● | ● |
| **9,2** | 125 | 81 | 67 | 9,2 | ● | ● |
| **9,3** | 125 | 81 | 67 | 9,3 | ● | ● |
| **9,4** | 125 | 81 | 67 | 9,4 | ● | ● |
| **9,5** | 125 | 81 | 67 | 9,5 | ● | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6208TN | 6228TF |
|---|---|---|---|---|---|---|
| **9,6** | 133 | 87 | 73 | 9,6 | ● | ● |
| **9,7** | 133 | 87 | 73 | 9,7 | ● | ● |
| **9,8** | 133 | 87 | 72 | 9,8 | ● | ● |
| **9,9** | 133 | 87 | 72 | 9,9 | ● | ● |
| **10,0** | 133 | 87 | 72 | 10,0 | ● | ● |
| **10,2** | 133 | 87 | 72 | 10,2 | ● | ● |
| **10,5** | 133 | 87 | 71 | 10,5 | ● | ● |
| **11,0** | 142 | 94 | 78 | 11,0 | ● | ● |
| **11,2** | 142 | 94 | 77 | 11,2 | ● | ● |
| **11,3** | 142 | 94 | 77 | 11,3 | - | ● |
| **11,5** | 142 | 94 | 77 | 11,5 | ● | ● |
| **12,0** | 151 | 101 | 83 | 12,0 | ● | ● |
| **12,5** | 151 | 101 | 82 | 12,5 | ● | ● |
| **13,0** | 151 | 101 | 82 | 13,0 | ● | ● |
| **13,1** | 151 | 101 | 81 | 13,1 | - | ● |
| **13,3** | 160 | 108 | 88 | 13,3 | - | ● |
| **13,5** | 160 | 108 | 88 | 13,5 | ● | ● |
| **14,0** | 160 | 108 | 87 | 14,0 | ● | ● |
| **14,5** | 169 | 114 | 92 | 14,5 | ● | ● |
| **15,0** | 169 | 114 | 92 | 15,0 | ● | ● |
| **15,1** | 178 | 120 | 97 | 15,1 | - | ● |
| **15,3** | 178 | 120 | 97 | 15,3 | - | ● |
| **15,5** | 178 | 120 | 97 | 15,5 | ● | ● |
| **16,0** | 178 | 120 | 96 | 16,0 | ● | ● |
| **16,5** | 184 | 125 | 100 | 16,5 | ● | - |
| **17,0** | 184 | 125 | 100 | 17,0 | ● | - |
| **17,5** | 191 | 130 | 104 | 17,5 | ● | - |
| **18,0** | 191 | 130 | 103 | 18,0 | ● | - |
| **18,5** | 198 | 135 | 107 | 18,5 | ● | - |
| **19,0** | 198 | 135 | 107 | 19,0 | ● | - |
| **19,5** | 205 | 140 | 111 | 19,5 | ● | - |
| **20,0** | 205 | 140 | 110 | 20,0 | ● | - |

02/02

# RECORD HD

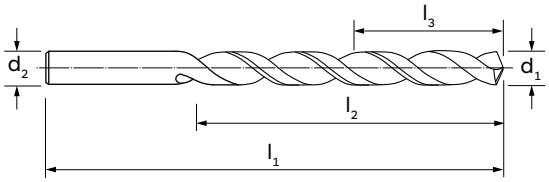
Punte Evolute in HSS-Co | HSS-Co high performance twist drills

**340**
**DIN**

≤12xd

130°

P. 122




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN Top | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | P | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M | M |
| **K** \| **Ghise** \| Cast Irons | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6248TP | 6248TF |
|---|---|---|---|---|---|---|
| **1,0** | 56 | 33 | 32 | 1,0 | ● | ● |
| **1,1** | 60 | 37 | 35 | 1,1 | ● | ● |
| **1,2** | 65 | 41 | 39 | 1,2 | ● | ● |
| **1,3** | 65 | 41 | 39 | 1,3 | ● | ● |
| **1,4** | 70 | 45 | 43 | 1,4 | ● | ● |
| **1,5** | 70 | 45 | 43 | 1,5 | ● | ● |
| **1,6** | 76 | 50 | 48 | 1,6 | ● | ● |
| **1,7** | 76 | 50 | 48 | 1,7 | ● | ● |
| **1,8** | 80 | 53 | 50 | 1,8 | ● | ● |
| **1,9** | 80 | 53 | 50 | 1,9 | ● | ● |
| **2,0** | 85 | 56 | 53 | 2,0 | ● | ● |
| **2,1** | 85 | 56 | 53 | 2,1 | ● | ● |
| **2,2** | 90 | 59 | 56 | 2,2 | ● | ● |
| **2,3** | 90 | 59 | 56 | 2,3 | ● | ● |
| **2,4** | 95 | 62 | 58 | 2,4 | ● | ● |
| **2,5** | 95 | 62 | 58 | 2,5 | ● | ● |
| **2,6** | 95 | 62 | 58 | 2,6 | ● | ● |
| **2,7** | 100 | 66 | 62 | 2,7 | ● | ● |
| **2,8** | 100 | 66 | 62 | 2,8 | ● | ● |
| **2,9** | 100 | 66 | 62 | 2,9 | ● | ● |
| **3,0** | 100 | 66 | 62 | 3,0 | ● | ● |
| **3,1** | 106 | 69 | 64 | 3,1 | ● | ● |
| **3,2** | 106 | 69 | 64 | 3,2 | ● | ● |
| **3,3** | 106 | 69 | 64 | 3,3 | ● | ● |
| **3,4** | 112 | 73 | 68 | 3,4 | ● | ● |
| **3,5** | 112 | 73 | 68 | 3,5 | ● | ● |
| **3,6** | 112 | 73 | 68 | 3,6 | ● | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6248TP | 6248TF |
|---|---|---|---|---|---|---|
| **3,7** | 112 | 73 | 68 | 3,7 | ● | ● |
| **3,8** | 119 | 78 | 72 | 3,8 | ● | ● |
| **3,9** | 119 | 78 | 72 | 3,9 | ● | ● |
| **4,0** | 119 | 78 | 72 | 4,0 | ● | ● |
| **4,1** | 119 | 78 | 72 | 4,1 | ● | ● |
| **4,2** | 119 | 78 | 72 | 4,2 | ● | ● |
| **4,3** | 126 | 82 | 76 | 4,3 | ● | ● |
| **4,4** | 126 | 82 | 75 | 4,4 | ● | ● |
| **4,5** | 126 | 82 | 75 | 4,5 | ● | ● |
| **4,6** | 126 | 82 | 75 | 4,6 | ● | ● |
| **4,7** | 126 | 82 | 75 | 4,7 | ● | ● |
| **4,8** | 132 | 87 | 80 | 4,8 | ● | ● |
| **4,9** | 132 | 87 | 80 | 4,9 | ● | ● |
| **5,0** | 132 | 87 | 80 | 5,0 | ● | ● |
| **5,1** | 132 | 87 | 79 | 5,1 | ● | ● |
| **5,2** | 132 | 87 | 79 | 5,2 | ● | ● |
| **5,3** | 132 | 87 | 79 | 5,3 | ● | ● |
| **5,4** | 139 | 91 | 83 | 5,4 | ● | ● |
| **5,5** | 139 | 91 | 83 | 5,5 | ● | ● |
| **5,6** | 139 | 91 | 83 | 5,6 | ● | ● |
| **5,7** | 139 | 91 | 83 | 5,7 | ● | ● |
| **5,8** | 139 | 91 | 82 | 5,8 | ● | ● |
| **5,9** | 139 | 91 | 82 | 5,9 | ● | ● |
| **6,0** | 139 | 91 | 82 | 6,0 | ● | ● |
| **6,1** | 148 | 97 | 88 | 6,1 | ● | ● |
| **6,2** | 148 | 97 | 88 | 6,2 | ● | ● |
| **6,3** | 148 | 97 | 88 | 6,3 | ● | ● |

01/02 →

# RECORD HD

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6248TP | 6248TF |
|---|---|---|---|---|---|---|
| **6,4** | 148 | 97 | 87 | 6,4 | ● | ● |
| **6,5** | 148 | 97 | 87 | 6,5 | ● | ● |
| **6,6** | 148 | 97 | 87 | 6,6 | ● | ● |
| **6,7** | 148 | 97 | 87 | 6,7 | ● | ● |
| **6,8** | 156 | 102 | 92 | 6,8 | ● | ● |
| **6,9** | 156 | 102 | 92 | 6,9 | ● | ● |
| **7,0** | 156 | 102 | 92 | 7,0 | ● | ● |
| **7,1** | 156 | 102 | 91 | 7,1 | ● | ● |
| **7,2** | 156 | 102 | 91 | 7,2 | ● | ● |
| **7,3** | 156 | 102 | 91 | 7,3 | ● | ● |
| **7,4** | 156 | 102 | 91 | 7,4 | ● | ● |
| **7,5** | 156 | 102 | 91 | 7,5 | ● | ● |
| **7,6** | 165 | 109 | 98 | 7,6 | ● | ● |
| **7,7** | 165 | 109 | 98 | 7,7 | ● | ● |
| **7,8** | 165 | 109 | 97 | 7,8 | ● | ● |
| **7,9** | 165 | 109 | 97 | 7,9 | ● | ● |
| **8,0** | 165 | 109 | 97 | 8,0 | ● | ● |
| **8,1** | 165 | 109 | 97 | 8,1 | ● | ● |
| **8,2** | 165 | 109 | 97 | 8,2 | ● | ● |
| **8,3** | 165 | 109 | 97 | 8,3 | ● | ● |
| **8,4** | 165 | 109 | 96 | 8,4 | ● | ● |
| **8,5** | 165 | 109 | 96 | 8,5 | ● | ● |
| **8,6** | 175 | 115 | 102 | 8,6 | ● | ● |
| **8,7** | 175 | 115 | 102 | 8,7 | ● | ● |
| **8,8** | 175 | 115 | 102 | 8,8 | ● | ● |
| **8,9** | 175 | 115 | 102 | 8,9 | ● | ● |
| **9,0** | 175 | 115 | 102 | 9,0 | ● | ● |
| **9,1** | 175 | 115 | 101 | 9,1 | ● | ● |
| **9,2** | 175 | 115 | 101 | 9,2 | ● | ● |
| **9,3** | 175 | 115 | 101 | 9,3 | ● | ● |
| **9,4** | 175 | 115 | 101 | 9,4 | ● | ● |
| **9,5** | 175 | 115 | 101 | 9,5 | ● | ● |
| **9,6** | 184 | 121 | 107 | 9,6 | ● | ● |
| **9,7** | 184 | 121 | 107 | 9,7 | ● | ● |
| **9,8** | 184 | 121 | 106 | 9,8 | ● | ● |
| **9,9** | 184 | 121 | 106 | 9,9 | ● | ● |
| **10,0** | 184 | 121 | 106 | 10,0 | ● | ● |
| **10,2** | 184 | 121 | 106 | 10,2 | ● | ● |
| **10,5** | 184 | 121 | 105 | 10,5 | ● | ● |
| **11,0** | 195 | 128 | 112 | 11,0 | ● | ● |
| **11,5** | 195 | 128 | 111 | 11,5 | ● | ● |
| **12,0** | 205 | 134 | 116 | 12,0 | ● | ● |

02/02

**Le punte in HSS-Co della serie RECORD EVOLUTION VA sono progettate in modo specifico per le lavorazioni degli acciai inossidabili e leghe di Titanio garantendo elevate prestazioni ed affidabilità.**

HSS-Co drills of the RECORD EVOLUTION VA series are specifically designed for machining stainless steels and Titanium alloys, ensuring high performances and reliability.

# Record EVOLUTION VA

**IL RIVESTIMENTO TiN CON TECNICA PVD ASSICURA UN'ELEVATA RESISTENZA ALL'USURA ED UNA RIDOTTA ADESIONE SU MATERIALI ABRASIVI.**
TiN coating, with PVD technique, ensures high wear resistance minimizing adhesion on abrasive materials.

**LA GAMMA È DISPONIBILE IN STANDARDIZZAZIONE DIN 1897 E DIN 338.**
The range is available in DIN 1897 and DIN 338.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO ANCHE NEL CASO IN CUI CI FOSSE UNA BASSA PRESSIONE DEL REFRIGERANTE.**
Specific flute and polished surface to ensure better chip evacuation even in case of low coolant pressure.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Better drilling quality thanks to reduced axial forces compared to traditional HSS drills.

**ECCELLENTE RESISTENZA ALLA COMPRESSIONE E TORSIONE IN CONDIZIONI DI LAVORO INSTABILI.**
Excellent resistance to compression and torsion during unstable working conditions.

**OTTIMA CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

**RIDUZIONE DEGLI STEP DI SCARICO TRUCIOLO RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Reduction of peck drilling compared to traditional HSS drills.

ILIX® PRECISION

ILIX PRECISION

# RECORD EVOLUTION VA

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

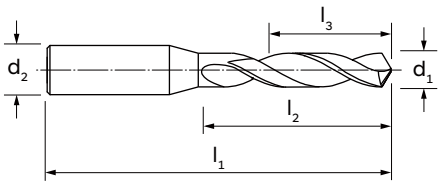
~1897
DIN

≤3xd

1835 A

120° 130° 140°

P. 122




| | |
|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | | 6134TN |
|---|---|---|---|---|---|---|---|
| **1,0** | 38 | 6 | 5 | 3 | 140° | | ● |
| **1,1** | 39 | 7 | 5 | 3 | 140° | | ● |
| **1,2** | 40 | 8 | 6 | 3 | 140° | | ● |
| **1,3** | 40 | 8 | 6 | 3 | 140° | | ● |
| **1,4** | 41 | 9 | 7 | 3 | 140° | | ● |
| **1,5** | 41 | 9 | 7 | 3 | 140° | | ● |
| **1,6** | 42 | 10 | 8 | 3 | 140° | | ● |
| **1,7** | 42 | 10 | 8 | 3 | 140° | | ● |
| **1,8** | 43 | 11 | 8 | 3 | 140° | | ● |
| **1,9** | 43 | 11 | 8 | 3 | 140° | | ● |
| **2,0** | 44 | 12 | 9 | 3 | 130° | | ● |
| **2,1** | 44 | 12 | 9 | 3 | 130° | | ● |
| **2,2** | 45 | 13 | 10 | 3 | 130° | | ● |
| **2,3** | 45 | 13 | 10 | 3 | 130° | | ● |
| **2,4** | 46 | 14 | 10 | 3 | 130° | | ● |
| **2,5** | 46 | 14 | 10 | 3 | 130° | | ● |
| **2,6** | 46 | 14 | 10 | 3 | 130° | | ● |
| **2,7** | 46 | 16 | 12 | 3 | 130° | | ● |
| **2,8** | 46 | 16 | 12 | 3 | 130° | | ● |
| **2,9** | 46 | 16 | 12 | 3 | 130° | | ● |
| **3,0** | 46 | 16 | 12 | 3 | 130° | | ● |
| **3,1** | 49 | 18 | 13 | 4 | 130° | | ● |
| **3,2** | 49 | 18 | 13 | 4 | 130° | | ● |
| **3,3** | 49 | 18 | 13 | 4 | 130° | | ● |
| **3,4** | 52 | 20 | 15 | 4 | 130° | | ● |
| **3,5** | 52 | 20 | 15 | 4 | 130° | | ● |
| **3,6** | 52 | 20 | 15 | 4 | 130° | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | | 6134TN |
|---|---|---|---|---|---|---|---|
| **3,7** | 52 | 20 | 15 | 4 | 130° | | ● |
| **3,8** | 55 | 22 | 16 | 4 | 130° | | ● |
| **3,9** | 55 | 22 | 16 | 4 | 130° | | ● |
| **4,0** | 55 | 22 | 16 | 4 | 130° | | ● |
| **4,1** | 55 | 22 | 16 | 6 | 120° | | ● |
| **4,2** | 55 | 22 | 16 | 6 | 120° | | ● |
| **4,3** | 58 | 24 | 18 | 6 | 120° | | ● |
| **4,4** | 58 | 24 | 17 | 6 | 120° | | ● |
| **4,5** | 58 | 24 | 17 | 6 | 120° | | ● |
| **4,6** | 58 | 24 | 17 | 6 | 120° | | ● |
| **4,7** | 58 | 24 | 17 | 6 | 120° | | ● |
| **4,8** | 62 | 26 | 19 | 6 | 120° | | ● |
| **4,9** | 62 | 26 | 19 | 6 | 120° | | ● |
| **5,0** | 62 | 26 | 19 | 6 | 120° | | ● |
| **5,1** | 62 | 26 | 18 | 6 | 120° | | ● |
| **5,2** | 62 | 26 | 18 | 6 | 120° | | ● |
| **5,3** | 62 | 26 | 18 | 6 | 120° | | ● |
| **5,4** | 66 | 28 | 20 | 6 | 120° | | ● |
| **5,5** | 66 | 28 | 20 | 6 | 120° | | ● |
| **5,6** | 66 | 28 | 20 | 6 | 120° | | ● |
| **5,7** | 66 | 28 | 20 | 6 | 120° | | ● |
| **5,8** | 66 | 28 | 19 | 6 | 120° | | ● |
| **5,9** | 66 | 28 | 19 | 6 | 120° | | ● |
| **6,0** | 66 | 28 | 19 | 6 | 120° | | ● |
| **6,1** | 70 | 31 | 22 | 8 | 120° | | ● |
| **6,2** | 70 | 31 | 22 | 8 | 120° | | ● |
| **6,3** | 70 | 31 | 22 | 8 | 120° | | ● |

01/02 →

# RECORD EVOLUTION VA

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | 6134TN |
|---|---|---|---|---|---|---|
| **6,4** | 70 | 31 | 21 | 8 | 120° | ● |
| **6,5** | 70 | 31 | 21 | 8 | 120° | ● |
| **6,6** | 70 | 31 | 21 | 8 | 120° | ● |
| **6,7** | 70 | 31 | 21 | 8 | 120° | ● |
| **6,8** | 74 | 34 | 24 | 8 | 120° | ● |
| **6,9** | 74 | 34 | 24 | 8 | 120° | ● |
| **7,0** | 74 | 34 | 24 | 8 | 120° | ● |
| **7,1** | 74 | 34 | 23 | 8 | 120° | ● |
| **7,2** | 74 | 34 | 23 | 8 | 120° | ● |
| **7,3** | 74 | 34 | 23 | 8 | 120° | ● |
| **7,4** | 74 | 34 | 23 | 8 | 120° | ● |
| **7,5** | 74 | 34 | 23 | 8 | 120° | ● |
| **7,6** | 79 | 37 | 26 | 8 | 120° | ● |
| **7,7** | 79 | 37 | 26 | 8 | 120° | ● |
| **7,8** | 79 | 37 | 25 | 8 | 120° | ● |
| **7,9** | 79 | 37 | 25 | 8 | 120° | ● |
| **8,0** | 79 | 37 | 25 | 8 | 120° | ● |
| **8,1** | 79 | 37 | 25 | 10 | 120° | ● |
| **8,2** | 79 | 37 | 25 | 10 | 120° | ● |
| **8,3** | 79 | 37 | 25 | 10 | 120° | ● |
| **8,4** | 79 | 37 | 24 | 10 | 120° | ● |
| **8,5** | 79 | 37 | 24 | 10 | 120° | ● |
| **8,6** | 84 | 40 | 27 | 10 | 120° | ● |
| **8,7** | 84 | 40 | 27 | 10 | 120° | ● |
| **8,8** | 84 | 40 | 27 | 10 | 120° | ● |
| **8,9** | 84 | 40 | 27 | 10 | 120° | ● |
| **9,0** | 84 | 40 | 27 | 10 | 120° | ● |
| **9,1** | 84 | 40 | 26 | 10 | 120° | ● |
| **9,2** | 84 | 40 | 26 | 10 | 120° | ● |
| **9,3** | 84 | 40 | 26 | 10 | 120° | ● |
| **9,4** | 84 | 40 | 26 | 10 | 120° | ● |
| **9,5** | 84 | 40 | 26 | 10 | 120° | ● |
| **9,6** | 89 | 43 | 29 | 10 | 120° | ● |
| **9,7** | 89 | 43 | 29 | 10 | 120° | ● |
| **9,8** | 89 | 43 | 28 | 10 | 120° | ● |
| **9,9** | 89 | 43 | 28 | 10 | 120° | ● |
| **10,0** | 89 | 43 | 28 | 10 | 120° | ● |
| **10,1** | 89 | 43 | 28 | 10 | 120° | ● |
| **10,2** | 89 | 43 | 28 | 10 | 120° | ● |
| **10,3** | 89 | 43 | 28 | 10 | 120° | ● |
| **10,4** | 89 | 43 | 27 | 10 | 120° | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | 6134TN |
|---|---|---|---|---|---|---|
| **10,5** | 89 | 43 | 27 | 10 | 120° | ● |
| **10,6** | 89 | 43 | 27 | 12 | 120° | ● |
| **10,7** | 95 | 47 | 31 | 12 | 120° | ● |
| **10,8** | 95 | 47 | 31 | 12 | 120° | ● |
| **10,9** | 95 | 47 | 31 | 12 | 120° | ● |
| **11,0** | 95 | 47 | 31 | 12 | 120° | ● |
| **11,1** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,2** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,3** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,4** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,5** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,6** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,7** | 95 | 47 | 30 | 12 | 120° | ● |
| **11,8** | 95 | 47 | 29 | 12 | 120° | ● |
| **11,9** | 102 | 51 | 33 | 12 | 120° | ● |
| **12,0** | 102 | 51 | 33 | 12 | 120° | ● |
| **12,1** | 102 | 51 | 33 | 12 | 120° | ● |
| **12,2** | 102 | 51 | 33 | 12 | 120° | ● |
| **12,3** | 102 | 51 | 33 | 12 | 120° | ● |
| **12,4** | 102 | 51 | 32 | 12 | 120° | ● |
| **12,5** | 102 | 51 | 32 | 12 | 120° | ● |
| **12,6** | 102 | 51 | 32 | 12 | 120° | ● |
| **12,7** | 102 | 51 | 32 | 12 | 120° | ● |
| **12,8** | 102 | 51 | 32 | 12 | 120° | ● |
| **12,9** | 102 | 51 | 32 | 12 | 120° | ● |
| **13,0** | 102 | 51 | 32 | 12 | 120° | ● |
| **13,5** | 107 | 54 | 34 | 16 | 120° | ● |
| **14,0** | 107 | 54 | 33 | 16 | 120° | ● |
| **14,5** | 111 | 56 | 34 | 16 | 120° | ● |
| **15,0** | 111 | 56 | 34 | 16 | 120° | ● |
| **15,5** | 115 | 58 | 35 | 16 | 120° | ● |
| **16,0** | 115 | 58 | 34 | 16 | 120° | ● |
| **16,5** | 119 | 60 | 35 | 20 | 120° | ● |
| **17,0** | 119 | 60 | 35 | 20 | 120° | ● |
| **17,5** | 123 | 62 | 36 | 20 | 120° | ● |
| **18,0** | 123 | 62 | 35 | 20 | 120° | ● |
| **18,5** | 127 | 64 | 36 | 20 | 120° | ● |
| **19,0** | 127 | 64 | 36 | 20 | 120° | ● |
| **19,5** | 131 | 66 | 37 | 20 | 120° | ● |
| **20,0** | 131 | 66 | 36 | 20 | 120° | ● |

02/02

ILIX PRECISION

# RECORD EVOLUTION VA

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

~338
DIN

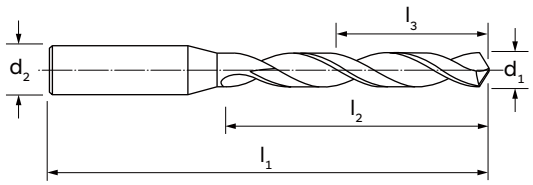
≤8xd

1835 A

120°

130°

P. 122




| | |
|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | | 6229TN |
|---|---|---|---|---|---|---|---|
| **1,0** | 41 | 12 | 11 | 3 | 130° | | ● |
| **1,1** | 43 | 14 | 12 | 3 | 130° | | ● |
| **1,2** | 44 | 16 | 14 | 3 | 130° | | ● |
| **1,3** | 44 | 16 | 14 | 3 | 130° | | ● |
| **1,4** | 46 | 18 | 16 | 3 | 130° | | ● |
| **1,5** | 46 | 18 | 16 | 3 | 130° | | ● |
| **1,6** | 47 | 20 | 18 | 3 | 130° | | ● |
| **1,7** | 47 | 20 | 18 | 3 | 130° | | ● |
| **1,8** | 49 | 22 | 19 | 3 | 130° | | ● |
| **1,9** | 49 | 22 | 19 | 3 | 130° | | ● |
| **2,0** | 49 | 24 | 21 | 3 | 130° | | ● |
| **2,1** | 49 | 24 | 21 | 3 | 130° | | ● |
| **2,2** | 53 | 28 | 25 | 3 | 130° | | ● |
| **2,3** | 53 | 28 | 25 | 3 | 130° | | ● |
| **2,4** | 57 | 31 | 27 | 3 | 130° | | ● |
| **2,5** | 57 | 31 | 27 | 3 | 130° | | ● |
| **2,6** | 57 | 31 | 27 | 3 | 130° | | ● |
| **2,7** | 61 | 34 | 30 | 3 | 130° | | ● |
| **2,8** | 61 | 34 | 30 | 3 | 130° | | ● |
| **2,9** | 61 | 34 | 30 | 3 | 130° | | ● |
| **3,0** | 61 | 33 | 29 | 3 | 130° | | ● |
| **3,1** | 65 | 36 | 31 | 4 | 130° | | ● |
| **3,2** | 65 | 36 | 31 | 4 | 130° | | ● |
| **3,3** | 65 | 36 | 31 | 4 | 130° | | ● |
| **3,4** | 70 | 39 | 34 | 4 | 130° | | ● |
| **3,5** | 70 | 39 | 34 | 4 | 130° | | ● |
| **3,6** | 70 | 39 | 34 | 4 | 130° | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | | 6229TN |
|---|---|---|---|---|---|---|---|
| **3,7** | 70 | 39 | 34 | 4 | 130° | | ● |
| **3,8** | 75 | 43 | 37 | 4 | 130° | | ● |
| **3,9** | 75 | 43 | 37 | 4 | 130° | | ● |
| **4,0** | 75 | 43 | 37 | 4 | 130° | | ● |
| **4,1** | 75 | 43 | 37 | 6 | 120° | | ● |
| **4,2** | 75 | 43 | 37 | 6 | 120° | | ● |
| **4,3** | 80 | 47 | 41 | 6 | 120° | | ● |
| **4,4** | 80 | 47 | 40 | 6 | 120° | | ● |
| **4,5** | 80 | 47 | 40 | 6 | 120° | | ● |
| **4,6** | 80 | 47 | 40 | 6 | 120° | | ● |
| **4,7** | 80 | 47 | 40 | 6 | 120° | | ● |
| **4,8** | 86 | 52 | 45 | 6 | 120° | | ● |
| **4,9** | 86 | 52 | 45 | 6 | 120° | | ● |
| **5,0** | 86 | 52 | 45 | 6 | 120° | | ● |
| **5,1** | 86 | 52 | 44 | 6 | 120° | | ● |
| **5,2** | 86 | 52 | 44 | 6 | 120° | | ● |
| **5,3** | 86 | 52 | 44 | 6 | 120° | | ● |
| **5,4** | 93 | 57 | 49 | 6 | 120° | | ● |
| **5,5** | 93 | 57 | 49 | 6 | 120° | | ● |
| **5,6** | 93 | 57 | 49 | 6 | 120° | | ● |
| **5,7** | 93 | 57 | 49 | 6 | 120° | | ● |
| **5,8** | 93 | 57 | 48 | 6 | 120° | | ● |
| **5,9** | 93 | 57 | 48 | 6 | 120° | | ● |
| **6,0** | 93 | 57 | 48 | 6 | 120° | | ● |
| **6,1** | 101 | 63 | 54 | 8 | 120° | | ● |
| **6,2** | 101 | 63 | 54 | 8 | 120° | | ● |
| **6,3** | 101 | 63 | 54 | 8 | 120° | | ● |

01/02 →

# RECORD EVOLUTION VA

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | 6229TN |
|---|---|---|---|---|---|---|
| **6,4** | 101 | 63 | 53 | 8 | 120° | ● |
| **6,5** | 101 | 63 | 53 | 8 | 120° | ● |
| **6,6** | 101 | 63 | 53 | 8 | 120° | ● |
| **6,7** | 101 | 63 | 53 | 8 | 120° | ● |
| **6,8** | 109 | 69 | 59 | 8 | 120° | ● |
| **6,9** | 109 | 69 | 59 | 8 | 120° | ● |
| **7,0** | 109 | 69 | 59 | 8 | 120° | ● |
| **7,1** | 109 | 69 | 58 | 8 | 120° | ● |
| **7,2** | 109 | 69 | 58 | 8 | 120° | ● |
| **7,3** | 109 | 69 | 58 | 8 | 120° | ● |
| **7,4** | 109 | 69 | 58 | 8 | 120° | ● |
| **7,5** | 109 | 69 | 58 | 8 | 120° | ● |
| **7,6** | 117 | 75 | 64 | 8 | 120° | ● |
| **7,7** | 117 | 75 | 64 | 8 | 120° | ● |
| **7,8** | 117 | 75 | 63 | 8 | 120° | ● |
| **7,9** | 117 | 75 | 63 | 8 | 120° | ● |
| **8,0** | 117 | 75 | 63 | 8 | 120° | ● |
| **8,1** | 117 | 75 | 63 | 10 | 120° | ● |
| **8,2** | 117 | 75 | 63 | 10 | 120° | ● |
| **8,3** | 117 | 75 | 63 | 10 | 120° | ● |
| **8,4** | 117 | 75 | 62 | 10 | 120° | ● |
| **8,5** | 117 | 75 | 62 | 10 | 120° | ● |
| **8,6** | 125 | 81 | 68 | 10 | 120° | ● |
| **8,7** | 125 | 81 | 68 | 10 | 120° | ● |
| **8,8** | 125 | 81 | 68 | 10 | 120° | ● |
| **8,9** | 125 | 81 | 68 | 10 | 120° | ● |
| **9,0** | 125 | 81 | 68 | 10 | 120° | ● |
| **9,1** | 125 | 81 | 67 | 10 | 120° | ● |
| **9,2** | 125 | 81 | 67 | 10 | 120° | ● |
| **9,3** | 125 | 81 | 67 | 10 | 120° | ● |
| **9,4** | 125 | 81 | 67 | 10 | 120° | ● |
| **9,5** | 125 | 81 | 67 | 10 | 120° | ● |
| **9,6** | 133 | 87 | 73 | 10 | 120° | ● |
| **9,7** | 133 | 87 | 73 | 10 | 120° | ● |
| **9,8** | 133 | 87 | 72 | 10 | 120° | ● |
| **9,9** | 133 | 87 | 72 | 10 | 120° | ● |
| **10,0** | 133 | 87 | 72 | 10 | 120° | ● |
| **10,1** | 133 | 87 | 72 | 10 | 120° | ● |
| **10,2** | 133 | 87 | 72 | 10 | 120° | ● |
| **10,3** | 133 | 87 | 72 | 10 | 120° | ● |
| **10,4** | 133 | 87 | 71 | 10 | 120° | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h7) | | 6229TN |
|---|---|---|---|---|---|---|
| **10,5** | 133 | 87 | 71 | 10 | 120° | ● |
| **10,6** | 133 | 87 | 71 | 12 | 120° | ● |
| **10,7** | 142 | 94 | 78 | 12 | 120° | ● |
| **10,8** | 142 | 94 | 78 | 12 | 120° | ● |
| **10,9** | 142 | 94 | 78 | 12 | 120° | ● |
| **11,0** | 142 | 94 | 78 | 12 | 120° | ● |
| **11,1** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,2** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,3** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,4** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,5** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,6** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,7** | 142 | 94 | 77 | 12 | 120° | ● |
| **11,8** | 142 | 94 | 76 | 12 | 120° | ● |
| **11,9** | 151 | 94 | 76 | 12 | 120° | ● |
| **12,0** | 151 | 101 | 83 | 12 | 120° | ● |
| **12,1** | 151 | 101 | 83 | 12 | 120° | ● |
| **12,2** | 151 | 101 | 83 | 12 | 120° | ● |
| **12,3** | 151 | 101 | 83 | 12 | 120° | ● |
| **12,4** | 151 | 101 | 82 | 12 | 120° | ● |
| **12,5** | 151 | 101 | 82 | 12 | 120° | ● |
| **12,6** | 151 | 101 | 82 | 12 | 120° | ● |
| **12,7** | 151 | 101 | 82 | 12 | 120° | ● |
| **12,8** | 151 | 101 | 82 | 12 | 120° | ● |
| **12,9** | 151 | 101 | 82 | 12 | 120° | ● |
| **13,0** | 151 | 101 | 82 | 12 | 120° | ● |
| **13,5** | 160 | 108 | 88 | 16 | 120° | ● |
| **14,0** | 160 | 108 | 87 | 16 | 120° | ● |
| **14,5** | 169 | 114 | 92 | 16 | 120° | ● |
| **15,0** | 169 | 114 | 92 | 16 | 120° | ● |
| **15,5** | 178 | 120 | 97 | 16 | 120° | ● |
| **16,0** | 178 | 120 | 96 | 16 | 120° | ● |
| **16,5** | 184 | 125 | 100 | 20 | 120° | ● |
| **17,0** | 184 | 125 | 100 | 20 | 120° | ● |
| **17,5** | 191 | 130 | 104 | 20 | 120° | ● |
| **18,0** | 191 | 130 | 103 | 20 | 120° | ● |
| **18,5** | 198 | 135 | 107 | 20 | 120° | ● |
| **19,0** | 198 | 135 | 107 | 20 | 120° | ● |
| **19,5** | 205 | 140 | 111 | 20 | 120° | ● |
| **20,0** | 205 | 140 | 110 | 20 | 120° | ● |

02/02

**Le punte in HSS-Co della serie RECORD HD i con fori di refrigerazione interna sono progettate in modo specifico per applicazioni generali su acciai e ghise garantendo elevate prestazioni ed affidabilità.**

HSS-Co drills of the RECORD HD i serie, with internal coolant, are specifically designed for general applications on steels and cast irons ensuring high performances and reliability.

# Record HD i

**IL RIVESTIMENTO TiN CON TECNICA PVD ASSICURA UN'ELEVATA RESISTENZA ALL'USURA ED UNA RIDOTTA ADESIONE SU ACCIAI A TRUCIOLO LUNGO.**
TiN coating, with PVD technique, ensures high wear resistance minimizing adhesion on long chip steels.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO ANCHE NEL CASO IN CUI CI FOSSE UNA BASSA PRESSIONE DEL REFRIGERANTE.**
The specific flute and the polished surface ensure better chip evacuation even in case of low coolant pressure.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Better drilling quality thanks to reduced axial forces compared to traditional HSS drills.

**ECCELLENTE RESISTENZA ALLA COMPRESSIONE E TORSIONE IN CONDIZIONI DI LAVORO INSTABILI.**
Excellent resistance to compression and torsion during unstable working conditions.

**OTTIMA CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

**RIDUZIONE DEGLI STEP DI SCARICO TRUCIOLO RISPETTO ALLE TRADIZIONALI PUNTE HSS.**
Reduction of peck drilling compared to traditional HSS drills.

ILIX® PRECISION

# RECORD HD i

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

**ILIX NORM**
DIN

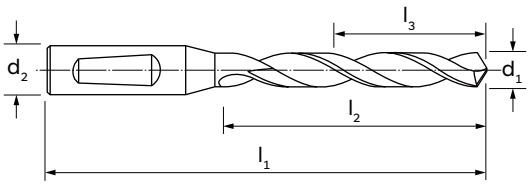
≤5xd

1835 E

130°

A

P. 122




| | |
|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co |
| **RIVESTIMENTO** \| COATING | TiN |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6522TN |
|---|---|---|---|---|---|---|
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6522TN |
|---|---|---|---|---|---|---|
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,2** | 122 | 75 | 60 | 12 | | ● |
| **10,5** | 122 | 75 | 59 | 12 | | ● |
| **11,0** | 122 | 75 | 59 | 12 | | ● |

01/02 →

# RECORD HD i

Punte Evolute in HSS-Co | HSS-Co high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6522TN |
|---|---|---|---|---|---|---|
| **11,5** | 122 | 75 | 58 | 12 | | ● |
| **12,0** | 122 | 75 | 57 | 12 | | ● |
| **12,5** | 134 | 87 | 68 | 14 | | ● |
| **13,0** | 134 | 87 | 68 | 14 | | ● |
| **13,5** | 134 | 87 | 67 | 14 | | ● |
| **14,0** | 134 | 87 | 66 | 14 | | ● |
| **14,5** | 150 | 100 | 78 | 16 | | ● |
| **15,0** | 150 | 100 | 78 | 16 | | ● |
| **15,5** | 150 | 100 | 77 | 16 | | ● |
| **16,0** | 150 | 100 | 76 | 16 | | ● |
| **16,5** | 162 | 112 | 87 | 18 | | ● |
| **17,0** | 162 | 112 | 87 | 18 | | ● |
| **17,5** | 162 | 112 | 86 | 18 | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6522TN |
|---|---|---|---|---|---|---|
| **18,0** | 162 | 112 | 85 | 18 | | ● |
| **18,5** | 176 | 124 | 96 | 20 | | ● |
| **19,0** | 176 | 124 | 96 | 20 | | ● |
| **19,5** | 176 | 124 | 95 | 20 | | ● |
| **20,0** | 176 | 124 | 94 | 20 | | ● |
| **20,5** | 207 | 145 | 114 | 25 | | ● |
| **21,0** | 210 | 145 | 114 | 25 | | ● |
| **21,5** | 207 | 145 | 113 | 25 | | ● |
| **22,0** | 207 | 145 | 112 | 25 | | ● |
| **22,5** | 207 | 145 | 111 | 25 | | ● |
| **23,0** | 207 | 145 | 111 | 25 | | ● |
| **23,5** | 207 | 145 | 110 | 25 | | ● |
| **24,0** | 207 | 145 | 109 | 25 | | ● |

**Le punte in HSS-Co-8% della serie RECORD HX sono progettate per il settore delle macchine movimento terra, garantendo elevate prestazioni ed affidabilità nella foratura di acciai ad alta resistenza come HARDOX e WELDOX.**

The HSS-Co-8% drills of the RECORD HX series are designed for the construction machinery sector, ensuring high performances and reliability when drilling high-strength steels such as HARDOX and WELDOX.

# RECORD HX

**IL NUOVO RIVESTIMENTO NX (TiSiN Plus) ASSICURA UN'ELEVATA RESISTENZA ALL'USURA.**
NX (TiSiN Plus) coating ensures high wear resistance.

**BASSO COEFFICIENTE D'ATTRITO GRAZIE ALLA PRESENZA DI PATTINI DI GUIDA PIÙ STRETTI.**
Low coefficient of friction thanks to narrower guide chamfers.

**ELICA PIÙ CORTA CON NOCCIOLO RINFORZATO PER UNA FORATURA PIÙ STABILE CON RIDOTTE FORZE ASSIALI.**
Short flute with specially reinforced cor for stable drilling process.

**OTTIMA CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

ILIX® PRECISION

# RECORD HX

Punte Evolute in HSS-Co-8%, similare a DIN 338 | HSS-Co-8% high performance twist drills, similar to DIN 338

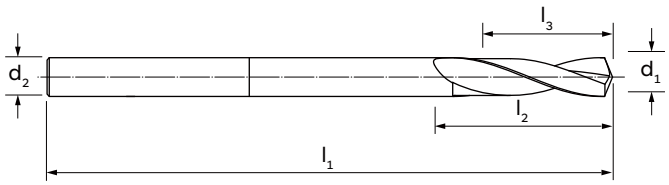
NEW

ILIX NORM
DIN

≤3xd

135°

P. 122




| | |
|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co 8% |
| **RIVESTIMENTO** \| COATING | TiSiN Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | 6205NX |
|---|---|---|---|---|---|
| **2,0** | 49 | 12 | 9 | 2,0 | ● |
| **2,5** | 57 | 14 | 10 | 2,5 | ● |
| **3,0** | 61 | 16 | 12 | 3,0 | ● |
| **3,3** | 65 | 18 | 13 | 3,3 | ● |
| **3,5** | 70 | 20 | 15 | 3,5 | ● |
| **4,0** | 75 | 22 | 16 | 4,0 | ● |
| **4,2** | 75 | 22 | 16 | 4,2 | ● |
| **4,5** | 80 | 24 | 17 | 4,5 | ● |
| **5,0** | 86 | 26 | 19 | 5,0 | ● |
| **5,5** | 93 | 28 | 20 | 5,5 | ● |
| **6,0** | 93 | 28 | 19 | 6,0 | ● |
| **6,5** | 101 | 31 | 21 | 6,5 | ● |
| **6,8** | 109 | 34 | 24 | 6,8 | ● |
| **7,0** | 109 | 34 | 24 | 7,0 | ● |
| **7,5** | 109 | 34 | 23 | 7,5 | ● |
| **8,0** | 117 | 37 | 25 | 8,0 | ● |
| **8,5** | 117 | 37 | 24 | 8,5 | ● |
| **9,0** | 125 | 40 | 27 | 9,0 | ● |
| **9,5** | 125 | 40 | 26 | 9,5 | ● |
| **10,0** | 133 | 43 | 28 | 10,0 | ● |
| **10,2** | 133 | 43 | 28 | 10,2 | ● |
| **10,5** | 133 | 43 | 27 | 10,5 | ● |
| **11,0** | 142 | 47 | 31 | 11,0 | ● |
| **11,5** | 142 | 47 | 30 | 11,5 | ● |
| **12,0** | 151 | 51 | 33 | 12,0 | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | 6205NX |
|---|---|---|---|---|---|

**Le punte in HSS-Co-PM della serie RECORD PM sono progettate in modo specifico per applicazioni generali su acciai e ghise garantendo elevate prestazioni ed affidabilità rispetto alle tradizionali punte in HSS-Co.**

HSS-Co-PM drills of the RECORD PM series are specifically designed for general applications on steels and cast irons ensuring high performances and reliability compared to traditional HSS-Co drills.

# Record PM

**IL RIVESTIMENTO TiSiN CON TECNICA PVD ASSICURA UN'ELEVATA RESISTENZA ALL'USURA ED UNA RIDOTTA ADESIONE SU ACCIAI A TRUCIOLO LUNGO E A BASSO TENORE DI CARBONIO.**
TiSiN coating obtained with PVD technique, ensures high wear resistance minimizing adherence on long-chip low-carbon steels.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO.**
The specific flute and the polished surface ensure better chip evacuation.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI RISPETTO ALLE TRADIZIONALI PUNTE HSS-Co.**
Better drilling quality thanks to reduced axial forces compared to traditional HSS-Co drills.

**ECCELLENTE RESISTENZA ALLA COMPRESSIONE E TORSIONE IN CONDIZIONI DI LAVORO INSTABILI.**
Excellent resistance to compression and torsion during unstable working conditions.

**OTTIMA CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

**RIDUZIONE DEGLI STEP DI SCARICO TRUCIOLO RISPETTO ALLE TRADIZIONALI PUNTE HSS-Co.**
Reduction of peck drilling compared to traditional HSS-Co drills.

ILIX® PRECISION

ILIX PRECISION

# RECORD PM

Punte Evolute in HSS-Co-PM | HSS-Co-PM high performance twist drills

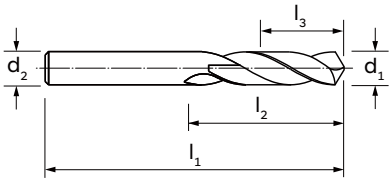
NEW

1897
DIN

≤3xd

130°

P. 122




| | |
|---|---|
| **MATERIALE** \| MATERIAL | HSS-Co-PM |
| **RIVESTIMENTO** \| COATING | TiSiN |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | | 6178NX |
|---|---|---|---|---|---|---|
| **2,0** | 38 | 12 | 9 | 2,0 | | ● |
| **2,1** | 38 | 12 | 9 | 2,1 | | ● |
| **2,2** | 40 | 13 | 10 | 2,2 | | ● |
| **2,3** | 40 | 13 | 10 | 2,3 | | ● |
| **2,4** | 43 | 14 | 10 | 2,4 | | ● |
| **2,5** | 43 | 14 | 10 | 2,5 | | ● |
| **2,6** | 43 | 14 | 10 | 2,6 | | ● |
| **2,7** | 43 | 14 | 10 | 2,7 | | ● |
| **2,8** | 46 | 16 | 12 | 2,8 | | ● |
| **2,9** | 46 | 16 | 12 | 2,9 | | ● |
| **3,0** | 46 | 16 | 12 | 3,0 | | ● |
| **3,1** | 49 | 18 | 13 | 3,1 | | ● |
| **3,2** | 49 | 18 | 13 | 3,2 | | ● |
| **3,3** | 49 | 18 | 13 | 3,3 | | ● |
| **3,4** | 52 | 20 | 15 | 3,4 | | ● |
| **3,5** | 52 | 20 | 15 | 3,5 | | ● |
| **3,6** | 52 | 20 | 15 | 3,6 | | ● |
| **3,7** | 52 | 20 | 15 | 3,7 | | ● |
| **3,8** | 55 | 22 | 16 | 3,8 | | ● |
| **3,9** | 55 | 22 | 16 | 3,9 | | ● |
| **4,0** | 55 | 22 | 16 | 4,0 | | ● |
| **4,1** | 55 | 22 | 16 | 4,1 | | ● |
| **4,2** | 55 | 22 | 16 | 4,2 | | ● |
| **4,3** | 58 | 24 | 18 | 4,3 | | ● |
| **4,4** | 58 | 24 | 17 | 4,4 | | ● |
| **4,5** | 58 | 24 | 17 | 4,5 | | ● |
| **4,6** | 58 | 24 | 17 | 4,6 | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | | 6178NX |
|---|---|---|---|---|---|---|
| **4,7** | 58 | 24 | 17 | 4,7 | | ● |
| **4,8** | 62 | 26 | 19 | 4,8 | | ● |
| **4,9** | 62 | 26 | 19 | 4,9 | | ● |
| **5,0** | 62 | 26 | 19 | 5,0 | | ● |
| **5,1** | 62 | 26 | 18 | 5,1 | | ● |
| **5,2** | 62 | 26 | 18 | 5,2 | | ● |
| **5,3** | 62 | 26 | 18 | 5,3 | | ● |
| **5,4** | 66 | 28 | 20 | 5,4 | | ● |
| **5,5** | 66 | 28 | 20 | 5,5 | | ● |
| **5,6** | 66 | 28 | 20 | 5,6 | | ● |
| **5,7** | 66 | 28 | 20 | 5,7 | | ● |
| **5,8** | 66 | 28 | 19 | 5,8 | | ● |
| **5,9** | 66 | 28 | 19 | 5,9 | | ● |
| **6,0** | 66 | 28 | 19 | 6,0 | | ● |
| **6,1** | 70 | 31 | 22 | 6,1 | | ● |
| **6,2** | 70 | 31 | 22 | 6,2 | | ● |
| **6,3** | 70 | 31 | 22 | 6,3 | | ● |
| **6,4** | 70 | 31 | 21 | 6,4 | | ● |
| **6,5** | 70 | 31 | 21 | 6,5 | | ● |
| **6,6** | 70 | 31 | 21 | 6,6 | | ● |
| **6,7** | 70 | 31 | 21 | 6,7 | | ● |
| **6,8** | 74 | 34 | 24 | 6,8 | | ● |
| **6,9** | 74 | 34 | 24 | 6,9 | | ● |
| **7,0** | 74 | 34 | 24 | 7,0 | | ● |
| **7,1** | 74 | 34 | 23 | 7,1 | | ● |
| **7,2** | 74 | 34 | 23 | 7,2 | | ● |
| **7,3** | 74 | 34 | 23 | 7,3 | | ● |

01/02 →

# RECORD PM

Punte Evolute in HSS-Co-PM | HSS-Co-PM high performance twist drills

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | | 6178NX |
|---|---|---|---|---|---|---|
| **7,4** | 74 | 34 | 23 | 7,4 | | ● |
| **7,5** | 74 | 34 | 23 | 7,5 | | ● |
| **7,6** | 79 | 37 | 26 | 7,6 | | ● |
| **7,7** | 79 | 37 | 26 | 7,7 | | ● |
| **7,8** | 79 | 37 | 25 | 7,8 | | ● |
| **7,9** | 79 | 37 | 25 | 7,9 | | ● |
| **8,0** | 79 | 37 | 25 | 8,0 | | ● |
| **8,1** | 79 | 37 | 25 | 8,1 | | ● |
| **8,2** | 79 | 37 | 25 | 8,2 | | ● |
| **8,3** | 79 | 37 | 25 | 8,3 | | ● |

| $d_1$ (h8) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (f11) | | 6178NX |
|---|---|---|---|---|---|---|
| **8,4** | 79 | 37 | 24 | 8,4 | | ● |
| **8,5** | 79 | 37 | 24 | 8,5 | | ● |
| **9,0** | 84 | 40 | 27 | 9,0 | | ● |
| **9,5** | 84 | 40 | 26 | 9,5 | | ● |
| **10,0** | 89 | 43 | 28 | 10,0 | | ● |
| **10,2** | 89 | 43 | 28 | 10,2 | | ● |
| **10,5** | 89 | 43 | 27 | 10,5 | | ● |
| **11,0** | 95 | 47 | 31 | 11,0 | | ● |
| **11,5** | 95 | 47 | 30 | 11,5 | | ● |
| **12,0** | 102 | 51 | 33 | 12,0 | | ● |

02/02

**Le punte in metallo duro della serie RECORD 2S e 2S i, garantiscono il massimo volume di truciolo asportato e la maggior durata dell'utensile nelle lavorazioni di acciai, ghise.**

The solid carbide drills RECORD 2S and 2S i series guarantee maximum chip removal and longer tool life in steels and cast irons machining.

# Record 2S-2S i

**GEOMETRIA 2S.**
2S geometry.

**DISPONIBILI NELLE VERSIONI 3xD E 5xD CON E SENZA FORI DI REFRIGERAZIONE INTERNA.**
Available in 3xD and 5xD versions with and without internal coolant.

**I RIVESTIMENTI TF (TiAlN Futura Plus) E TN (TiN), OTTENUTI CON TECNICA PVD, ASSICURANO ELEVATA RESISTENZA ALL'USURA, BASSO COEFFICIENTE D'ATTRITO ANCHE SU APPLICAZIONI CON QUANTITÀ MINIMA DI REFRIGERANTE (MQL).**
The coatings TF (TiAlN Futura Plus) and TN (TiN), obtained with PVD technique, ensure high wear resistance, low coefficient of friction even during applications with minimum quantity of lubricaton (MQL).

**CODOLI DIN 6535HA E DIN6535HB IN TOLLERANZA h6 IDONEI PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA and DIN 6535HB shanks in tolerance h6 suitable for shrink fit.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI.**
Improved drilling quality thanks to reduced axial forces.

**ECCELLENTE CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

ILIX® PRECISION

# RECORD 2S

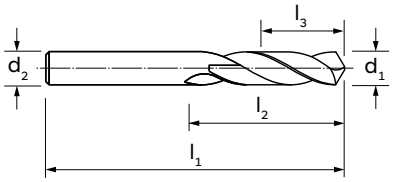
Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

~1897
DIN

≤3xd

140°

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiN |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steelss | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6213TN |
|---|---|---|---|---|---|---|
| **1,5** | 32 | 9 | 7 | 1,5 | | ● |
| **1,6** | 34 | 10 | 8 | 1,6 | | ● |
| **1,7** | 34 | 10 | 8 | 1,7 | | ● |
| **1,8** | 36 | 11 | 8 | 1,8 | | ● |
| **1,9** | 36 | 11 | 8 | 1,9 | | ● |
| **2,0** | 38 | 12 | 9 | 2,0 | | ● |
| **2,1** | 38 | 12 | 9 | 2,1 | | ● |
| **2,2** | 40 | 13 | 10 | 2,2 | | ● |
| **2,3** | 40 | 13 | 10 | 2,3 | | ● |
| **2,4** | 43 | 14 | 10 | 2,4 | | ● |
| **2,5** | 43 | 14 | 10 | 2,5 | | ● |
| **2,6** | 43 | 14 | 10 | 2,6 | | ● |
| **2,7** | 46 | 16 | 12 | 2,7 | | ● |
| **2,8** | 46 | 16 | 12 | 2,8 | | ● |
| **2,9** | 46 | 16 | 12 | 2,9 | | ● |
| **3,0** | 46 | 16 | 12 | 3,0 | | ● |
| **3,1** | 49 | 18 | 13 | 3,1 | | ● |
| **3,2** | 49 | 18 | 13 | 3,2 | | ● |
| **3,3** | 49 | 18 | 13 | 3,3 | | ● |
| **3,4** | 52 | 20 | 15 | 3,4 | | ● |
| **3,5** | 52 | 20 | 15 | 3,5 | | ● |
| **3,6** | 52 | 20 | 15 | 3,6 | | ● |
| **3,7** | 52 | 20 | 15 | 3,7 | | ● |
| **3,8** | 55 | 22 | 16 | 3,8 | | ● |
| **3,9** | 55 | 22 | 16 | 3,9 | | ● |
| **4,0** | 55 | 22 | 16 | 4,0 | | ● |
| **4,1** | 55 | 22 | 16 | 4,1 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6213TN |
|---|---|---|---|---|---|---|
| **4,2** | 55 | 22 | 16 | 4,2 | | ● |
| **4,3** | 58 | 24 | 18 | 4,3 | | ● |
| **4,4** | 58 | 24 | 17 | 4,4 | | ● |
| **4,5** | 58 | 24 | 17 | 4,5 | | ● |
| **4,6** | 58 | 24 | 17 | 4,6 | | ● |
| **4,7** | 58 | 24 | 17 | 4,7 | | ● |
| **4,8** | 62 | 26 | 19 | 4,8 | | ● |
| **4,9** | 62 | 26 | 19 | 4,9 | | ● |
| **5,0** | 62 | 26 | 19 | 5,0 | | ● |
| **5,1** | 62 | 26 | 18 | 5,1 | | ● |
| **5,2** | 62 | 26 | 18 | 5,2 | | ● |
| **5,3** | 62 | 26 | 18 | 5,3 | | ● |
| **5,4** | 66 | 28 | 20 | 5,4 | | ● |
| **5,5** | 66 | 28 | 20 | 5,5 | | ● |
| **5,6** | 66 | 28 | 20 | 5,6 | | ● |
| **5,7** | 66 | 28 | 20 | 5,7 | | ● |
| **5,8** | 66 | 28 | 19 | 5,8 | | ● |
| **5,9** | 66 | 28 | 19 | 5,9 | | ● |
| **6,0** | 66 | 28 | 19 | 6,0 | | ● |
| **6,1** | 70 | 31 | 22 | 6,1 | | ● |
| **6,2** | 70 | 31 | 22 | 6,2 | | ● |
| **6,3** | 70 | 31 | 22 | 6,3 | | ● |
| **6,4** | 70 | 31 | 21 | 6,4 | | ● |
| **6,5** | 70 | 31 | 21 | 6,5 | | ● |
| **6,6** | 70 | 31 | 21 | 6,6 | | ● |
| **6,7** | 70 | 31 | 21 | 6,7 | | ● |
| **6,8** | 74 | 34 | 24 | 6,8 | | ● |

01/02 →

ILIX PRECISION

# RECORD 2S

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6213TN |
|---|---|---|---|---|---|---|
| **6,9** | 74 | 34 | 24 | 6,9 | | ● |
| **7,0** | 74 | 34 | 24 | 7,0 | | ● |
| **7,1** | 74 | 34 | 23 | 7,1 | | ● |
| **7,2** | 74 | 34 | 23 | 7,2 | | ● |
| **7,3** | 74 | 34 | 23 | 7,3 | | ● |
| **7,4** | 74 | 34 | 23 | 7,4 | | ● |
| **7,5** | 74 | 34 | 23 | 7,5 | | ● |
| **7,6** | 79 | 37 | 26 | 7,6 | | ● |
| **7,7** | 79 | 37 | 26 | 7,7 | | ● |
| **7,8** | 79 | 37 | 25 | 7,8 | | ● |
| **7,9** | 79 | 37 | 25 | 7,9 | | ● |
| **8,0** | 79 | 37 | 25 | 8,0 | | ● |
| **8,1** | 79 | 37 | 25 | 8,1 | | ● |
| **8,2** | 79 | 37 | 25 | 8,2 | | ● |
| **8,3** | 79 | 37 | 25 | 8,3 | | ● |
| **8,4** | 79 | 37 | 24 | 8,4 | | ● |
| **8,5** | 79 | 37 | 24 | 8,5 | | ● |
| **8,6** | 84 | 40 | 27 | 8,6 | | ● |
| **8,7** | 84 | 40 | 27 | 8,7 | | ● |
| **8,8** | 84 | 40 | 27 | 8,8 | | ● |
| **8,9** | 84 | 40 | 27 | 8,9 | | ● |
| **9,0** | 84 | 40 | 27 | 9,0 | | ● |
| **9,1** | 84 | 40 | 26 | 9,1 | | ● |
| **9,2** | 84 | 40 | 26 | 9,2 | | ● |
| **9,3** | 84 | 40 | 26 | 9,3 | | ● |
| **9,4** | 84 | 40 | 26 | 9,4 | | ● |
| **9,5** | 84 | 40 | 26 | 9,5 | | ● |
| **9,6** | 89 | 43 | 29 | 9,6 | | ● |
| **9,7** | 89 | 43 | 29 | 9,7 | | ● |
| **9,8** | 89 | 43 | 28 | 9,8 | | ● |
| **9,9** | 89 | 43 | 28 | 9,9 | | ● |
| **10,0** | 89 | 43 | 28 | 10,0 | | ● |
| **10,1** | 89 | 43 | 28 | 10,1 | | ● |
| **10,2** | 89 | 43 | 28 | 10,2 | | ● |
| **10,3** | 89 | 43 | 28 | 10,3 | | ● |
| **10,4** | 89 | 43 | 27 | 10,4 | | ● |
| **10,5** | 89 | 43 | 27 | 10,5 | | ● |
| **10,6** | 89 | 43 | 27 | 10,6 | | ● |
| **10,7** | 95 | 47 | 31 | 10,7 | | ● |
| **10,8** | 95 | 47 | 31 | 10,8 | | ● |
| **10,9** | 95 | 47 | 31 | 10,9 | | ● |
| **11,0** | 95 | 47 | 31 | 11,0 | | ● |
| **11,1** | 95 | 47 | 30 | 11,1 | | ● |
| **11,2** | 95 | 47 | 30 | 11,2 | | ● |
| **11,3** | 95 | 47 | 30 | 11,3 | | ● |
| **11,4** | 95 | 47 | 30 | 11,4 | | ● |
| **11,5** | 95 | 47 | 30 | 11,5 | | ● |
| **11,6** | 95 | 47 | 30 | 11,6 | | ● |
| **11,7** | 95 | 47 | 30 | 11,7 | | ● |
| **11,8** | 95 | 47 | 29 | 11,8 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6213TN |
|---|---|---|---|---|---|---|
| **11,9** | 102 | 51 | 33 | 11,9 | | ● |
| **12,0** | 102 | 51 | 33 | 12,0 | | ● |
| **12,1** | 102 | 51 | 33 | 12,1 | | ● |
| **12,2** | 102 | 51 | 33 | 12,2 | | ● |
| **12,3** | 102 | 51 | 33 | 12,3 | | ● |
| **12,4** | 102 | 51 | 32 | 12,4 | | ● |
| **12,5** | 102 | 51 | 32 | 12,5 | | ● |
| **12,6** | 102 | 51 | 32 | 12,6 | | ● |
| **12,7** | 102 | 51 | 32 | 12,7 | | ● |
| **12,8** | 102 | 51 | 32 | 12,8 | | ● |
| **12,9** | 102 | 51 | 32 | 12,9 | | ● |
| **13,0** | 102 | 51 | 32 | 13,0 | | ● |
| **13,1** | 102 | 51 | 31 | 13,1 | | ● |
| **13,2** | 102 | 51 | 31 | 13,2 | | ● |
| **13,3** | 107 | 54 | 34 | 13,3 | | ● |
| **13,4** | 107 | 54 | 34 | 13,4 | | ● |
| **13,5** | 107 | 54 | 34 | 13,5 | | ● |
| **13,6** | 107 | 54 | 34 | 13,6 | | ● |
| **13,7** | 107 | 54 | 34 | 13,7 | | ● |
| **13,8** | 107 | 54 | 33 | 13,8 | | ● |
| **13,9** | 107 | 54 | 33 | 13,9 | | ● |
| **14,0** | 107 | 54 | 33 | 14,0 | | ● |
| **14,1** | 111 | 56 | 35 | 14,1 | | ● |
| **14,2** | 111 | 56 | 35 | 14,2 | | ● |
| **14,3** | 111 | 56 | 35 | 14,3 | | ● |
| **14,4** | 111 | 56 | 34 | 14,4 | | ● |
| **14,5** | 111 | 56 | 34 | 14,5 | | ● |
| **14,6** | 111 | 56 | 34 | 14,6 | | ● |
| **14,7** | 111 | 56 | 34 | 14,7 | | ● |
| **14,8** | 111 | 56 | 34 | 14,8 | | ● |
| **14,9** | 111 | 56 | 34 | 14,9 | | ● |
| **15,0** | 111 | 56 | 34 | 15,0 | | ● |
| **15,1** | 115 | 58 | 35 | 15,1 | | ● |
| **15,2** | 115 | 58 | 35 | 15,2 | | ● |
| **15,3** | 115 | 58 | 35 | 15,3 | | ● |
| **15,4** | 115 | 58 | 35 | 15,4 | | ● |
| **15,5** | 115 | 58 | 35 | 15,5 | | ● |
| **15,6** | 115 | 58 | 35 | 15,6 | | ● |
| **15,7** | 115 | 58 | 35 | 15,7 | | ● |
| **15,8** | 115 | 58 | 34 | 15,8 | | ● |
| **15,9** | 115 | 58 | 34 | 15,9 | | ● |
| **16,0** | 115 | 58 | 34 | 16,0 | | ● |
| **16,5** | 119 | 60 | 35 | 16,5 | | ● |
| **17,0** | 119 | 60 | 35 | 17,0 | | ● |
| **17,5** | 123 | 62 | 36 | 17,5 | | ● |
| **18,0** | 123 | 62 | 35 | 18,0 | | ● |
| **18,5** | 127 | 64 | 36 | 18,5 | | ● |
| **19,0** | 127 | 64 | 36 | 19,0 | | ● |
| **19,5** | 131 | 66 | 37 | 19,5 | | ● |
| **20,0** | 131 | 66 | 36 | 20,0 | | ● |

02/02

# RECORD 2S

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 K**

DIN

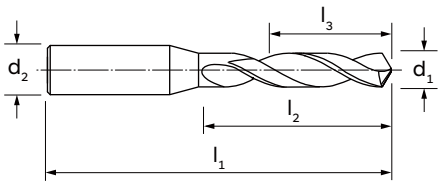
≤3xd

6535 HA

140°

SHRINK FIT

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6015TF |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 16 | 6 | | ● |
| **3,1** | 62 | 20 | 15 | 6 | | ● |
| **3,2** | 62 | 20 | 15 | 6 | | ● |
| **3,3** | 62 | 20 | 15 | 6 | | ● |
| **3,4** | 62 | 20 | 15 | 6 | | ● |
| **3,5** | 62 | 20 | 15 | 6 | | ● |
| **3,6** | 62 | 20 | 15 | 6 | | ● |
| **3,7** | 62 | 20 | 15 | 6 | | ● |
| **3,8** | 66 | 24 | 18 | 6 | | ● |
| **3,9** | 66 | 24 | 18 | 6 | | ● |
| **4,0** | 66 | 24 | 18 | 6 | | ● |
| **4,1** | 66 | 24 | 18 | 6 | | ● |
| **4,2** | 66 | 24 | 18 | 6 | | ● |
| **4,3** | 66 | 24 | 18 | 6 | | ● |
| **4,4** | 66 | 24 | 17 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **4,6** | 66 | 24 | 17 | 6 | | ● |
| **4,7** | 66 | 24 | 17 | 6 | | ● |
| **4,8** | 66 | 28 | 21 | 6 | | ● |
| **4,9** | 66 | 28 | 21 | 6 | | ● |
| **5,0** | 66 | 28 | 21 | 6 | | ● |
| **5,1** | 66 | 28 | 20 | 6 | | ● |
| **5,2** | 66 | 28 | 20 | 6 | | ● |
| **5,3** | 66 | 28 | 20 | 6 | | ● |
| **5,4** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,6** | 66 | 28 | 20 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6015TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 19 | 6 | | ● |
| **5,9** | 66 | 28 | 19 | 6 | | ● |
| **6,0** | 66 | 28 | 19 | 6 | | ● |
| **6,1** | 79 | 34 | 25 | 8 | | ● |
| **6,2** | 79 | 34 | 25 | 8 | | ● |
| **6,3** | 79 | 34 | 25 | 8 | | ● |
| **6,4** | 79 | 34 | 24 | 8 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,6** | 79 | 34 | 24 | 8 | | ● |
| **6,7** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **6,9** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 41 | 31 | 8 | | ● |
| **7,1** | 79 | 41 | 30 | 8 | | ● |
| **7,2** | 79 | 41 | 30 | 8 | | ● |
| **7,3** | 79 | 41 | 30 | 8 | | ● |
| **7,4** | 79 | 41 | 30 | 8 | | ● |
| **7,5** | 79 | 41 | 30 | 8 | | ● |
| **7,6** | 79 | 41 | 30 | 8 | | ● |
| **7,7** | 79 | 41 | 30 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **7,9** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,1** | 89 | 47 | 35 | 10 | | ● |
| **8,2** | 89 | 47 | 35 | 10 | | ● |
| **8,3** | 89 | 47 | 35 | 10 | | ● |

01/02 →



| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6015TF |
|---|---|---|---|---|---|---|
| **8,4** | 89 | 47 | 34 | 10 | | ● |
| **8,5** | 89 | 47 | 34 | 10 | | ● |
| **8,6** | 89 | 47 | 34 | 10 | | ● |
| **8,7** | 89 | 47 | 34 | 10 | | ● |
| **8,8** | 89 | 47 | 34 | 10 | | ● |
| **8,9** | 89 | 47 | 34 | 10 | | ● |
| **9,0** | 89 | 47 | 34 | 10 | | ● |
| **9,1** | 89 | 47 | 33 | 10 | | ● |
| **9,2** | 89 | 47 | 33 | 10 | | ● |
| **9,3** | 89 | 47 | 33 | 10 | | ● |
| **9,4** | 89 | 47 | 33 | 10 | | ● |
| **9,5** | 89 | 47 | 33 | 10 | | ● |
| **9,6** | 89 | 47 | 33 | 10 | | ● |
| **9,7** | 89 | 47 | 33 | 10 | | ● |
| **9,8** | 89 | 47 | 32 | 10 | | ● |
| **9,9** | 89 | 47 | 32 | 10 | | ● |
| **10,0** | 89 | 47 | 32 | 10 | | ● |
| **10,1** | 102 | 55 | 40 | 12 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,3** | 102 | 55 | 40 | 12 | | ● |
| **10,4** | 102 | 55 | 39 | 12 | | ● |
| **10,5** | 102 | 55 | 39 | 12 | | ● |
| **10,6** | 102 | 55 | 39 | 12 | | ● |
| **10,7** | 102 | 55 | 39 | 12 | | ● |
| **10,8** | 102 | 55 | 39 | 12 | | ● |
| **10,9** | 102 | 55 | 39 | 12 | | ● |
| **11,0** | 102 | 55 | 39 | 12 | | ● |
| **11,1** | 102 | 55 | 38 | 12 | | ● |
| **11,2** | 102 | 55 | 38 | 12 | | ● |
| **11,3** | 102 | 55 | 38 | 12 | | ● |
| **11,4** | 102 | 55 | 38 | 12 | | ● |
| **11,5** | 102 | 55 | 38 | 12 | | ● |
| **11,6** | 102 | 55 | 38 | 12 | | ● |
| **11,7** | 102 | 55 | 38 | 12 | | ● |
| **11,8** | 102 | 55 | 37 | 12 | | ● |
| **11,9** | 102 | 55 | 37 | 12 | | ● |
| **12,0** | 102 | 55 | 37 | 12 | | ● |
| **12,1** | 107 | 60 | 42 | 14 | | ● |
| **12,2** | 107 | 60 | 42 | 14 | | ● |
| **12,3** | 107 | 60 | 42 | 14 | | ● |
| **12,4** | 107 | 60 | 41 | 14 | | ● |
| **12,5** | 107 | 60 | 41 | 14 | | ● |
| **12,6** | 107 | 60 | 41 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6015TF |
|---|---|---|---|---|---|---|
| **12,7** | 107 | 60 | 41 | 14 | | ● |
| **12,8** | 107 | 60 | 41 | 14 | | ● |
| **12,9** | 107 | 60 | 41 | 14 | | ● |
| **13,0** | 107 | 60 | 41 | 14 | | ● |
| **13,1** | 107 | 60 | 40 | 14 | | ● |
| **13,2** | 107 | 60 | 40 | 14 | | ● |
| **13,3** | 107 | 60 | 40 | 14 | | ● |
| **13,4** | 107 | 60 | 40 | 14 | | ● |
| **13,5** | 107 | 60 | 40 | 14 | | ● |
| **13,6** | 107 | 60 | 40 | 14 | | ● |
| **13,7** | 107 | 60 | 40 | 14 | | ● |
| **13,8** | 107 | 60 | 39 | 14 | | ● |
| **13,9** | 107 | 60 | 39 | 14 | | ● |
| **14,0** | 107 | 60 | 39 | 14 | | ● |
| **14,1** | 115 | 65 | 44 | 16 | | ● |
| **14,2** | 115 | 65 | 44 | 16 | | ● |
| **14,3** | 115 | 65 | 44 | 16 | | ● |
| **14,4** | 115 | 65 | 43 | 16 | | ● |
| **14,5** | 115 | 65 | 43 | 16 | | ● |
| **14,6** | 115 | 65 | 43 | 16 | | ● |
| **14,7** | 115 | 65 | 43 | 16 | | ● |
| **14,8** | 115 | 65 | 43 | 16 | | ● |
| **14,9** | 115 | 65 | 43 | 16 | | ● |
| **15,0** | 115 | 65 | 43 | 16 | | ● |
| **15,1** | 115 | 65 | 42 | 16 | | ● |
| **15,2** | 115 | 65 | 42 | 16 | | ● |
| **15,3** | 115 | 65 | 42 | 16 | | ● |
| **15,4** | 115 | 65 | 42 | 16 | | ● |
| **15,5** | 115 | 65 | 42 | 16 | | ● |
| **15,6** | 115 | 65 | 42 | 16 | | ● |
| **15,7** | 115 | 65 | 42 | 16 | | ● |
| **15,8** | 115 | 65 | 41 | 16 | | ● |
| **15,9** | 115 | 65 | 41 | 16 | | ● |
| **16,0** | 115 | 65 | 41 | 16 | | ● |
| **16,5** | 123 | 73 | 48 | 18 | | ● |
| **17,0** | 123 | 73 | 48 | 18 | | ● |
| **17,5** | 123 | 73 | 47 | 18 | | ● |
| **18,0** | 123 | 73 | 46 | 18 | | ● |
| **18,5** | 131 | 79 | 51 | 20 | | ● |
| **19,0** | 131 | 79 | 51 | 20 | | ● |
| **19,5** | 131 | 79 | 50 | 20 | | ● |
| **20,0** | 131 | 79 | 49 | 20 | | ● |

02/02

# RECORD 2S

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

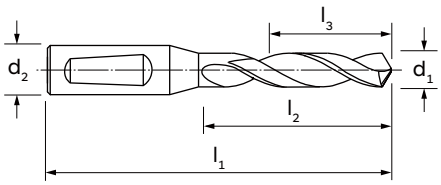
**6537 K**
DIN

≤3xd

6535 HE

140°

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

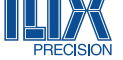
**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6016TF |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 16 | 6 | | ● |
| **3,1** | 62 | 20 | 15 | 6 | | ● |
| **3,2** | 62 | 20 | 15 | 6 | | ● |
| **3,3** | 62 | 20 | 15 | 6 | | ● |
| **3,4** | 62 | 20 | 15 | 6 | | ● |
| **3,5** | 62 | 20 | 15 | 6 | | ● |
| **3,6** | 62 | 20 | 15 | 6 | | ● |
| **3,7** | 62 | 20 | 15 | 6 | | ● |
| **3,8** | 66 | 24 | 18 | 6 | | ● |
| **3,9** | 66 | 24 | 18 | 6 | | ● |
| **4,0** | 66 | 24 | 18 | 6 | | ● |
| **4,1** | 66 | 24 | 18 | 6 | | ● |
| **4,2** | 66 | 24 | 18 | 6 | | ● |
| **4,3** | 66 | 24 | 18 | 6 | | ● |
| **4,4** | 66 | 24 | 17 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **4,6** | 66 | 24 | 17 | 6 | | ● |
| **4,7** | 66 | 24 | 17 | 6 | | ● |
| **4,8** | 66 | 28 | 21 | 6 | | ● |
| **4,9** | 66 | 28 | 21 | 6 | | ● |
| **5,0** | 66 | 28 | 21 | 6 | | ● |
| **5,1** | 66 | 28 | 20 | 6 | | ● |
| **5,2** | 66 | 28 | 20 | 6 | | ● |
| **5,3** | 66 | 28 | 20 | 6 | | ● |
| **5,4** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,6** | 66 | 28 | 20 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6016TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 19 | 6 | | ● |
| **5,9** | 66 | 28 | 19 | 6 | | ● |
| **6,0** | 66 | 28 | 19 | 6 | | ● |
| **6,1** | 79 | 34 | 25 | 8 | | ● |
| **6,2** | 79 | 34 | 25 | 8 | | ● |
| **6,3** | 79 | 34 | 25 | 8 | | ● |
| **6,4** | 79 | 34 | 24 | 8 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,6** | 79 | 34 | 24 | 8 | | ● |
| **6,7** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **6,9** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 41 | 31 | 8 | | ● |
| **7,1** | 79 | 41 | 30 | 8 | | ● |
| **7,2** | 79 | 41 | 30 | 8 | | ● |
| **7,3** | 79 | 41 | 30 | 8 | | ● |
| **7,4** | 79 | 41 | 30 | 8 | | ● |
| **7,5** | 79 | 41 | 30 | 8 | | ● |
| **7,6** | 79 | 41 | 30 | 8 | | ● |
| **7,7** | 79 | 41 | 30 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **7,9** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,1** | 89 | 47 | 35 | 10 | | ● |
| **8,2** | 89 | 47 | 35 | 10 | | ● |
| **8,3** | 89 | 47 | 35 | 10 | | ● |

01/02 →





| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6016TF |
|---|---|---|---|---|---|---|
| **8,4** | 89 | 47 | 34 | 10 | | ● |
| **8,5** | 89 | 47 | 34 | 10 | | ● |
| **8,6** | 89 | 47 | 34 | 10 | | ● |
| **8,7** | 89 | 47 | 34 | 10 | | ● |
| **8,8** | 89 | 47 | 34 | 10 | | ● |
| **8,9** | 89 | 47 | 34 | 10 | | ● |
| **9,0** | 89 | 47 | 34 | 10 | | ● |
| **9,1** | 89 | 47 | 33 | 10 | | ● |
| **9,2** | 89 | 47 | 33 | 10 | | ● |
| **9,3** | 89 | 47 | 33 | 10 | | ● |
| **9,4** | 89 | 47 | 33 | 10 | | ● |
| **9,5** | 89 | 47 | 33 | 10 | | ● |
| **9,6** | 89 | 47 | 33 | 10 | | ● |
| **9,7** | 89 | 47 | 33 | 10 | | ● |
| **9,8** | 89 | 47 | 32 | 10 | | ● |
| **9,9** | 89 | 47 | 32 | 10 | | ● |
| **10,0** | 89 | 47 | 32 | 10 | | ● |
| **10,1** | 102 | 55 | 40 | 12 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,3** | 102 | 55 | 40 | 12 | | ● |
| **10,4** | 102 | 55 | 39 | 12 | | ● |
| **10,5** | 102 | 55 | 39 | 12 | | ● |
| **10,6** | 102 | 55 | 39 | 12 | | ● |
| **10,7** | 102 | 55 | 39 | 12 | | ● |
| **10,8** | 102 | 55 | 39 | 12 | | ● |
| **10,9** | 102 | 55 | 39 | 12 | | ● |
| **11,0** | 102 | 55 | 39 | 12 | | ● |
| **11,1** | 102 | 55 | 38 | 12 | | ● |
| **11,2** | 102 | 55 | 38 | 12 | | ● |
| **11,3** | 102 | 55 | 38 | 12 | | ● |
| **11,4** | 102 | 55 | 38 | 12 | | ● |
| **11,5** | 102 | 55 | 38 | 12 | | ● |
| **11,6** | 102 | 55 | 38 | 12 | | ● |
| **11,7** | 102 | 55 | 38 | 12 | | ● |
| **11,8** | 102 | 55 | 37 | 12 | | ● |
| **11,9** | 102 | 55 | 37 | 12 | | ● |
| **12,0** | 102 | 55 | 37 | 12 | | ● |
| **12,1** | 107 | 60 | 42 | 14 | | ● |
| **12,2** | 107 | 60 | 42 | 14 | | ● |
| **12,3** | 107 | 60 | 42 | 14 | | ● |
| **12,4** | 107 | 60 | 41 | 14 | | ● |
| **12,5** | 107 | 60 | 41 | 14 | | ● |
| **12,6** | 107 | 60 | 41 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6016TF |
|---|---|---|---|---|---|---|
| **12,7** | 107 | 60 | 41 | 14 | | ● |
| **12,8** | 107 | 60 | 41 | 14 | | ● |
| **12,9** | 107 | 60 | 41 | 14 | | ● |
| **13,0** | 107 | 60 | 41 | 14 | | ● |
| **13,1** | 107 | 60 | 40 | 14 | | ● |
| **13,2** | 107 | 60 | 40 | 14 | | ● |
| **13,3** | 107 | 60 | 40 | 14 | | ● |
| **13,4** | 107 | 60 | 40 | 14 | | ● |
| **13,5** | 107 | 60 | 40 | 14 | | ● |
| **13,6** | 107 | 60 | 40 | 14 | | ● |
| **13,7** | 107 | 60 | 40 | 14 | | ● |
| **13,8** | 107 | 60 | 39 | 14 | | ● |
| **13,9** | 107 | 60 | 39 | 14 | | ● |
| **14,0** | 107 | 60 | 39 | 14 | | ● |
| **14,1** | 115 | 65 | 44 | 16 | | ● |
| **14,2** | 115 | 65 | 44 | 16 | | ● |
| **14,3** | 115 | 65 | 44 | 16 | | ● |
| **14,4** | 115 | 65 | 43 | 16 | | ● |
| **14,5** | 115 | 65 | 43 | 16 | | ● |
| **14,6** | 115 | 65 | 43 | 16 | | ● |
| **14,7** | 115 | 65 | 43 | 16 | | ● |
| **14,8** | 115 | 65 | 43 | 16 | | ● |
| **14,9** | 115 | 65 | 43 | 16 | | ● |
| **15,0** | 115 | 65 | 43 | 16 | | ● |
| **15,1** | 115 | 65 | 42 | 16 | | ● |
| **15,2** | 115 | 65 | 42 | 16 | | ● |
| **15,3** | 115 | 65 | 42 | 16 | | ● |
| **15,4** | 115 | 65 | 42 | 16 | | ● |
| **15,5** | 115 | 65 | 42 | 16 | | ● |
| **15,6** | 115 | 65 | 42 | 16 | | ● |
| **15,7** | 115 | 65 | 42 | 16 | | ● |
| **15,8** | 115 | 65 | 41 | 16 | | ● |
| **15,9** | 115 | 65 | 41 | 16 | | ● |
| **16,0** | 115 | 65 | 41 | 16 | | ● |
| **16,5** | 123 | 73 | 48 | 18 | | ● |
| **17,0** | 123 | 73 | 48 | 18 | | ● |
| **17,5** | 123 | 73 | 47 | 18 | | ● |
| **18,0** | 123 | 73 | 46 | 18 | | ● |
| **18,5** | 131 | 79 | 51 | 20 | | ● |
| **19,0** | 131 | 79 | 51 | 20 | | ● |
| **19,5** | 131 | 79 | 50 | 20 | | ● |
| **20,0** | 131 | 79 | 49 | 20 | | ● |

02/02

# RECORD 2S

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**
DIN

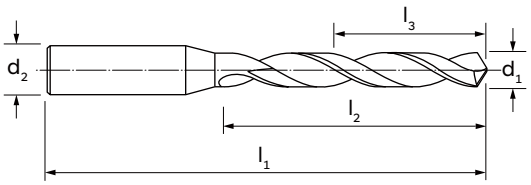
≤5xd

6535 HA

140°

SHRINK FIT

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6017TT |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6017TT |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →



| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6017TT |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,1** | 118 | 71 | 56 | 12 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,3** | 118 | 71 | 56 | 12 | | ● |
| **10,4** | 118 | 71 | 55 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,6** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **10,9** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,1** | 118 | 71 | 54 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,3** | 118 | 71 | 54 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6017TT |
|---|---|---|---|---|---|---|
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,6** | 118 | 71 | 54 | 12 | | ● |
| **11,7** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **11,9** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,2** | 124 | 77 | 59 | 14 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **12,7** | 124 | 77 | 58 | 14 | | ● |
| **12,8** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **13,1** | 124 | 77 | 57 | 14 | | ● |
| **13,5** | 124 | 77 | 57 | 14 | | ● |
| **13,8** | 124 | 77 | 56 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **14,5** | 133 | 83 | 61 | 16 | | ● |
| **14,8** | 133 | 83 | 61 | 16 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,1** | 133 | 83 | 60 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **15,8** | 133 | 83 | 59 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **16,5** | 143 | 93 | 68 | 18 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |
| **18,5** | 153 | 101 | 73 | 20 | | ● |
| **19,0** | 153 | 101 | 73 | 20 | | ● |
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

# RECORD 2S

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**

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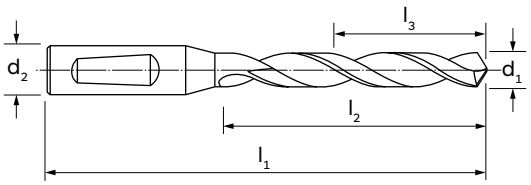
6535 HE

140°

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6018TT |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6018TT |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →



| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6018TT |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,1** | 118 | 71 | 56 | 12 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,3** | 118 | 71 | 56 | 12 | | ● |
| **10,4** | 118 | 71 | 55 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,6** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **10,9** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,1** | 118 | 71 | 54 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,3** | 118 | 71 | 54 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6018TT |
|---|---|---|---|---|---|---|
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,6** | 118 | 71 | 54 | 12 | | ● |
| **11,7** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **11,9** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,2** | 124 | 77 | 59 | 14 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **12,7** | 124 | 77 | 58 | 14 | | ● |
| **12,8** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **13,1** | 124 | 77 | 57 | 14 | | ● |
| **13,5** | 124 | 77 | 57 | 14 | | ● |
| **13,8** | 124 | 77 | 56 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **14,5** | 133 | 83 | 61 | 16 | | ● |
| **14,8** | 133 | 83 | 61 | 16 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,1** | 133 | 83 | 60 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **15,8** | 133 | 83 | 59 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **16,5** | 143 | 93 | 68 | 18 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |
| **18,5** | 153 | 101 | 73 | 20 | | ● |
| **19,0** | 153 | 101 | 73 | 20 | | ● |
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 K**

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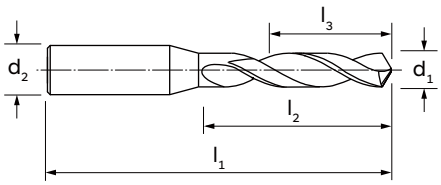
A

SHRINK FIT

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6011TF |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 16 | 6 | | ● |
| **3,1** | 62 | 20 | 15 | 6 | | ● |
| **3,2** | 62 | 20 | 15 | 6 | | ● |
| **3,3** | 62 | 20 | 15 | 6 | | ● |
| **3,4** | 62 | 20 | 15 | 6 | | ● |
| **3,5** | 62 | 20 | 15 | 6 | | ● |
| **3,6** | 62 | 20 | 15 | 6 | | ● |
| **3,7** | 62 | 20 | 15 | 6 | | ● |
| **3,8** | 66 | 24 | 18 | 6 | | ● |
| **3,9** | 66 | 24 | 18 | 6 | | ● |
| **4,0** | 66 | 24 | 18 | 6 | | ● |
| **4,1** | 66 | 24 | 18 | 6 | | ● |
| **4,2** | 66 | 24 | 18 | 6 | | ● |
| **4,3** | 66 | 24 | 18 | 6 | | ● |
| **4,4** | 66 | 24 | 17 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **4,6** | 66 | 24 | 17 | 6 | | ● |
| **4,7** | 66 | 24 | 17 | 6 | | ● |
| **4,8** | 66 | 28 | 21 | 6 | | ● |
| **4,9** | 66 | 28 | 21 | 6 | | ● |
| **5,0** | 66 | 28 | 21 | 6 | | ● |
| **5,1** | 66 | 28 | 20 | 6 | | ● |
| **5,2** | 66 | 28 | 20 | 6 | | ● |
| **5,3** | 66 | 28 | 20 | 6 | | ● |
| **5,4** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,6** | 66 | 28 | 20 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6011TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 19 | 6 | | ● |
| **5,9** | 66 | 28 | 19 | 6 | | ● |
| **6,0** | 66 | 28 | 19 | 6 | | ● |
| **6,1** | 79 | 34 | 25 | 8 | | ● |
| **6,2** | 79 | 34 | 25 | 8 | | ● |
| **6,3** | 79 | 34 | 25 | 8 | | ● |
| **6,4** | 79 | 34 | 24 | 8 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,6** | 79 | 34 | 24 | 8 | | ● |
| **6,7** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **6,9** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 41 | 31 | 8 | | ● |
| **7,1** | 79 | 41 | 30 | 8 | | ● |
| **7,2** | 79 | 41 | 30 | 8 | | ● |
| **7,3** | 79 | 41 | 30 | 8 | | ● |
| **7,4** | 79 | 41 | 30 | 8 | | ● |
| **7,5** | 79 | 41 | 30 | 8 | | ● |
| **7,6** | 79 | 41 | 30 | 8 | | ● |
| **7,7** | 79 | 41 | 30 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **7,9** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,1** | 89 | 47 | 35 | 10 | | ● |
| **8,2** | 89 | 47 | 35 | 10 | | ● |
| **8,3** | 89 | 47 | 35 | 10 | | ● |

01/02 →



| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6011TF |
|---|---|---|---|---|---|---|
| **8,4** | 89 | 47 | 34 | 10 | | ● |
| **8,5** | 89 | 47 | 34 | 10 | | ● |
| **8,6** | 89 | 47 | 34 | 10 | | ● |
| **8,7** | 89 | 47 | 34 | 10 | | ● |
| **8,8** | 89 | 47 | 34 | 10 | | ● |
| **8,9** | 89 | 47 | 34 | 10 | | ● |
| **9,0** | 89 | 47 | 34 | 10 | | ● |
| **9,1** | 89 | 47 | 33 | 10 | | ● |
| **9,2** | 89 | 47 | 33 | 10 | | ● |
| **9,3** | 89 | 47 | 33 | 10 | | ● |
| **9,4** | 89 | 47 | 33 | 10 | | ● |
| **9,5** | 89 | 47 | 33 | 10 | | ● |
| **9,6** | 89 | 47 | 33 | 10 | | ● |
| **9,7** | 89 | 47 | 33 | 10 | | ● |
| **9,8** | 89 | 47 | 32 | 10 | | ● |
| **9,9** | 89 | 47 | 32 | 10 | | ● |
| **10,0** | 89 | 47 | 32 | 10 | | ● |
| **10,1** | 102 | 55 | 40 | 12 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,3** | 102 | 55 | 40 | 12 | | ● |
| **10,4** | 102 | 55 | 39 | 12 | | ● |
| **10,5** | 102 | 55 | 39 | 12 | | ● |
| **10,6** | 102 | 55 | 39 | 12 | | ● |
| **10,7** | 102 | 55 | 39 | 12 | | ● |
| **10,8** | 102 | 55 | 39 | 12 | | ● |
| **10,9** | 102 | 55 | 39 | 12 | | ● |
| **11,0** | 102 | 55 | 39 | 12 | | ● |
| **11,1** | 102 | 55 | 38 | 12 | | ● |
| **11,2** | 102 | 55 | 38 | 12 | | ● |
| **11,3** | 102 | 55 | 38 | 12 | | ● |
| **11,4** | 102 | 55 | 38 | 12 | | ● |
| **11,5** | 102 | 55 | 38 | 12 | | ● |
| **11,6** | 102 | 55 | 38 | 12 | | ● |
| **11,7** | 102 | 55 | 38 | 12 | | ● |
| **11,8** | 102 | 55 | 37 | 12 | | ● |
| **11,9** | 102 | 55 | 37 | 12 | | ● |
| **12,0** | 102 | 55 | 37 | 12 | | ● |
| **12,1** | 107 | 60 | 42 | 14 | | ● |
| **12,2** | 107 | 60 | 42 | 14 | | ● |
| **12,3** | 107 | 60 | 42 | 14 | | ● |
| **12,4** | 107 | 60 | 41 | 14 | | ● |
| **12,5** | 107 | 60 | 41 | 14 | | ● |
| **12,6** | 107 | 60 | 41 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6011TF |
|---|---|---|---|---|---|---|
| **12,7** | 107 | 60 | 41 | 14 | | ● |
| **12,8** | 107 | 60 | 41 | 14 | | ● |
| **12,9** | 107 | 60 | 41 | 14 | | ● |
| **13,0** | 107 | 60 | 41 | 14 | | ● |
| **13,1** | 107 | 60 | 40 | 14 | | ● |
| **13,2** | 107 | 60 | 40 | 14 | | ● |
| **13,3** | 107 | 60 | 40 | 14 | | ● |
| **13,4** | 107 | 60 | 40 | 14 | | ● |
| **13,5** | 107 | 60 | 40 | 14 | | ● |
| **13,6** | 107 | 60 | 40 | 14 | | ● |
| **13,7** | 107 | 60 | 40 | 14 | | ● |
| **13,8** | 107 | 60 | 39 | 14 | | ● |
| **13,9** | 107 | 60 | 39 | 14 | | ● |
| **14,0** | 107 | 60 | 39 | 14 | | ● |
| **14,1** | 115 | 65 | 44 | 16 | | ● |
| **14,2** | 115 | 65 | 44 | 16 | | ● |
| **14,3** | 115 | 65 | 44 | 16 | | ● |
| **14,4** | 115 | 65 | 43 | 16 | | ● |
| **14,5** | 115 | 65 | 43 | 16 | | ● |
| **14,6** | 115 | 65 | 43 | 16 | | ● |
| **14,7** | 115 | 65 | 43 | 16 | | ● |
| **14,8** | 115 | 65 | 43 | 16 | | ● |
| **14,9** | 115 | 65 | 43 | 16 | | ● |
| **15,0** | 115 | 65 | 43 | 16 | | ● |
| **15,1** | 115 | 65 | 42 | 16 | | ● |
| **15,2** | 115 | 65 | 42 | 16 | | ● |
| **15,3** | 115 | 65 | 42 | 16 | | ● |
| **15,4** | 115 | 65 | 42 | 16 | | ● |
| **15,5** | 115 | 65 | 42 | 16 | | ● |
| **15,6** | 115 | 65 | 42 | 16 | | ● |
| **15,7** | 115 | 65 | 42 | 16 | | ● |
| **15,8** | 115 | 65 | 41 | 16 | | ● |
| **15,9** | 115 | 65 | 41 | 16 | | ● |
| **16,0** | 115 | 65 | 41 | 16 | | ● |
| **16,5** | 123 | 73 | 48 | 18 | | ● |
| **17,0** | 123 | 73 | 48 | 18 | | ● |
| **17,5** | 123 | 73 | 47 | 18 | | ● |
| **18,0** | 123 | 73 | 46 | 18 | | ● |
| **18,5** | 131 | 79 | 51 | 20 | | ● |
| **19,0** | 131 | 79 | 51 | 20 | | ● |
| **19,5** | 131 | 79 | 50 | 20 | | ● |
| **20,0** | 131 | 79 | 49 | 20 | | ● |

02/02

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 K**
DIN

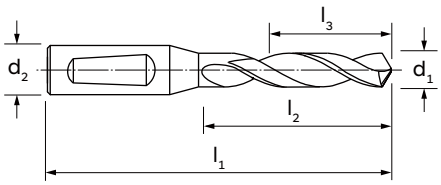
≤3xd

6535 HE

140°

A

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6012TF |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 16 | 6 | | ● |
| **3,1** | 62 | 20 | 15 | 6 | | ● |
| **3,2** | 62 | 20 | 15 | 6 | | ● |
| **3,3** | 62 | 20 | 15 | 6 | | ● |
| **3,4** | 62 | 20 | 15 | 6 | | ● |
| **3,5** | 62 | 20 | 15 | 6 | | ● |
| **3,6** | 62 | 20 | 15 | 6 | | ● |
| **3,7** | 62 | 20 | 15 | 6 | | ● |
| **3,8** | 66 | 24 | 18 | 6 | | ● |
| **3,9** | 66 | 24 | 18 | 6 | | ● |
| **4,0** | 66 | 24 | 18 | 6 | | ● |
| **4,1** | 66 | 24 | 18 | 6 | | ● |
| **4,2** | 66 | 24 | 18 | 6 | | ● |
| **4,3** | 66 | 24 | 18 | 6 | | ● |
| **4,4** | 66 | 24 | 17 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **4,6** | 66 | 24 | 17 | 6 | | ● |
| **4,7** | 66 | 24 | 17 | 6 | | ● |
| **4,8** | 66 | 28 | 21 | 6 | | ● |
| **4,9** | 66 | 28 | 21 | 6 | | ● |
| **5,0** | 66 | 28 | 21 | 6 | | ● |
| **5,1** | 66 | 28 | 20 | 6 | | ● |
| **5,2** | 66 | 28 | 20 | 6 | | ● |
| **5,3** | 66 | 28 | 20 | 6 | | ● |
| **5,4** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,6** | 66 | 28 | 20 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6012TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 19 | 6 | | ● |
| **5,9** | 66 | 28 | 19 | 6 | | ● |
| **6,0** | 66 | 28 | 19 | 6 | | ● |
| **6,1** | 79 | 34 | 25 | 8 | | ● |
| **6,2** | 79 | 34 | 25 | 8 | | ● |
| **6,3** | 79 | 34 | 25 | 8 | | ● |
| **6,4** | 79 | 34 | 24 | 8 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,6** | 79 | 34 | 24 | 8 | | ● |
| **6,7** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **6,9** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 41 | 31 | 8 | | ● |
| **7,1** | 79 | 41 | 30 | 8 | | ● |
| **7,2** | 79 | 41 | 30 | 8 | | ● |
| **7,3** | 79 | 41 | 30 | 8 | | ● |
| **7,4** | 79 | 41 | 30 | 8 | | ● |
| **7,5** | 79 | 41 | 30 | 8 | | ● |
| **7,6** | 79 | 41 | 30 | 8 | | ● |
| **7,7** | 79 | 41 | 30 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **7,9** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,1** | 89 | 47 | 35 | 10 | | ● |
| **8,2** | 89 | 47 | 35 | 10 | | ● |
| **8,3** | 89 | 47 | 35 | 10 | | ● |

01/02 →

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6012TF |
|---|---|---|---|---|---|---|
| **8,4** | 89 | 47 | 34 | 10 | | ● |
| **8,5** | 89 | 47 | 34 | 10 | | ● |
| **8,6** | 89 | 47 | 34 | 10 | | ● |
| **8,7** | 89 | 47 | 34 | 10 | | ● |
| **8,8** | 89 | 47 | 34 | 10 | | ● |
| **8,9** | 89 | 47 | 34 | 10 | | ● |
| **9,0** | 89 | 47 | 34 | 10 | | ● |
| **9,1** | 89 | 47 | 33 | 10 | | ● |
| **9,2** | 89 | 47 | 33 | 10 | | ● |
| **9,3** | 89 | 47 | 33 | 10 | | ● |
| **9,4** | 89 | 47 | 33 | 10 | | ● |
| **9,5** | 89 | 47 | 33 | 10 | | ● |
| **9,6** | 89 | 47 | 33 | 10 | | ● |
| **9,7** | 89 | 47 | 33 | 10 | | ● |
| **9,8** | 89 | 47 | 32 | 10 | | ● |
| **9,9** | 89 | 47 | 32 | 10 | | ● |
| **10,0** | 89 | 47 | 32 | 10 | | ● |
| **10,1** | 102 | 55 | 40 | 12 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,3** | 102 | 55 | 40 | 12 | | ● |
| **10,4** | 102 | 55 | 39 | 12 | | ● |
| **10,5** | 102 | 55 | 39 | 12 | | ● |
| **10,6** | 102 | 55 | 39 | 12 | | ● |
| **10,7** | 102 | 55 | 39 | 12 | | ● |
| **10,8** | 102 | 55 | 39 | 12 | | ● |
| **10,9** | 102 | 55 | 39 | 12 | | ● |
| **11,0** | 102 | 55 | 39 | 12 | | ● |
| **11,1** | 102 | 55 | 38 | 12 | | ● |
| **11,2** | 102 | 55 | 38 | 12 | | ● |
| **11,3** | 102 | 55 | 38 | 12 | | ● |
| **11,4** | 102 | 55 | 38 | 12 | | ● |
| **11,5** | 102 | 55 | 38 | 12 | | ● |
| **11,6** | 102 | 55 | 38 | 12 | | ● |
| **11,7** | 102 | 55 | 38 | 12 | | ● |
| **11,8** | 102 | 55 | 37 | 12 | | ● |
| **11,9** | 102 | 55 | 37 | 12 | | ● |
| **12,0** | 102 | 55 | 37 | 12 | | ● |
| **12,1** | 107 | 60 | 42 | 14 | | ● |
| **12,2** | 107 | 60 | 42 | 14 | | ● |
| **12,3** | 107 | 60 | 42 | 14 | | ● |
| **12,4** | 107 | 60 | 41 | 14 | | ● |
| **12,5** | 107 | 60 | 41 | 14 | | ● |
| **12,6** | 107 | 60 | 41 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6012TF |
|---|---|---|---|---|---|---|
| **12,7** | 107 | 60 | 41 | 14 | | ● |
| **12,8** | 107 | 60 | 41 | 14 | | ● |
| **12,9** | 107 | 60 | 41 | 14 | | ● |
| **13,0** | 107 | 60 | 41 | 14 | | ● |
| **13,1** | 107 | 60 | 40 | 14 | | ● |
| **13,2** | 107 | 60 | 40 | 14 | | ● |
| **13,3** | 107 | 60 | 40 | 14 | | ● |
| **13,4** | 107 | 60 | 40 | 14 | | ● |
| **13,5** | 107 | 60 | 40 | 14 | | ● |
| **13,6** | 107 | 60 | 40 | 14 | | ● |
| **13,7** | 107 | 60 | 40 | 14 | | ● |
| **13,8** | 107 | 60 | 39 | 14 | | ● |
| **13,9** | 107 | 60 | 39 | 14 | | ● |
| **14,0** | 107 | 60 | 39 | 14 | | ● |
| **14,1** | 115 | 65 | 44 | 16 | | ● |
| **14,2** | 115 | 65 | 44 | 16 | | ● |
| **14,3** | 115 | 65 | 44 | 16 | | ● |
| **14,4** | 115 | 65 | 43 | 16 | | ● |
| **14,5** | 115 | 65 | 43 | 16 | | ● |
| **14,6** | 115 | 65 | 43 | 16 | | ● |
| **14,7** | 115 | 65 | 43 | 16 | | ● |
| **14,8** | 115 | 65 | 43 | 16 | | ● |
| **14,9** | 115 | 65 | 43 | 16 | | ● |
| **15,0** | 115 | 65 | 43 | 16 | | ● |
| **15,1** | 115 | 65 | 42 | 16 | | ● |
| **15,2** | 115 | 65 | 42 | 16 | | ● |
| **15,3** | 115 | 65 | 42 | 16 | | ● |
| **15,4** | 115 | 65 | 42 | 16 | | ● |
| **15,5** | 115 | 65 | 42 | 16 | | ● |
| **15,6** | 115 | 65 | 42 | 16 | | ● |
| **15,7** | 115 | 65 | 42 | 16 | | ● |
| **15,8** | 115 | 65 | 41 | 16 | | ● |
| **15,9** | 115 | 65 | 41 | 16 | | ● |
| **16,0** | 115 | 65 | 41 | 16 | | ● |
| **16,5** | 123 | 73 | 48 | 18 | | ● |
| **17,0** | 123 | 73 | 48 | 18 | | ● |
| **17,5** | 123 | 73 | 47 | 18 | | ● |
| **18,0** | 123 | 73 | 46 | 18 | | ● |
| **18,5** | 131 | 79 | 51 | 20 | | ● |
| **19,0** | 131 | 79 | 51 | 20 | | ● |
| **19,5** | 131 | 79 | 50 | 20 | | ● |
| **20,0** | 131 | 79 | 49 | 20 | | ● |

02/02

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**

DIN

≤5xd

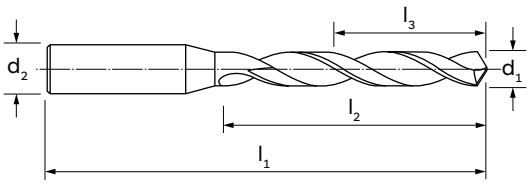
6535 HA

140°

A

SHRINK FIT

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6020TF |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6020TF |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →

ILIX PRECISION

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6020TF |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,1** | 118 | 71 | 56 | 12 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,3** | 118 | 71 | 56 | 12 | | ● |
| **10,4** | 118 | 71 | 55 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,6** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **10,9** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,1** | 118 | 71 | 54 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,3** | 118 | 71 | 54 | 12 | | ● |
| **11,4** | 118 | 71 | 54 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,6** | 118 | 71 | 54 | 12 | | ● |
| **11,7** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **11,9** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,1** | 124 | 77 | 59 | 14 | | ● |
| **12,2** | 124 | 77 | 59 | 14 | | ● |
| **12,3** | 124 | 77 | 59 | 14 | | ● |
| **12,4** | 124 | 77 | 58 | 14 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **12,6** | 124 | 77 | 58 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6020TF |
|---|---|---|---|---|---|---|
| **12,7** | 124 | 77 | 58 | 14 | | ● |
| **12,8** | 124 | 77 | 58 | 14 | | ● |
| **12,9** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **13,1** | 124 | 77 | 57 | 14 | | ● |
| **13,2** | 124 | 77 | 57 | 14 | | ● |
| **13,3** | 124 | 77 | 57 | 14 | | ● |
| **13,4** | 124 | 77 | 57 | 14 | | ● |
| **13,5** | 124 | 77 | 57 | 14 | | ● |
| **13,6** | 124 | 77 | 57 | 14 | | ● |
| **13,7** | 124 | 77 | 57 | 14 | | ● |
| **13,8** | 124 | 77 | 56 | 14 | | ● |
| **13,9** | 124 | 77 | 56 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **14,1** | 133 | 83 | 62 | 16 | | ● |
| **14,2** | 133 | 83 | 62 | 16 | | ● |
| **14,3** | 133 | 83 | 62 | 16 | | ● |
| **14,4** | 133 | 83 | 61 | 16 | | ● |
| **14,5** | 133 | 83 | 61 | 16 | | ● |
| **14,6** | 133 | 83 | 61 | 16 | | ● |
| **14,7** | 133 | 83 | 61 | 16 | | ● |
| **14,8** | 133 | 83 | 61 | 16 | | ● |
| **14,9** | 133 | 83 | 61 | 16 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,1** | 133 | 83 | 60 | 16 | | ● |
| **15,2** | 133 | 83 | 60 | 16 | | ● |
| **15,3** | 133 | 83 | 60 | 16 | | ● |
| **15,4** | 133 | 83 | 60 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **15,6** | 133 | 83 | 60 | 16 | | ● |
| **15,7** | 133 | 83 | 60 | 16 | | ● |
| **15,8** | 133 | 83 | 59 | 16 | | ● |
| **15,9** | 133 | 83 | 59 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **16,5** | 143 | 93 | 68 | 18 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |
| **18,5** | 153 | 101 | 73 | 20 | | ● |
| **19,0** | 153 | 101 | 73 | 20 | | ● |
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

02/02

# RECORD 2S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**
DIN

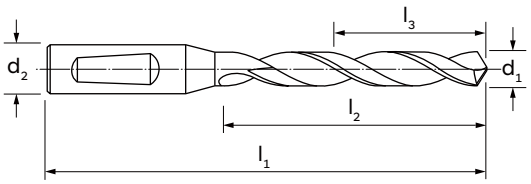
≤5xd

6535 HE

140°

A

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6021TF |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6021TF |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →



| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6021TF |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,1** | 118 | 71 | 56 | 12 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,3** | 118 | 71 | 56 | 12 | | ● |
| **10,4** | 118 | 71 | 55 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,6** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **10,9** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,1** | 118 | 71 | 54 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,3** | 118 | 71 | 54 | 12 | | ● |
| **11,4** | 118 | 71 | 54 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,6** | 118 | 71 | 54 | 12 | | ● |
| **11,7** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **11,9** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,1** | 124 | 77 | 59 | 14 | | ● |
| **12,2** | 124 | 77 | 59 | 14 | | ● |
| **12,3** | 124 | 77 | 59 | 14 | | ● |
| **12,4** | 124 | 77 | 58 | 14 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **12,6** | 124 | 77 | 58 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6021TF |
|---|---|---|---|---|---|---|
| **12,7** | 124 | 77 | 58 | 14 | | ● |
| **12,8** | 124 | 77 | 58 | 14 | | ● |
| **12,9** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **13,1** | 124 | 77 | 57 | 14 | | ● |
| **13,2** | 124 | 77 | 57 | 14 | | ● |
| **13,3** | 124 | 77 | 57 | 14 | | ● |
| **13,4** | 124 | 77 | 57 | 14 | | ● |
| **13,5** | 124 | 77 | 57 | 14 | | ● |
| **13,6** | 124 | 77 | 57 | 14 | | ● |
| **13,7** | 124 | 77 | 57 | 14 | | ● |
| **13,8** | 124 | 77 | 56 | 14 | | ● |
| **13,9** | 124 | 77 | 56 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **14,1** | 133 | 83 | 62 | 16 | | ● |
| **14,2** | 133 | 83 | 62 | 16 | | ● |
| **14,3** | 133 | 83 | 62 | 16 | | ● |
| **14,4** | 133 | 83 | 61 | 16 | | ● |
| **14,5** | 133 | 83 | 61 | 16 | | ● |
| **14,6** | 133 | 83 | 61 | 16 | | ● |
| **14,7** | 133 | 83 | 61 | 16 | | ● |
| **14,8** | 133 | 83 | 61 | 16 | | ● |
| **14,9** | 133 | 83 | 61 | 16 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,1** | 133 | 83 | 60 | 16 | | ● |
| **15,2** | 133 | 83 | 60 | 16 | | ● |
| **15,3** | 133 | 83 | 60 | 16 | | ● |
| **15,4** | 133 | 83 | 60 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **15,6** | 133 | 83 | 60 | 16 | | ● |
| **15,7** | 133 | 83 | 60 | 16 | | ● |
| **15,8** | 133 | 83 | 59 | 16 | | ● |
| **15,9** | 133 | 83 | 59 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **16,5** | 143 | 93 | 68 | 18 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |
| **18,5** | 153 | 101 | 73 | 20 | | ● |
| **19,0** | 153 | 101 | 73 | 20 | | ● |
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

02/02

**Le punte in metallo duro della serie RECORD HP i garantiscono il massimo volume di truciolo asportato e la maggior durata dell'utensile nelle lavorazioni di acciai medio/alto legati e ghise.**

The solid carbide drills of the RECORD HP i series ensures maximum chip removal and longer tool life in medium/high alloy steels and cast irons machining.

# Record HP i

**GEOMETRIA HP.**
HP geometry.

**DISPONIBILE NELLA VERSIONE 5xD CON FORI DI REFRIGERAZIONE INTERNA.**
Available in 5xD version with internal coolant.

**IL RIVESTIMENTO TF (TiAlN Futura Plus), OTTENUTO CON TECNICA PVD, ASSICURA ELEVATA RESISTENZA ALL'USURA, BASSO COEFFICIENTE D'ATTRITO.**
TF coating (TiAlN Futura Plus), with PVD technique, ensures high wear resistance and low coefficient of friction.

**CODOLO DIN 6535HA IN TOLLERANZA h6 IDONEO PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA shank in h6 tolerance suitable for shrink fit.

**MIGLIOR RETTILINEITÀ E QUALITÀ DEL FORO GRAZIE AI QUATTRO PATTINI DI GUIDA.**
Better straightness and hole quality thanks to four margin lands.

**ECCELLENTE CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

ILIX® PRECISION

ILIX PRECISION

# RECORD HP i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**

DIN

≤5xd

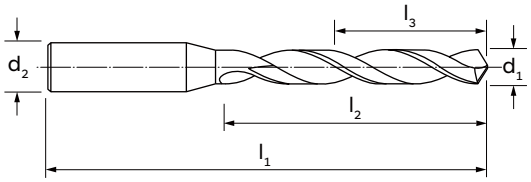
6535 HA

140°

A

SHRINK FIT

P. 124




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | – |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | – |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | – |
| **H** \| **Acciai Temprati** \| Hardened Steels | – |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6022TF |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6022TF |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →

# RECORD HP i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6022TF |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,2** | 124 | 77 | 59 | 14 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6022TF |
|---|---|---|---|---|---|---|
| **12,75** | 124 | 77 | 58 | 14 | | ● |
| **12,80** | 124 | 77 | 58 | 14 | | ● |
| **13,00** | 124 | 77 | 58 | 14 | | ● |
| **13,10** | 124 | 77 | 57 | 14 | | ● |
| **13,50** | 124 | 77 | 57 | 14 | | ● |
| **13,80** | 124 | 77 | 56 | 14 | | ● |
| **14,00** | 124 | 77 | 56 | 14 | | ● |
| **14,20** | 133 | 83 | 62 | 16 | | ● |
| **14,50** | 133 | 83 | 61 | 16 | | ● |
| **14,80** | 133 | 83 | 61 | 16 | | ● |
| **15,00** | 133 | 83 | 61 | 16 | | ● |
| **15,10** | 133 | 83 | 60 | 16 | | ● |
| **15,20** | 133 | 83 | 60 | 16 | | ● |
| **15,50** | 133 | 83 | 60 | 16 | | ● |
| **15,80** | 133 | 83 | 59 | 16 | | ● |
| **15,90** | 133 | 83 | 59 | 16 | | ● |
| **16,00** | 133 | 83 | 59 | 16 | | ● |
| **16,50** | 143 | 93 | 68 | 18 | | ● |
| **16,70** | 143 | 93 | 68 | 18 | | ● |
| **16,75** | 143 | 93 | 68 | 18 | | ● |
| **17,00** | 143 | 93 | 68 | 18 | | ● |
| **17,20** | 143 | 93 | 67 | 18 | | ● |
| **17,50** | 143 | 93 | 67 | 18 | | ● |
| **18,00** | 143 | 93 | 66 | 18 | | ● |
| **18,50** | 153 | 101 | 73 | 20 | | ● |
| **19,00** | 153 | 101 | 73 | 20 | | ● |
| **19,50** | 153 | 101 | 72 | 20 | | ● |
| **20,00** | 153 | 101 | 71 | 20 | | ● |

02/02

**Le punte in metallo duro della serie RECORD VA e VA i sono progettate in modo specifico per le lavorazioni di acciai inossidabili e leghe resistenti al calore, ma garantiscono ottime performance anche su acciai a basso tenore di Carbonio e leghe di Titanio.**

The solid carbide drills of the RECORD VA and VA i series are specifically designed for machining stainless steels and heat-resistant alloys but they can also guarantee excellent performances on low carbon steels and Titanium alloys.

# Record VA-VA i

**GEOMETRIA VA.**
VA geometry.

**DISPONIBILI NELLE VERSIONI 3xD, 5XD E 8xD CON E SENZA FORI DI REFRIGERAZIONE INTERNA.**
Available in 3xD, 5xD and 8xD versions with and without internal coolant.

**IL RIVESTIMENTO NANOCOMPOSITO XB (TiAlN Blue Evo) ASSICURA UN'ELEVATA RESISTENZA ALL'USURA E RIDOTTA ADESIONE SU ACCIAI INOSSIDABILI.**
The XB (TiAlN Blue Evo) nanocomposite coating ensures high wear resistance minimizing adhesion on stainless steels.

**CODOLO DIN 6535HA IN TOLLERANZA h6 IDONEO PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA shank in h6 tolerance suitable for shrink fit.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO ANCHE NEL CASO IN CUI CI FOSSE UNA BASSA PRESSIONE DEL REFRIGERANTE.**
The specific design of the flute and the polished surface ensure better chip evacuation even in case of low coolant pressure.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI.**
Improved drilling quality thanks to reduced axial forces.

**ECCELLENTE CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

ILIX® PRECISION

# RECORD VA

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**6537 K**

DIN

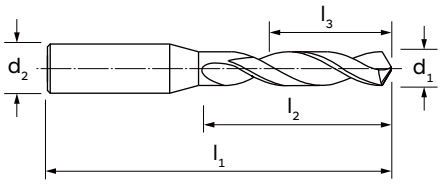
≤3xd

6535 HA

140°

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Blue Evo |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6051XB |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 16 | 6 | | ● |
| **3,3** | 62 | 20 | 15 | 6 | | ● |
| **3,5** | 62 | 20 | 15 | 6 | | ● |
| **3,8** | 66 | 24 | 18 | 6 | | ● |
| **4,0** | 66 | 24 | 18 | 6 | | ● |
| **4,2** | 66 | 24 | 18 | 6 | | ● |
| **4,3** | 66 | 24 | 18 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **5,0** | 66 | 28 | 21 | 6 | | ● |
| **5,1** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 19 | 6 | | ● |
| **6,0** | 66 | 28 | 19 | 6 | | ● |
| **6,2** | 79 | 34 | 25 | 8 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,6** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 34 | 24 | 8 | | ● |
| **7,5** | 79 | 41 | 30 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,5** | 89 | 47 | 34 | 10 | | ● |
| **8,6** | 89 | 47 | 34 | 10 | | ● |
| **8,8** | 89 | 47 | 34 | 10 | | ● |
| **9,0** | 89 | 47 | 34 | 10 | | ● |
| **9,5** | 89 | 47 | 33 | 10 | | ● |
| **9,8** | 89 | 47 | 32 | 10 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6051XB |
|---|---|---|---|---|---|---|
| **10,0** | 89 | 47 | 32 | 10 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,5** | 102 | 55 | 39 | 12 | | ● |
| **11,0** | 102 | 55 | 39 | 12 | | ● |
| **11,2** | 102 | 55 | 38 | 12 | | ● |
| **11,5** | 102 | 55 | 38 | 12 | | ● |
| **11,8** | 102 | 55 | 37 | 12 | | ● |
| **12,0** | 102 | 55 | 37 | 12 | | ● |
| **13,0** | 107 | 60 | 41 | 14 | | ● |
| **13,5** | 107 | 60 | 40 | 14 | | ● |
| **13,8** | 107 | 60 | 39 | 14 | | ● |
| **14,0** | 107 | 60 | 39 | 14 | | ● |
| **15,0** | 115 | 65 | 43 | 16 | | ● |
| **16,0** | 115 | 65 | 41 | 16 | | ● |

ILIX PRECISION

# RECORD VA i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

6537 K

DIN

≤3xd

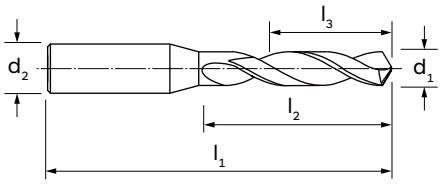
6535 HA

140°

A

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Blue Evo |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6050XB |
|---|---|---|---|---|---|---|
| **3,0** | 62 | 20 | 14 | 6 | | ● |
| **3,2** | 62 | 20 | 14 | 6 | | ● |
| **3,3** | 62 | 20 | 14 | 6 | | ● |
| **3,5** | 62 | 20 | 14 | 6 | | ● |
| **3,8** | 66 | 24 | 17 | 6 | | ● |
| **4,0** | 66 | 24 | 17 | 6 | | ● |
| **4,2** | 66 | 24 | 17 | 6 | | ● |
| **4,5** | 66 | 24 | 17 | 6 | | ● |
| **4,8** | 66 | 28 | 20 | 6 | | ● |
| **5,0** | 66 | 28 | 20 | 6 | | ● |
| **5,5** | 66 | 28 | 20 | 6 | | ● |
| **5,8** | 66 | 28 | 20 | 6 | | ● |
| **6,0** | 66 | 28 | 20 | 6 | | ● |
| **6,5** | 79 | 34 | 24 | 8 | | ● |
| **6,8** | 79 | 34 | 24 | 8 | | ● |
| **7,0** | 79 | 34 | 24 | 8 | | ● |
| **7,5** | 79 | 41 | 29 | 8 | | ● |
| **7,8** | 79 | 41 | 29 | 8 | | ● |
| **8,0** | 79 | 41 | 29 | 8 | | ● |
| **8,5** | 89 | 47 | 35 | 10 | | ● |
| **8,8** | 89 | 47 | 35 | 10 | | ● |
| **9,0** | 89 | 47 | 35 | 10 | | ● |
| **9,8** | 89 | 47 | 35 | 10 | | ● |
| **10,0** | 89 | 47 | 35 | 10 | | ● |
| **10,2** | 102 | 55 | 40 | 12 | | ● |
| **10,8** | 102 | 55 | 40 | 12 | | ● |
| **11,8** | 102 | 55 | 40 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6050XB |
|---|---|---|---|---|---|---|
| **12,0** | 102 | 55 | 40 | 12 | | ● |
| **14,0** | 107 | 60 | 43 | 14 | | ● |

# RECORD VA i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**6537 L**
DIN

≤5xd

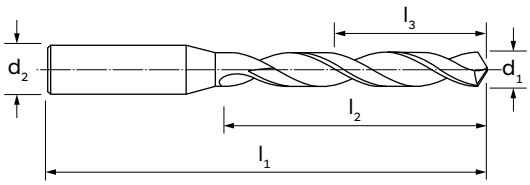
6535 HA

140°

A

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Blue Evo |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6052XB |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ● |
| **3,1** | 66 | 28 | 23 | 6 | | ● |
| **3,2** | 66 | 28 | 23 | 6 | | ● |
| **3,3** | 66 | 28 | 23 | 6 | | ● |
| **3,4** | 66 | 28 | 23 | 6 | | ● |
| **3,5** | 66 | 28 | 23 | 6 | | ● |
| **3,6** | 66 | 28 | 23 | 6 | | ● |
| **3,7** | 66 | 28 | 23 | 6 | | ● |
| **3,8** | 74 | 36 | 30 | 6 | | ● |
| **3,9** | 74 | 36 | 30 | 6 | | ● |
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,1** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **4,3** | 74 | 36 | 30 | 6 | | ● |
| **4,4** | 74 | 36 | 29 | 6 | | ● |
| **4,5** | 74 | 36 | 29 | 6 | | ● |
| **4,6** | 74 | 36 | 29 | 6 | | ● |
| **4,7** | 74 | 36 | 29 | 6 | | ● |
| **4,8** | 82 | 44 | 37 | 6 | | ● |
| **4,9** | 82 | 44 | 37 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,1** | 82 | 44 | 36 | 6 | | ● |
| **5,2** | 82 | 44 | 36 | 6 | | ● |
| **5,3** | 82 | 44 | 36 | 6 | | ● |
| **5,4** | 82 | 44 | 36 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **5,6** | 82 | 44 | 36 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6052XB |
|---|---|---|---|---|---|---|
| **5,7** | 82 | 44 | 36 | 6 | | ● |
| **5,8** | 82 | 44 | 35 | 6 | | ● |
| **5,9** | 82 | 44 | 35 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,1** | 91 | 53 | 44 | 8 | | ● |
| **6,2** | 91 | 53 | 44 | 8 | | ● |
| **6,3** | 91 | 53 | 44 | 8 | | ● |
| **6,4** | 91 | 53 | 43 | 8 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,6** | 91 | 53 | 43 | 8 | | ● |
| **6,7** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **6,9** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,1** | 91 | 53 | 42 | 8 | | ● |
| **7,2** | 91 | 53 | 42 | 8 | | ● |
| **7,3** | 91 | 53 | 42 | 8 | | ● |
| **7,4** | 91 | 53 | 42 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **7,6** | 91 | 53 | 42 | 8 | | ● |
| **7,7** | 91 | 53 | 42 | 8 | | ● |
| **7,8** | 91 | 53 | 41 | 8 | | ● |
| **7,9** | 91 | 53 | 41 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,1** | 103 | 61 | 49 | 10 | | ● |
| **8,2** | 103 | 61 | 49 | 10 | | ● |
| **8,3** | 103 | 61 | 49 | 10 | | ● |

01/02 →

ILIX PRECISION

# RECORD VA i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6052XB |
|---|---|---|---|---|---|---|
| **8,4** | 103 | 61 | 48 | 10 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **8,6** | 103 | 61 | 48 | 10 | | ● |
| **8,7** | 103 | 61 | 48 | 10 | | ● |
| **8,8** | 103 | 61 | 48 | 10 | | ● |
| **8,9** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **9,1** | 103 | 61 | 47 | 10 | | ● |
| **9,2** | 103 | 61 | 47 | 10 | | ● |
| **9,3** | 103 | 61 | 47 | 10 | | ● |
| **9,4** | 103 | 61 | 47 | 10 | | ● |
| **9,5** | 103 | 61 | 47 | 10 | | ● |
| **9,6** | 103 | 61 | 47 | 10 | | ● |
| **9,7** | 103 | 61 | 47 | 10 | | ● |
| **9,8** | 103 | 61 | 46 | 10 | | ● |
| **9,9** | 103 | 61 | 46 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,1** | 118 | 71 | 56 | 12 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,3** | 118 | 71 | 56 | 12 | | ● |
| **10,4** | 118 | 71 | 55 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **10,6** | 118 | 71 | 55 | 12 | | ● |
| **10,7** | 118 | 71 | 55 | 12 | | ● |
| **10,8** | 118 | 71 | 55 | 12 | | ● |
| **10,9** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,1** | 118 | 71 | 54 | 12 | | ● |
| **11,2** | 118 | 71 | 54 | 12 | | ● |
| **11,3** | 118 | 71 | 54 | 12 | | ● |
| **11,4** | 118 | 71 | 54 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **11,6** | 118 | 71 | 54 | 12 | | ● |
| **11,7** | 118 | 71 | 54 | 12 | | ● |
| **11,8** | 118 | 71 | 53 | 12 | | ● |
| **11,9** | 118 | 71 | 53 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **13,5** | 124 | 77 | 57 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **14,5** | 133 | 83 | 61 | 16 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |

02/02

# RECORD VA i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

≤8xd

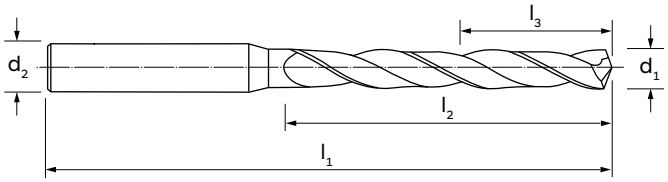
6535 HA

140°

A

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Blue Evo |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6053XB |
|---|---|---|---|---|---|---|
| **3,0** | 72 | 34 | 30 | 6 | | ● |
| **3,1** | 72 | 34 | 29 | 6 | | ● |
| **3,2** | 72 | 34 | 29 | 6 | | ● |
| **3,3** | 72 | 34 | 29 | 6 | | ● |
| **3,4** | 72 | 34 | 29 | 6 | | ● |
| **3,5** | 72 | 34 | 29 | 6 | | ● |
| **3,6** | 72 | 34 | 29 | 6 | | ● |
| **3,7** | 72 | 34 | 29 | 6 | | ● |
| **3,8** | 81 | 43 | 37 | 6 | | ● |
| **3,9** | 81 | 43 | 37 | 6 | | ● |
| **4,0** | 81 | 43 | 37 | 6 | | ● |
| **4,1** | 81 | 43 | 37 | 6 | | ● |
| **4,2** | 81 | 43 | 37 | 6 | | ● |
| **4,3** | 81 | 43 | 37 | 6 | | ● |
| **4,4** | 81 | 43 | 36 | 6 | | ● |
| **4,5** | 81 | 43 | 36 | 6 | | ● |
| **4,6** | 81 | 43 | 36 | 6 | | ● |
| **4,7** | 81 | 43 | 36 | 6 | | ● |
| **4,8** | 95 | 57 | 50 | 6 | | ● |
| **4,9** | 95 | 57 | 50 | 6 | | ● |
| **5,0** | 95 | 57 | 50 | 6 | | ● |
| **5,1** | 95 | 57 | 49 | 6 | | ● |
| **5,2** | 95 | 57 | 49 | 6 | | ● |
| **5,3** | 95 | 57 | 49 | 6 | | ● |
| **5,4** | 95 | 57 | 49 | 6 | | ● |
| **5,5** | 95 | 57 | 49 | 6 | | ● |
| **5,6** | 95 | 57 | 49 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6053XB |
|---|---|---|---|---|---|---|
| **5,7** | 95 | 57 | 49 | 6 | | ● |
| **5,8** | 95 | 57 | 48 | 6 | | ● |
| **5,9** | 95 | 57 | 48 | 6 | | ● |
| **6,0** | 95 | 57 | 48 | 6 | | ● |
| **6,1** | 114 | 76 | 67 | 8 | | ● |
| **6,2** | 114 | 76 | 67 | 8 | | ● |
| **6,3** | 114 | 76 | 67 | 8 | | ● |
| **6,4** | 114 | 76 | 66 | 8 | | ● |
| **6,5** | 114 | 76 | 66 | 8 | | ● |
| **6,6** | 114 | 76 | 66 | 8 | | ● |
| **6,7** | 114 | 76 | 66 | 8 | | ● |
| **6,8** | 114 | 76 | 66 | 8 | | ● |
| **6,9** | 114 | 76 | 66 | 8 | | ● |
| **7,0** | 114 | 76 | 66 | 8 | | ● |
| **7,1** | 114 | 76 | 65 | 8 | | ● |
| **7,2** | 114 | 76 | 65 | 8 | | ● |
| **7,3** | 114 | 76 | 65 | 8 | | ● |
| **7,4** | 114 | 76 | 65 | 8 | | ● |
| **7,5** | 114 | 76 | 65 | 8 | | ● |
| **7,6** | 114 | 76 | 65 | 8 | | ● |
| **7,7** | 114 | 76 | 65 | 8 | | ● |
| **7,8** | 114 | 76 | 64 | 8 | | ● |
| **7,9** | 114 | 76 | 64 | 8 | | ● |
| **8,0** | 114 | 76 | 64 | 8 | | ● |
| **8,1** | 142 | 95 | 83 | 10 | | ● |
| **8,2** | 142 | 95 | 83 | 10 | | ● |
| **8,3** | 142 | 95 | 83 | 10 | | ● |

01/02 →

# RECORD VA i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6053XB |
|---|---|---|---|---|---|---|
| **8,4** | 142 | 95 | 82 | 10 | | ● |
| **8,5** | 142 | 95 | 82 | 10 | | ● |
| **8,6** | 142 | 95 | 82 | 10 | | ● |
| **8,7** | 142 | 95 | 82 | 10 | | ● |
| **8,8** | 142 | 95 | 82 | 10 | | ● |
| **8,9** | 142 | 95 | 82 | 10 | | ● |
| **9,0** | 142 | 95 | 82 | 10 | | ● |
| **9,1** | 142 | 95 | 81 | 10 | | ● |
| **9,2** | 142 | 95 | 81 | 10 | | ● |
| **9,3** | 142 | 95 | 81 | 10 | | ● |
| **9,4** | 142 | 95 | 81 | 10 | | ● |
| **9,5** | 142 | 95 | 81 | 10 | | ● |
| **9,6** | 142 | 95 | 81 | 10 | | ● |
| **9,7** | 142 | 95 | 81 | 10 | | ● |
| **9,8** | 142 | 95 | 80 | 10 | | ● |
| **9,9** | 142 | 95 | 80 | 10 | | ● |
| **10,0** | 142 | 95 | 80 | 10 | | ● |
| **10,1** | 162 | 114 | 99 | 12 | | ● |
| **10,2** | 162 | 114 | 99 | 12 | | ● |
| **10,3** | 162 | 114 | 99 | 12 | | ● |
| **10,4** | 162 | 114 | 98 | 12 | | ● |
| **10,5** | 162 | 114 | 98 | 12 | | ● |
| **10,6** | 162 | 114 | 98 | 12 | | ● |
| **10,7** | 162 | 114 | 98 | 12 | | ● |
| **10,8** | 162 | 114 | 98 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6053XB |
|---|---|---|---|---|---|---|
| **10,9** | 162 | 114 | 98 | 12 | | ● |
| **11,0** | 162 | 114 | 98 | 12 | | ● |
| **11,1** | 162 | 114 | 97 | 12 | | ● |
| **11,2** | 162 | 114 | 97 | 12 | | ● |
| **11,3** | 162 | 114 | 97 | 12 | | ● |
| **11,4** | 162 | 114 | 97 | 12 | | ● |
| **11,5** | 162 | 114 | 97 | 12 | | ● |
| **11,6** | 162 | 114 | 97 | 12 | | ● |
| **11,7** | 162 | 114 | 97 | 12 | | ● |
| **11,8** | 162 | 114 | 96 | 12 | | ● |
| **11,9** | 162 | 114 | 96 | 12 | | ● |
| **12,0** | 162 | 114 | 96 | 12 | | ● |
| **12,5** | 178 | 131 | 112 | 14 | | ● |
| **12,8** | 178 | 131 | 112 | 14 | | ● |
| **13,0** | 178 | 131 | 112 | 14 | | ● |
| **13,5** | 178 | 131 | 111 | 14 | | ● |
| **13,8** | 178 | 131 | 110 | 14 | | ● |
| **14,0** | 178 | 131 | 110 | 14 | | ● |
| **14,5** | 203 | 152 | 130 | 16 | | ● |
| **14,8** | 203 | 152 | 130 | 16 | | ● |
| **15,0** | 203 | 152 | 130 | 16 | | ● |
| **15,5** | 203 | 152 | 129 | 16 | | ● |
| **15,8** | 203 | 152 | 128 | 16 | | ● |
| **16,0** | 203 | 152 | 128 | 16 | | ● |

02/02

**Le punte in metallo duro della serie RECORD EVOLUTION TP sono progettate in modo specifico per le lavorazioni di acciai temprati con durezze superiori a 50 HRC.**

The solid carbide drills of the RECORD EVOLUTION TP series are specifically designed for machining hardened steels with hardness more than 50 HRC.

# Record EVOLUTION TP

**GEOMETRIA TP.**
TP geometry.

**DISPONIBILE NELLA VERSIONE 5xD SENZA FORI DI REFRIGERAZIONE INTERNA.**
Available in 5xD version without internal coolant.

**IL NUOVO SPECIFICO RIVESTIMENTO NX (TiSiN Plus) ASSICURA UN'ELEVATA RESISTENZA ALL'USURA.**
The new NX (TiSiN Plus) specific coating ensures high wear resistance.

**CODOLO DIN 6535HA IN TOLLERANZA h6 IDONEO PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA shank in h6 tolerance suitable for shrink fit.

**OTTIMA STABILITÀ NELLA FORATURA DI MATERIALI TERMICAMENTE TRATTATI.**
Excellent stability while drilling heat-treated materials.

**ECCELLENTE CAPACITÀ DI AUTO-CENTRATURA.**
Excellent self-centring capability.

ILIX® PRECISION

ILIX PRECISION

# RECORD EVOLUTION TP

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

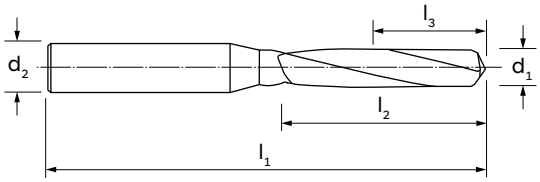
≤5xd

6535 HA

140°

›50 HRC

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiSiN Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6014NX |
|---|---|---|---|---|---|
| **3,0** | 46 | 16 | 12 | 3 | ● |
| **3,4** | 50 | 20 | 15 | 4 | ● |
| **3,5** | 50 | 20 | 15 | 4 | ● |
| **4,0** | 52 | 22 | 16 | 4 | ● |
| **4,3** | 68 | 28 | 22 | 6 | ● |
| **4,5** | 68 | 28 | 21 | 6 | ● |
| **5,0** | 72 | 32 | 25 | 6 | ● |
| **5,1** | 72 | 32 | 24 | 6 | ● |
| **5,5** | 75 | 35 | 27 | 6 | ● |
| **6,0** | 75 | 35 | 26 | 6 | ● |
| **6,5** | 75 | 35 | 25 | 6 | ● |
| **6,9** | 85 | 45 | 35 | 8 | ● |
| **7,0** | 85 | 45 | 35 | 8 | ● |
| **7,5** | 85 | 45 | 34 | 8 | ● |
| **8,0** | 98 | 50 | 38 | 8 | ● |
| **8,5** | 98 | 50 | 37 | 10 | ● |
| **8,6** | 105 | 57 | 44 | 10 | ● |
| **9,0** | 105 | 57 | 44 | 10 | ● |
| **9,5** | 105 | 57 | 43 | 10 | ● |
| **10,0** | 111 | 63 | 48 | 10 | ● |
| **10,4** | 111 | 63 | 47 | 12 | ● |
| **10,5** | 111 | 63 | 47 | 12 | ● |
| **11,0** | 119 | 71 | 55 | 12 | ● |
| **12,0** | 127 | 71 | 53 | 12 | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6014NX |
|---|---|---|---|---|---|

**Le punte in metallo duro della serie RECORD DH i sono state progettate per eseguire forature profonde su acciai, acciai inossidabili, ghise e leghe resistenti al calore.**

The solid carbide drills of the RECORD DH i series have been designed for drilling deep holes on steels, stainless steels, cast irons and heat-resistant alloys.

# Record DH i

**GEOMETRIA DH.**
DH geometry.

**FORI DI REFRIGERAZIONE INTERNA.**
Internal coolant.

**IL RIVESTIMENTO TT (TiAlN Futura Plus), OTTENUTO CON TECNICA PVD, ASSICURA UN'ELEVATA RESISTENZA ALL'USURA, BASSO COEFFICIENTE D'ATTRITO ANCHE SU APPLICAZIONI CON QUANTITÀ MINIMA DI REFRIGERANTE (MQL).**
TT (TiAlN Futura Plus) coating, with PVD technique, ensures high wear resistance, low coefficient of friction even on applications with minimum quantity lubrication (MQL).

**CODOLI DIN 6535HA E DIN 6535HB IN TOLLERANZA h6 IDONEI PER MANDRINI A CALETTAMENTO.**
DIN 6535HA and DIN 6535HB shanks in tolerance h6 suitable for shrink fit.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO.**
Specific flute shape and polished surface process ensure better chip evacuation.

**I 4 PATTINI DI GUIDA PERMETTONO ALLA PUNTA DI AVERE UN MIGLIOR ALLINEAMENTO E MAGGIORE STABILITÀ E RIGIDITÀ IN CASO DI FORI INCROCIATI.**
The four margin lands allow the drill to better perform during cross-holes machining.

ILIX® PRECISION

ILIX PRECISION

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤8xd

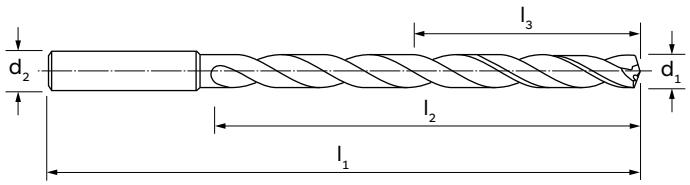
6535 HA

140°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6025TT |
|---|---|---|---|---|---|---|
| **3,0** | 70 | 32 | 28 | 6 | | ● |
| **3,1** | 70 | 32 | 27 | 6 | | ● |
| **3,2** | 70 | 32 | 27 | 6 | | ● |
| **3,3** | 70 | 32 | 27 | 6 | | ● |
| **3,4** | 70 | 32 | 27 | 6 | | ● |
| **3,5** | 70 | 32 | 27 | 6 | | ● |
| **3,6** | 70 | 32 | 27 | 6 | | ● |
| **3,7** | 70 | 32 | 27 | 6 | | ● |
| **3,8** | 80 | 42 | 36 | 6 | | ● |
| **3,9** | 80 | 42 | 36 | 6 | | ● |
| **4,0** | 80 | 42 | 36 | 6 | | ● |
| **4,1** | 80 | 42 | 36 | 6 | | ● |
| **4,2** | 80 | 42 | 36 | 6 | | ● |
| **4,3** | 80 | 42 | 36 | 6 | | ● |
| **4,4** | 80 | 42 | 35 | 6 | | ● |
| **4,5** | 80 | 42 | 35 | 6 | | ● |
| **4,6** | 80 | 42 | 35 | 6 | | ● |
| **4,7** | 80 | 42 | 35 | 6 | | ● |
| **4,8** | 92 | 54 | 47 | 6 | | ● |
| **4,9** | 92 | 54 | 47 | 6 | | ● |
| **5,0** | 92 | 54 | 47 | 6 | | ● |
| **5,1** | 92 | 54 | 46 | 6 | | ● |
| **5,2** | 92 | 54 | 46 | 6 | | ● |
| **5,3** | 92 | 54 | 46 | 6 | | ● |
| **5,4** | 92 | 54 | 46 | 6 | | ● |
| **5,5** | 92 | 54 | 46 | 6 | | ● |
| **5,6** | 92 | 54 | 46 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6025TT |
|---|---|---|---|---|---|---|
| **5,7** | 92 | 54 | 46 | 6 | | ● |
| **5,8** | 92 | 54 | 45 | 6 | | ● |
| **5,9** | 92 | 54 | 45 | 6 | | ● |
| **6,0** | 92 | 54 | 45 | 6 | | ● |
| **6,1** | 100 | 62 | 53 | 8 | | ● |
| **6,2** | 100 | 62 | 53 | 8 | | ● |
| **6,3** | 100 | 62 | 53 | 8 | | ● |
| **6,4** | 100 | 62 | 52 | 8 | | ● |
| **6,5** | 100 | 62 | 52 | 8 | | ● |
| **6,6** | 100 | 62 | 52 | 8 | | ● |
| **6,7** | 100 | 62 | 52 | 8 | | ● |
| **6,8** | 100 | 62 | 52 | 8 | | ● |
| **6,9** | 100 | 62 | 52 | 8 | | ● |
| **7,0** | 108 | 70 | 60 | 8 | | ● |
| **7,1** | 108 | 70 | 59 | 8 | | ● |
| **7,2** | 108 | 70 | 59 | 8 | | ● |
| **7,3** | 108 | 70 | 59 | 8 | | ● |
| **7,4** | 108 | 70 | 59 | 8 | | ● |
| **7,5** | 108 | 70 | 59 | 8 | | ● |
| **7,6** | 108 | 70 | 59 | 8 | | ● |
| **7,7** | 108 | 70 | 59 | 8 | | ● |
| **7,8** | 108 | 70 | 58 | 8 | | ● |
| **7,9** | 108 | 70 | 58 | 8 | | ● |
| **8,0** | 108 | 70 | 58 | 8 | | ● |
| **8,1** | 122 | 80 | 68 | 10 | | ● |
| **8,2** | 122 | 80 | 68 | 10 | | ● |
| **8,3** | 122 | 80 | 68 | 10 | | ● |

01/02 →

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6025TT |
|---|---|---|---|---|---|---|
| **8,4** | 122 | 80 | 67 | 10 | | ● |
| **8,5** | 122 | 80 | 67 | 10 | | ● |
| **8,6** | 122 | 80 | 67 | 10 | | ● |
| **8,7** | 122 | 80 | 67 | 10 | | ● |
| **8,8** | 122 | 80 | 67 | 10 | | ● |
| **8,9** | 122 | 80 | 67 | 10 | | ● |
| **9,0** | 122 | 80 | 67 | 10 | | ● |
| **9,1** | 130 | 88 | 74 | 10 | | ● |
| **9,2** | 130 | 88 | 74 | 10 | | ● |
| **9,3** | 130 | 88 | 74 | 10 | | ● |
| **9,4** | 130 | 88 | 74 | 10 | | ● |
| **9,5** | 130 | 88 | 74 | 10 | | ● |
| **9,6** | 130 | 88 | 74 | 10 | | ● |
| **9,7** | 130 | 88 | 74 | 10 | | ● |
| **9,8** | 130 | 88 | 73 | 10 | | ● |
| **9,9** | 130 | 88 | 73 | 10 | | ● |
| **10,0** | 130 | 88 | 73 | 10 | | ● |
| **10,1** | 152 | 105 | 90 | 12 | | ● |
| **10,2** | 152 | 105 | 90 | 12 | | ● |
| **10,3** | 152 | 105 | 90 | 12 | | ● |
| **10,4** | 152 | 105 | 89 | 12 | | ● |
| **10,5** | 152 | 105 | 89 | 12 | | ● |
| **10,6** | 152 | 105 | 89 | 12 | | ● |
| **10,7** | 152 | 105 | 89 | 12 | | ● |
| **10,8** | 152 | 105 | 89 | 12 | | ● |
| **10,9** | 152 | 105 | 89 | 12 | | ● |
| **11,0** | 152 | 105 | 89 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6025TT |
|---|---|---|---|---|---|---|
| **11,1** | 152 | 105 | 88 | 12 | | ● |
| **11,2** | 152 | 105 | 88 | 12 | | ● |
| **11,3** | 152 | 105 | 88 | 12 | | ● |
| **11,4** | 152 | 105 | 88 | 12 | | ● |
| **11,5** | 152 | 105 | 88 | 12 | | ● |
| **11,6** | 152 | 105 | 88 | 12 | | ● |
| **11,7** | 152 | 105 | 88 | 12 | | ● |
| **11,8** | 152 | 105 | 87 | 12 | | ● |
| **11,9** | 152 | 105 | 87 | 12 | | ● |
| **12,0** | 152 | 105 | 87 | 12 | | ● |
| **12,5** | 170 | 123 | 104 | 14 | | ● |
| **13,0** | 170 | 123 | 104 | 14 | | ● |
| **13,5** | 170 | 123 | 103 | 14 | | ● |
| **14,0** | 170 | 123 | 102 | 14 | | ● |
| **14,5** | 192 | 142 | 120 | 16 | | ● |
| **15,0** | 192 | 142 | 120 | 16 | | ● |
| **15,5** | 192 | 142 | 119 | 16 | | ● |
| **16,0** | 192 | 142 | 118 | 16 | | ● |
| **16,5** | 223 | 171 | 146 | 18 | | ● |
| **17,0** | 223 | 171 | 146 | 18 | | ● |
| **17,5** | 223 | 171 | 145 | 18 | | ● |
| **18,0** | 223 | 171 | 144 | 18 | | ● |
| **18,5** | 244 | 190 | 162 | 20 | | ● |
| **19,0** | 244 | 190 | 162 | 20 | | ● |
| **19,5** | 244 | 190 | 161 | 20 | | ● |
| **20,0** | 244 | 190 | 160 | 20 | | ● |

02/02

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

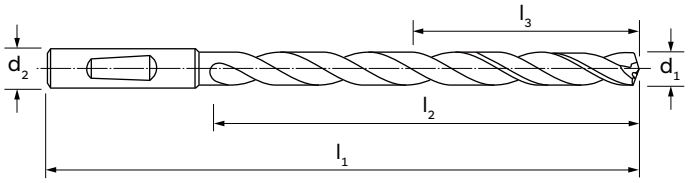
≤8xd

6535 HE

140°

A

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | – |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | – |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | – |
| **H** \| **Acciai Temprati** \| Hardened Steels | – |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6026TT |
|---|---|---|---|---|---|---|
| **3,0** | 70 | 32 | 28 | 6 | | ● |
| **3,1** | 70 | 32 | 27 | 6 | | ● |
| **3,2** | 70 | 32 | 27 | 6 | | ● |
| **3,3** | 70 | 32 | 27 | 6 | | ● |
| **3,4** | 70 | 32 | 27 | 6 | | ● |
| **3,5** | 70 | 32 | 27 | 6 | | ● |
| **3,6** | 70 | 32 | 27 | 6 | | ● |
| **3,7** | 70 | 32 | 27 | 6 | | ● |
| **3,8** | 80 | 42 | 36 | 6 | | ● |
| **3,9** | 80 | 42 | 36 | 6 | | ● |
| **4,0** | 80 | 42 | 36 | 6 | | ● |
| **4,1** | 80 | 42 | 36 | 6 | | ● |
| **4,2** | 80 | 42 | 36 | 6 | | ● |
| **4,3** | 80 | 42 | 36 | 6 | | ● |
| **4,4** | 80 | 42 | 35 | 6 | | ● |
| **4,5** | 80 | 42 | 35 | 6 | | ● |
| **4,6** | 80 | 42 | 35 | 6 | | ● |
| **4,7** | 80 | 42 | 35 | 6 | | ● |
| **4,8** | 92 | 54 | 47 | 6 | | ● |
| **4,9** | 92 | 54 | 47 | 6 | | ● |
| **5,0** | 92 | 54 | 47 | 6 | | ● |
| **5,1** | 92 | 54 | 46 | 6 | | ● |
| **5,2** | 92 | 54 | 46 | 6 | | ● |
| **5,3** | 92 | 54 | 46 | 6 | | ● |
| **5,4** | 92 | 54 | 46 | 6 | | ● |
| **5,5** | 92 | 54 | 46 | 6 | | ● |
| **5,6** | 92 | 54 | 46 | 6 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6026TT |
|---|---|---|---|---|---|---|
| **5,7** | 92 | 54 | 46 | 6 | | ● |
| **5,8** | 92 | 54 | 45 | 6 | | ● |
| **5,9** | 92 | 54 | 45 | 6 | | ● |
| **6,0** | 92 | 54 | 45 | 6 | | ● |
| **6,1** | 100 | 62 | 53 | 8 | | ● |
| **6,2** | 100 | 62 | 53 | 8 | | ● |
| **6,3** | 100 | 62 | 53 | 8 | | ● |
| **6,4** | 100 | 62 | 52 | 8 | | ● |
| **6,5** | 100 | 62 | 52 | 8 | | ● |
| **6,6** | 100 | 62 | 52 | 8 | | ● |
| **6,7** | 100 | 62 | 52 | 8 | | ● |
| **6,8** | 100 | 62 | 52 | 8 | | ● |
| **6,9** | 100 | 62 | 52 | 8 | | ● |
| **7,0** | 108 | 70 | 60 | 8 | | ● |
| **7,1** | 108 | 70 | 59 | 8 | | ● |
| **7,2** | 108 | 70 | 59 | 8 | | ● |
| **7,3** | 108 | 70 | 59 | 8 | | ● |
| **7,4** | 108 | 70 | 59 | 8 | | ● |
| **7,5** | 108 | 70 | 59 | 8 | | ● |
| **7,6** | 108 | 70 | 59 | 8 | | ● |
| **7,7** | 108 | 70 | 59 | 8 | | ● |
| **7,8** | 108 | 70 | 58 | 8 | | ● |
| **7,9** | 108 | 70 | 58 | 8 | | ● |
| **8,0** | 108 | 70 | 58 | 8 | | ● |
| **8,1** | 122 | 80 | 68 | 10 | | ● |
| **8,2** | 122 | 80 | 68 | 10 | | ● |
| **8,3** | 122 | 80 | 68 | 10 | | ● |

01/02 →

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6026TT |
|---|---|---|---|---|---|---|
| **8,4** | 122 | 80 | 67 | 10 | | ● |
| **8,5** | 122 | 80 | 67 | 10 | | ● |
| **8,6** | 122 | 80 | 67 | 10 | | ● |
| **8,7** | 122 | 80 | 67 | 10 | | ● |
| **8,8** | 122 | 80 | 67 | 10 | | ● |
| **8,9** | 122 | 80 | 67 | 10 | | ● |
| **9,0** | 122 | 80 | 67 | 10 | | ● |
| **9,1** | 130 | 88 | 74 | 10 | | ● |
| **9,2** | 130 | 88 | 74 | 10 | | ● |
| **9,3** | 130 | 88 | 74 | 10 | | ● |
| **9,4** | 130 | 88 | 74 | 10 | | ● |
| **9,5** | 130 | 88 | 74 | 10 | | ● |
| **9,6** | 130 | 88 | 74 | 10 | | ● |
| **9,7** | 130 | 88 | 74 | 10 | | ● |
| **9,8** | 130 | 88 | 73 | 10 | | ● |
| **9,9** | 130 | 88 | 73 | 10 | | ● |
| **10,0** | 130 | 88 | 73 | 10 | | ● |
| **10,1** | 152 | 105 | 90 | 12 | | ● |
| **10,2** | 152 | 105 | 90 | 12 | | ● |
| **10,3** | 152 | 105 | 90 | 12 | | ● |
| **10,4** | 152 | 105 | 89 | 12 | | ● |
| **10,5** | 152 | 105 | 89 | 12 | | ● |
| **10,6** | 152 | 105 | 89 | 12 | | ● |
| **10,7** | 152 | 105 | 89 | 12 | | ● |
| **10,8** | 152 | 105 | 89 | 12 | | ● |
| **10,9** | 152 | 105 | 89 | 12 | | ● |
| **11,0** | 152 | 105 | 89 | 12 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6026TT |
|---|---|---|---|---|---|---|
| **11,1** | 152 | 105 | 88 | 12 | | ● |
| **11,2** | 152 | 105 | 88 | 12 | | ● |
| **11,3** | 152 | 105 | 88 | 12 | | ● |
| **11,4** | 152 | 105 | 88 | 12 | | ● |
| **11,5** | 152 | 105 | 88 | 12 | | ● |
| **11,6** | 152 | 105 | 88 | 12 | | ● |
| **11,7** | 152 | 105 | 88 | 12 | | ● |
| **11,8** | 152 | 105 | 87 | 12 | | ● |
| **11,9** | 152 | 105 | 87 | 12 | | ● |
| **12,0** | 152 | 105 | 87 | 12 | | ● |
| **12,5** | 170 | 123 | 104 | 14 | | ● |
| **13,0** | 170 | 123 | 104 | 14 | | ● |
| **13,5** | 170 | 123 | 103 | 14 | | ● |
| **14,0** | 170 | 123 | 102 | 14 | | ● |
| **14,5** | 192 | 142 | 120 | 16 | | ● |
| **15,0** | 192 | 142 | 120 | 16 | | ● |
| **15,5** | 192 | 142 | 119 | 16 | | ● |
| **16,0** | 192 | 142 | 118 | 16 | | ● |
| **16,5** | 223 | 171 | 146 | 18 | | ● |
| **17,0** | 223 | 171 | 146 | 18 | | ● |
| **17,5** | 223 | 171 | 145 | 18 | | ● |
| **18,0** | 223 | 171 | 144 | 18 | | ● |
| **18,5** | 244 | 190 | 162 | 20 | | ● |
| **19,0** | 244 | 190 | 162 | 20 | | ● |
| **19,5** | 244 | 190 | 161 | 20 | | ● |
| **20,0** | 244 | 190 | 160 | 20 | | ● |

02/02

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤12xd

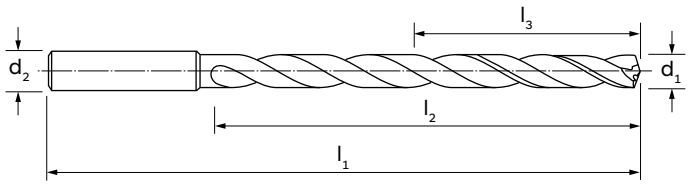
6535 HA

140°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6027TT |
|---|---|---|---|---|---|---|
| **3,0** | 92 | 54 | 50 | 6 | | ● |
| **3,3** | 92 | 54 | 49 | 6 | | ● |
| **3,4** | 92 | 54 | 49 | 6 | | ● |
| **3,5** | 92 | 54 | 49 | 6 | | ● |
| **3,8** | 102 | 64 | 58 | 6 | | ● |
| **4,0** | 102 | 64 | 58 | 6 | | ● |
| **4,2** | 102 | 64 | 58 | 6 | | ● |
| **4,3** | 102 | 64 | 58 | 6 | | ● |
| **4,5** | 102 | 64 | 57 | 6 | | ● |
| **4,8** | 121 | 83 | 76 | 6 | | ● |
| **5,0** | 121 | 83 | 76 | 6 | | ● |
| **5,1** | 121 | 83 | 75 | 6 | | ● |
| **5,2** | 121 | 83 | 75 | 6 | | ● |
| **5,5** | 121 | 83 | 75 | 6 | | ● |
| **5,6** | 121 | 83 | 75 | 6 | | ● |
| **5,8** | 121 | 83 | 74 | 6 | | ● |
| **6,0** | 121 | 83 | 74 | 6 | | ● |
| **6,1** | 148 | 110 | 101 | 8 | | ● |
| **6,5** | 148 | 110 | 100 | 8 | | ● |
| **6,6** | 148 | 110 | 100 | 8 | | ● |
| **6,8** | 148 | 110 | 100 | 8 | | ● |
| **6,9** | 148 | 110 | 100 | 8 | | ● |
| **7,0** | 148 | 110 | 100 | 8 | | ● |
| **7,4** | 148 | 110 | 99 | 8 | | ● |
| **7,5** | 148 | 110 | 99 | 8 | | ● |
| **7,8** | 148 | 110 | 98 | 8 | | ● |
| **8,0** | 148 | 110 | 98 | 8 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6027TT |
|---|---|---|---|---|---|---|
| **8,1** | 180 | 138 | 126 | 10 | | ● |
| **8,3** | 180 | 138 | 126 | 10 | | ● |
| **8,4** | 180 | 138 | 125 | 10 | | ● |
| **8,5** | 180 | 138 | 125 | 10 | | ● |
| **8,6** | 180 | 138 | 125 | 10 | | ● |
| **8,7** | 180 | 138 | 125 | 10 | | ● |
| **8,8** | 180 | 138 | 125 | 10 | | ● |
| **9,0** | 180 | 138 | 125 | 10 | | ● |
| **9,3** | 180 | 138 | 124 | 10 | | ● |
| **9,5** | 180 | 138 | 124 | 10 | | ● |
| **9,8** | 180 | 138 | 123 | 10 | | ● |
| **10,0** | 180 | 138 | 123 | 10 | | ● |
| **10,2** | 206 | 158 | 143 | 12 | | ● |
| **10,3** | 206 | 158 | 143 | 12 | | ● |
| **10,4** | 206 | 158 | 142 | 12 | | ● |
| **10,5** | 206 | 158 | 142 | 12 | | ● |
| **10,8** | 206 | 158 | 142 | 12 | | ● |
| **11,0** | 206 | 158 | 142 | 12 | | ● |
| **11,2** | 206 | 158 | 141 | 12 | | ● |
| **11,5** | 206 | 158 | 141 | 12 | | ● |
| **11,8** | 206 | 158 | 140 | 12 | | ● |
| **12,0** | 206 | 158 | 140 | 12 | | ● |
| **12,5** | 230 | 182 | 163 | 14 | | ● |
| **13,0** | 230 | 182 | 163 | 14 | | ● |
| **13,5** | 230 | 182 | 162 | 14 | | ● |
| **14,0** | 230 | 182 | 161 | 14 | | ● |
| **14,5** | 260 | 208 | 186 | 16 | | ● |

01/02 →

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6027TT |
|---|---|---|---|---|---|---|
| **15,0** | 260 | 208 | 186 | 16 | | ● |
| **15,5** | 260 | 208 | 185 | 16 | | ● |
| **16,0** | 260 | 208 | 184 | 16 | | ● |
| **16,5** | 285 | 234 | 209 | 18 | | ● |
| **17,0** | 285 | 234 | 209 | 18 | | ● |
| **17,5** | 285 | 234 | 208 | 18 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6027TT |
|---|---|---|---|---|---|---|
| **18,0** | 285 | 234 | 207 | 18 | | ● |
| **18,5** | 310 | 258 | 230 | 20 | | ● |
| **19,0** | 310 | 258 | 230 | 20 | | ● |
| **19,5** | 310 | 258 | 229 | 20 | | ● |
| **20,0** | 310 | 258 | 228 | 20 | | ● |

02/02

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

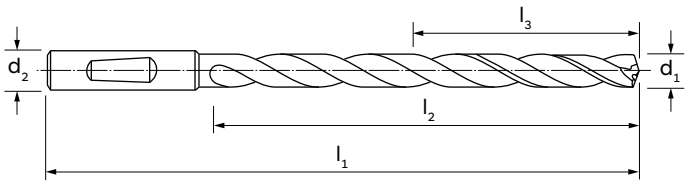
≤12xd

6535 HE

140°

A

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6028TT |
|---|---|---|---|---|---|---|
| **3,0** | 92 | 54 | 50 | 6 | | ● |
| **3,3** | 92 | 54 | 49 | 6 | | ● |
| **3,4** | 92 | 54 | 49 | 6 | | ● |
| **3,5** | 92 | 54 | 49 | 6 | | ● |
| **3,8** | 102 | 64 | 58 | 6 | | ● |
| **4,0** | 102 | 64 | 58 | 6 | | ● |
| **4,2** | 102 | 64 | 58 | 6 | | ● |
| **4,3** | 102 | 64 | 58 | 6 | | ● |
| **4,5** | 102 | 64 | 57 | 6 | | ● |
| **4,8** | 121 | 83 | 76 | 6 | | ● |
| **5,0** | 121 | 83 | 76 | 6 | | ● |
| **5,1** | 121 | 83 | 75 | 6 | | ● |
| **5,2** | 121 | 83 | 75 | 6 | | ● |
| **5,5** | 121 | 83 | 75 | 6 | | ● |
| **5,6** | 121 | 83 | 75 | 6 | | ● |
| **5,8** | 121 | 83 | 74 | 6 | | ● |
| **6,0** | 121 | 83 | 74 | 6 | | ● |
| **6,1** | 148 | 110 | 101 | 8 | | ● |
| **6,5** | 148 | 110 | 100 | 8 | | ● |
| **6,6** | 148 | 110 | 100 | 8 | | ● |
| **6,8** | 148 | 110 | 100 | 8 | | ● |
| **6,9** | 148 | 110 | 100 | 8 | | ● |
| **7,0** | 148 | 110 | 100 | 8 | | ● |
| **7,4** | 148 | 110 | 99 | 8 | | ● |
| **7,5** | 148 | 110 | 99 | 8 | | ● |
| **7,8** | 148 | 110 | 98 | 8 | | ● |
| **8,0** | 148 | 110 | 98 | 8 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6028TT |
|---|---|---|---|---|---|---|
| **8,1** | 180 | 138 | 126 | 10 | | ● |
| **8,3** | 180 | 138 | 126 | 10 | | ● |
| **8,4** | 180 | 138 | 125 | 10 | | ● |
| **8,5** | 180 | 138 | 125 | 10 | | ● |
| **8,6** | 180 | 138 | 125 | 10 | | ● |
| **8,7** | 180 | 138 | 125 | 10 | | ● |
| **8,8** | 180 | 138 | 125 | 10 | | ● |
| **9,0** | 180 | 138 | 125 | 10 | | ● |
| **9,3** | 180 | 138 | 124 | 10 | | ● |
| **9,5** | 180 | 138 | 124 | 10 | | ● |
| **9,8** | 180 | 138 | 123 | 10 | | ● |
| **10,0** | 180 | 138 | 123 | 10 | | ● |
| **10,2** | 206 | 158 | 143 | 12 | | ● |
| **10,3** | 206 | 158 | 143 | 12 | | ● |
| **10,4** | 206 | 158 | 142 | 12 | | ● |
| **10,5** | 206 | 158 | 142 | 12 | | ● |
| **10,8** | 206 | 158 | 142 | 12 | | ● |
| **11,0** | 206 | 158 | 142 | 12 | | ● |
| **11,2** | 206 | 158 | 141 | 12 | | ● |
| **11,5** | 206 | 158 | 141 | 12 | | ● |
| **11,8** | 206 | 158 | 140 | 12 | | ● |
| **12,0** | 206 | 158 | 140 | 12 | | ● |
| **12,5** | 230 | 182 | 163 | 14 | | ● |
| **13,0** | 230 | 182 | 163 | 14 | | ● |
| **13,5** | 230 | 182 | 162 | 14 | | ● |
| **14,0** | 230 | 182 | 161 | 14 | | ● |
| **14,5** | 260 | 208 | 186 | 16 | | ● |

01/02 →

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6028TT |
|---|---|---|---|---|---|---|
| **15,0** | 260 | 208 | 186 | 16 | | ● |
| **15,5** | 260 | 208 | 185 | 16 | | ● |
| **16,0** | 260 | 208 | 184 | 16 | | ● |
| **16,5** | 285 | 234 | 209 | 18 | | ● |
| **17,0** | 285 | 234 | 209 | 18 | | ● |
| **17,5** | 285 | 234 | 208 | 18 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6028TT |
|---|---|---|---|---|---|---|
| **18,0** | 285 | 234 | 207 | 18 | | ● |
| **18,5** | 310 | 258 | 230 | 20 | | ● |
| **19,0** | 310 | 258 | 230 | 20 | | ● |
| **19,5** | 310 | 258 | 229 | 20 | | ● |
| **20,0** | 310 | 258 | 228 | 20 | | ● |

02/02

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**ILIX NORM**

**DIN**

≤15xd

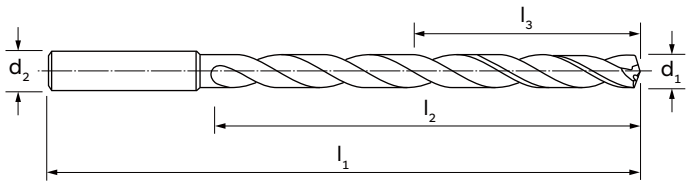
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6032TT |
|---|---|---|---|---|---|---|
| **3,0** | 100 | 60 | 55 | 6 | | ● |
| **3,2** | 100 | 60 | 55 | 6 | | ● |
| **3,5** | 100 | 60 | 55 | 6 | | ● |
| **3,8** | 115 | 75 | 69 | 6 | | ● |
| **4,0** | 115 | 75 | 69 | 6 | | ● |
| **4,2** | 115 | 75 | 69 | 6 | | ● |
| **4,5** | 130 | 90 | 83 | 6 | | ● |
| **4,8** | 130 | 90 | 83 | 6 | | ● |
| **5,0** | 130 | 90 | 83 | 6 | | ● |
| **5,5** | 150 | 108 | 99 | 6 | | ● |
| **5,8** | 150 | 108 | 99 | 6 | | ● |
| **6,0** | 150 | 108 | 99 | 6 | | ● |
| **6,5** | 165 | 125 | 115 | 8 | | ● |
| **6,8** | 165 | 125 | 115 | 8 | | ● |
| **7,0** | 165 | 125 | 115 | 8 | | ● |
| **7,5** | 180 | 140 | 128 | 8 | | ● |
| **8,0** | 180 | 140 | 128 | 8 | | ● |
| **8,5** | 205 | 160 | 147 | 10 | | ● |
| **8,8** | 205 | 160 | 147 | 10 | | ● |
| **9,0** | 205 | 160 | 147 | 10 | | ● |
| **10,0** | 225 | 180 | 165 | 10 | | ● |
| **10,2** | 240 | 190 | 174 | 12 | | ● |
| **12,0** | 265 | 215 | 197 | 12 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6032TT |
|---|---|---|---|---|---|---|

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**ILIX NORM**
DIN

≤20xd

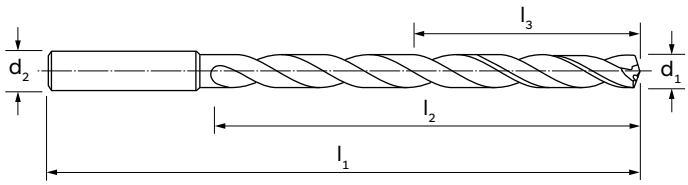
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6034TT |
|---|---|---|---|---|---|
| **2,0** | 92 | 50 | 47 | 4 | ● |
| **2,5** | 112 | 70 | 66 | 4 | ● |
| **3,0** | 120 | 80 | 75 | 6 | ● |
| **3,1** | 120 | 80 | 75 | 6 | ● |
| **3,2** | 120 | 80 | 75 | 6 | ● |
| **3,3** | 120 | 80 | 75 | 6 | ● |
| **3,4** | 120 | 80 | 75 | 6 | ● |
| **3,5** | 120 | 80 | 75 | 6 | ● |
| **3,7** | 130 | 90 | 84 | 6 | ● |
| **3,8** | 130 | 90 | 84 | 6 | ● |
| **3,9** | 130 | 90 | 84 | 6 | ● |
| **4,0** | 130 | 90 | 84 | 6 | ● |
| **4,2** | 160 | 110 | 103 | 6 | ● |
| **4,5** | 160 | 110 | 103 | 6 | ● |
| **4,7** | 160 | 110 | 103 | 6 | ● |
| **4,8** | 160 | 120 | 113 | 6 | ● |
| **4,9** | 160 | 120 | 113 | 6 | ● |
| **5,0** | 160 | 120 | 113 | 6 | ● |
| **5,1** | 160 | 120 | 113 | 6 | ● |
| **5,2** | 160 | 120 | 113 | 6 | ● |
| **5,4** | 160 | 120 | 113 | 6 | ● |
| **5,5** | 185 | 140 | 131 | 6 | ● |
| **5,9** | 185 | 140 | 131 | 6 | ● |
| **6,0** | 185 | 140 | 131 | 6 | ● |
| **6,2** | 210 | 160 | 150 | 8 | ● |
| **6,4** | 210 | 160 | 150 | 8 | ■ |
| **6,5** | 210 | 160 | 150 | 8 | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6034TT |
|---|---|---|---|---|---|
| **6,8** | 210 | 160 | 150 | 8 | ● |
| **7,0** | 210 | 160 | 150 | 8 | ● |
| **7,1** | 230 | 180 | 168 | 8 | ● |
| **7,4** | 230 | 180 | 168 | 8 | ● |
| **7,5** | 230 | 180 | 168 | 8 | ● |
| **7,8** | 230 | 180 | 168 | 8 | ● |
| **8,0** | 230 | 180 | 168 | 8 | ● |
| **8,5** | 260 | 195 | 182 | 10 | ● |
| **9,0** | 290 | 230 | 216 | 10 | ● |
| **9,5** | 290 | 230 | 216 | 10 | ● |
| **10,0** | 290 | 230 | 216 | 10 | ● |
| **10,2** | 315 | 268 | 251 | 12 | ● |
| **10,5** | 315 | 268 | 251 | 12 | ● |
| **10,9** | 315 | 268 | 251 | 12 | ● |
| **11,0** | 315 | 268 | 251 | 12 | ● |
| **12,0** | 315 | 268 | 251 | 12 | ● |

■ **Fino ad esaurimento scorte** | Till stocks last

ILIX PRECISION

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM

DIN

≤25xd

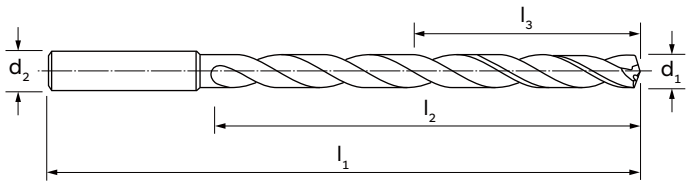
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6035TT |
|---|---|---|---|---|---|---|
| **3,0** | 135 | 98 | 93 | 6 | | ● |
| **3,2** | 135 | 98 | 93 | 6 | | ● |
| **3,3** | 150 | 110 | 105 | 6 | | ● |
| **3,5** | 150 | 110 | 105 | 6 | | ● |
| **3,8** | 160 | 120 | 114 | 6 | | ● |
| **4,0** | 160 | 120 | 114 | 6 | | ● |
| **4,2** | 160 | 120 | 114 | 6 | | ● |
| **4,5** | 180 | 135 | 128 | 6 | | ● |
| **4,8** | 180 | 135 | 128 | 6 | | ● |
| **5,0** | 180 | 135 | 128 | 6 | | ● |
| **5,5** | 205 | 168 | 159 | 6 | | ● |
| **5,8** | 205 | 168 | 159 | 6 | | ● |
| **6,0** | 205 | 168 | 159 | 6 | | ● |
| **6,5** | 240 | 200 | 190 | 8 | | ● |
| **6,8** | 240 | 200 | 190 | 8 | | ● |
| **7,0** | 240 | 200 | 190 | 8 | | ● |
| **7,5** | 260 | 220 | 208 | 8 | | ● |
| **7,8** | 260 | 220 | 208 | 8 | | ● |
| **8,0** | 260 | 220 | 208 | 8 | | ● |
| **8,5** | 285 | 240 | 227 | 10 | | ● |
| **8,8** | 310 | 268 | 254 | 10 | | ● |
| **9,0** | 310 | 268 | 254 | 10 | | ● |
| **9,8** | 310 | 268 | 254 | 10 | | ● |
| **10,0** | 310 | 268 | 254 | 10 | | ● |
| **10,2** | 375 | 325 | 308 | 12 | | ● |
| **10,8** | 375 | 325 | 308 | 12 | | ● |
| **11,8** | 375 | 325 | 308 | 12 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6035TT |
|---|---|---|---|---|---|---|
| **12,0** | 375 | 325 | 308 | 12 | | ● |

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**ILIX NORM**
DIN

≤30xd

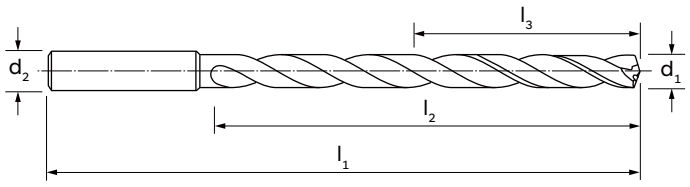
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6036TT |
|---|---|---|---|---|---|---|
| **2,0** | 115 | 70 | 67 | 4 | | ● |
| **2,5** | 138 | 90 | 86 | 4 | | ● |
| **3,0** | 150 | 105 | 100 | 6 | | ● |
| **3,2** | 150 | 105 | 100 | 6 | | ● |
| **3,3** | 185 | 135 | 130 | 6 | | ● |
| **3,5** | 185 | 135 | 130 | 6 | | ● |
| **3,6** | 185 | 135 | 130 | 6 | | ● |
| **3,7** | 185 | 135 | 130 | 6 | | ● |
| **3,8** | 185 | 135 | 130 | 6 | | ● |
| **4,0** | 185 | 135 | 130 | 6 | | ● |
| **4,2** | 185 | 135 | 130 | 6 | | ● |
| **4,5** | 215 | 165 | 158 | 6 | | ● |
| **4,8** | 215 | 165 | 158 | 6 | | ● |
| **5,0** | 215 | 165 | 158 | 6 | | ● |
| **5,1** | 230 | 180 | 171 | 6 | | ● |
| **5,2** | 230 | 180 | 171 | 6 | | ● |
| **5,5** | 230 | 180 | 171 | 6 | | ● |
| **5,8** | 230 | 180 | 171 | 6 | | ● |
| **6,0** | 230 | 180 | 171 | 6 | | ● |
| **6,5** | 280 | 215 | 205 | 8 | | ● |
| **6,8** | 280 | 230 | 220 | 8 | | ● |
| **7,0** | 280 | 230 | 220 | 8 | | ● |
| **7,5** | 280 | 230 | 220 | 8 | | ● |
| **8,0** | 315 | 265 | 253 | 8 | | ● |
| **8,5** | 350 | 295 | 282 | 10 | | ● |
| **9,0** | 380 | 330 | 316 | 10 | | ● |
| **10,0** | 380 | 330 | 316 | 10 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6036TT |
|---|---|---|---|---|---|---|
| **10,2** | 430 | 380 | 365 | 12 | | ● |
| **12,0** | 430 | 380 | 365 | 12 | | ● |

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

**ILIX NORM**
DIN

≤40xd

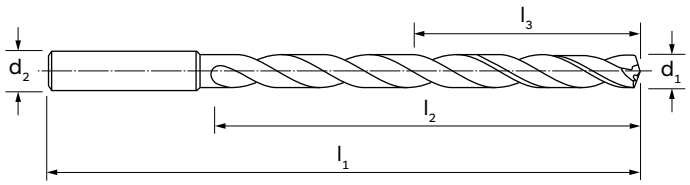
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (fg6) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6038TT |
|---|---|---|---|---|---|---|
| **3,0** | 195 | 150 | 146 | 6 | | ● |
| **4,0** | 220 | 175 | 169 | 6 | | ● |
| **4,2** | 245 | 200 | 194 | 6 | | ● |
| **4,5** | 245 | 200 | 194 | 6 | | ● |
| **4,8** | 275 | 230 | 223 | 6 | | ● |
| **5,0** | 275 | 230 | 223 | 6 | | ● |
| **5,5** | 305 | 260 | 251 | 6 | | ● |
| **5,8** | 305 | 260 | 251 | 6 | | ● |
| **6,0** | 305 | 260 | 251 | 6 | | ● |
| **6,5** | 345 | 300 | 290 | 8 | | ● |
| **6,8** | 345 | 300 | 290 | 8 | | ● |
| **7,0** | 345 | 300 | 290 | 8 | | ● |
| **7,5** | 385 | 340 | 328 | 8 | | ● |
| **8,0** | 385 | 340 | 328 | 8 | | ● |
| **9,0** | 430 | 380 | 367 | 10 | | ● |

| $d_1$ (fg6) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6038TT |
|---|---|---|---|---|---|---|

# RECORD DH i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

≤50xd

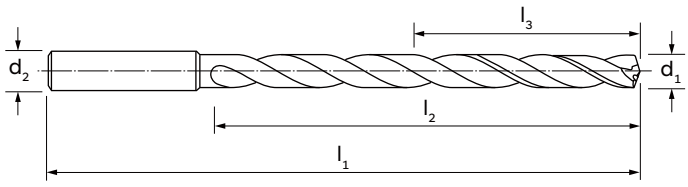
6535 HA

135°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Plus |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (fg6) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6039TT |
|---|---|---|---|---|---|---|
| **3** | 220 | 175 | 170 | 6 | | ● |
| **4** | 265 | 220 | 214 | 6 | | ● |
| **5** | 320 | 275 | 268 | 6 | | ● |
| **6** | 355 | 315 | 306 | 6 | | ● |

| $d_1$ (fg6) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6039TT |
|---|---|---|---|---|---|---|

**Le punte in metallo duro della serie RECORD DH I ALU sono progettate per eseguire forature profonde su Alluminio, leghe in Alluminio e materiali non ferrosi.**

The solid carbide drills of the RECORD DH I ALU series are designed for drilling deep holes on Aluminium, Aluminium alloys and non-ferrous materials.

# Record DH I ALU

**GEOMETRIA DH I ALU.**
Geometry DH I ALU.

**DISPONIBILI DALLA VERSIONE 15xD ALLA 40xD CON FORI DI REFRIGERAZIONE INTERNA.**
Available from 15xD to 40xD with internal coolant.

**IL DESIGN ESCLUSIVO DEL VANO PERMETTE UN'EFFICIENTE EVACUAZIONE DEL TRUCIOLO.**
The exclusive special flute execution allows efficient chip evacuation.

**IL VANO TRUCIOLO LUCIDATO E LAPPATO, TRAMITE UN SISTEMA DI TECNOLOGIA INNOVATIVO, GARANTISCE UN BASSO COEFFICIENTE D'ATTRITO ANCHE SU APPLICAZIONI CON QUANTITÀ MINIMA DI REFRIGERANTE (MQL) E PREVIENE LA FORMAZIONE DEL TAGLIENTE DI RIPORTO.**
The polished and lapped flute surface, through an innovative technology system, ensures low coefficient of friction even on applications with minimum quantity lubrication (MQL) and prevents the formation of a built up edge.

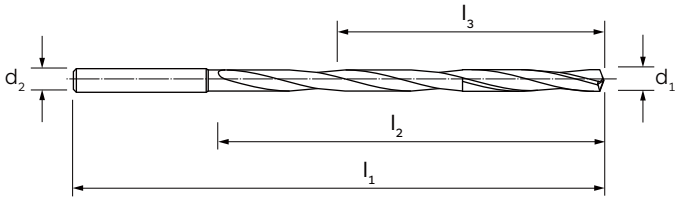
**I 4 PATTINI DI GUIDA PERMETTONO ALLA PUNTA DI AVERE UN MIGLIOR ALLINEAMENTO E MAGGIORE STABILITÀ E RIGIDITÀ IN CASO DI FORI INCROCIATI.**
The four margin lands allow the drill to better perform during cross-holes machining.

ILIX® PRECISION

# RECORD DH i ALU

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW ∅ | ILIX NORM DIN | ≤15xd | 6535 HA | 137° | A | SHRINK FIT | P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6041 |
|---|---|---|---|---|---|---|
| **3,0** | 95 | 51,0 | 45 | 6 | | ● |
| • **3,2** | 100 | 54,4 | 48 | 6 | | ● |
| • **3,3** | 100 | 56,1 | 50 | 6 | | ● |
| • **3,5** | 110 | 59,5 | 53 | 6 | | ● |
| • **3,8** | 110 | 64,6 | 57 | 6 | | ● |
| **4,0** | 110 | 68,0 | 60 | 6 | | ● |
| **4,2** | 120 | 71,4 | 63 | 6 | | ● |
| • **4,5** | 120 | 76,5 | 68 | 6 | | ● |
| • **4,8** | 125 | 81,6 | 72 | 6 | | ● |
| **5,0** | 125 | 85,0 | 75 | 6 | | ● |
| **5,5** | 135 | 93,5 | 83 | 6 | | ● |
| • **5,8** | 140 | 98,6 | 87 | 6 | | ● |
| **6,0** | 140 | 100,0 | 90 | 6 | | ● |
| **6,5** | 150 | 110,5 | 98 | 8 | | ● |
| • **6,8** | 160 | 115,6 | 102 | 8 | | ● |
| **7,0** | 160 | 119,0 | 105 | 8 | | ● |
| • **7,5** | 165 | 127,5 | 113 | 8 | | ● |
| • **7,8** | 170 | 132,6 | 117 | 8 | | ● |
| **8,0** | 180 | 136,0 | 120 | 8 | | ● |
| **8,5** | 190 | 144,5 | 128 | 10 | | ● |
| • **8,8** | 200 | 149,6 | 132 | 10 | | ● |
| • **9,0** | 200 | 153,0 | 135 | 10 | | ● |
| • **9,8** | 215 | 166,6 | 147 | 10 | | ● |
| **10,0** | 215 | 170,0 | 150 | 10 | | ● |
| • **10,2** | 230 | 173,4 | 153 | 12 | | ● |
| • **10,8** | 235 | 183,6 | 162 | 12 | | ● |
| • **11,8** | 255 | 200,6 | 177 | 12 | | ● |

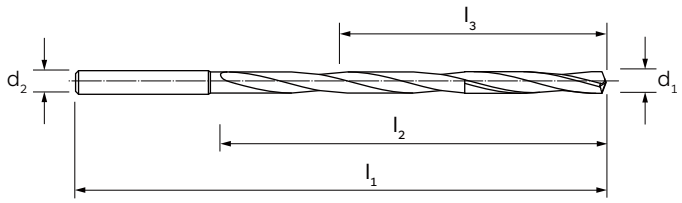
| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6041 |
|---|---|---|---|---|---|---|
| **12,0** | 255 | 204,0 | 180 | 12 | | ● |
| • **14,0** | 285 | 238,0 | 210 | 14 | | ● |

• **Nuovi diametri** | New diameters

# RECORD DH i ALU

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW ∅ | ILIX NORM DIN | ≤20xd | 6535 HA | 137° | A | SHRINK FIT | P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6042 |
|---|---|---|---|---|---|---|
| • **2,0** | 80 | 44,0 | 40 | 4 | | ● |
| • **2,2** | 85 | 48,4 | 44 | 4 | | ● |
| • **2,3** | 85 | 50,6 | 46 | 4 | | ● |
| • **2,4** | 90 | 52,8 | 48 | 4 | | ● |
| • **2,5** | 90 | 55,0 | 50 | 4 | | ● |
| • **2,7** | 95 | 59,4 | 54 | 4 | | ● |
| • **2,8** | 95 | 61,6 | 56 | 4 | | ● |
| **3,0** | 110 | 66,0 | 60 | 6 | | ● |
| • **3,2** | 115 | 70,4 | 64 | 6 | | ● |
| • **3,3** | 115 | 72,6 | 66 | 6 | | ● |
| • **3,5** | 120 | 77,0 | 70 | 6 | | ● |
| • **3,8** | 130 | 83,6 | 76 | 6 | | ● |
| **4,0** | 130 | 88,0 | 80 | 6 | | ● |
| • **4,2** | 140 | 92,4 | 84 | 6 | | ● |
| **4,5** | 140 | 99,0 | 90 | 6 | | ● |
| • **4,8** | 150 | 105,6 | 96 | 6 | | ● |
| **5,0** | 150 | 110,0 | 100 | 6 | | ● |
| **5,5** | 160 | 121,0 | 110 | 6 | | ● |
| • **5,8** | 170 | 127,6 | 116 | 6 | | ● |
| **6,0** | 170 | 132,0 | 120 | 6 | | ● |
| **6,5** | 185 | 143,0 | 130 | 8 | | ● |
| • **6,8** | 195 | 149,6 | 136 | 8 | | ● |
| **7,0** | 195 | 154,0 | 140 | 8 | | ● |
| • **7,5** | 210 | 165,0 | 150 | 8 | | ● |
| • **7,8** | 215 | 171,6 | 156 | 8 | | ● |
| **8,0** | 215 | 176,0 | 160 | 8 | | ● |
| **8,5** | 230 | 187,0 | 170 | 10 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6042 |
|---|---|---|---|---|---|---|
| • **8,8** | 240 | 193,6 | 176 | 10 | | ● |
| • **9,0** | 250 | 198,0 | 180 | 10 | | ● |
| • **9,8** | 265 | 215,6 | 196 | 10 | | ● |
| **10,0** | 265 | 220,0 | 200 | 10 | | ● |
| • **10,2** | 275 | 224,4 | 204 | 12 | | ● |
| • **10,8** | 295 | 237,6 | 216 | 12 | | ● |
| • **11,8** | 315 | 259,6 | 236 | 12 | | ● |
| **12,0** | 315 | 264,0 | 240 | 12 | | ● |

• **Nuovi diametri** | New diameters

# RECORD DH i ALU

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

≤25xd

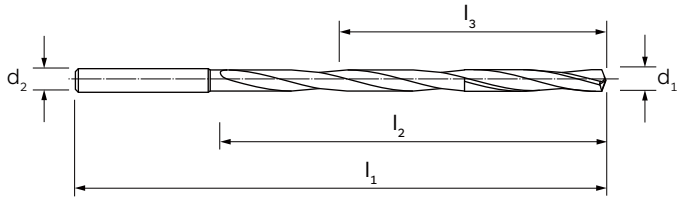
6535 HA

137°

A

SHRINK FIT

P. 126




| | | |
|---|---|---|
| | **MATERIALE** \| MATERIAL | M.D.I.-HM |
| | **RIVESTIMENTO** \| COATING | - |
| | **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| | **P** \| **Acciai** \| Steels | - |
| | **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| | **K** \| **Ghise** \| Cast Irons | - |
| | **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| | **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| | **H** \| **Acciai Temprati** \| Hardened Steels | - |

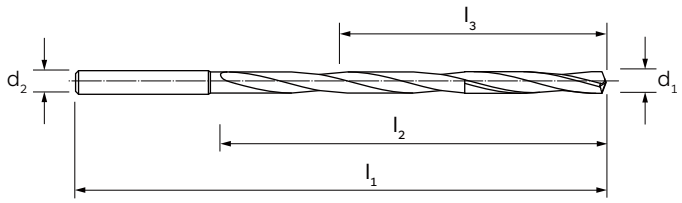
| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6043 |
|---|---|---|---|---|---|---|
| **3,0** | 125 | 81,0 | 75 | 6 | | ● |
| **3,3** | 140 | 89,1 | 83 | 6 | | ● |
| **4,0** | 150 | 108,0 | 100 | 6 | | ● |
| **4,2** | 160 | 113,4 | 105 | 6 | | ● |
| **4,5** | 165 | 121,5 | 113 | 6 | | ● |
| **5,0** | 175 | 135,0 | 125 | 6 | | ● |
| **5,5** | 190 | 148,5 | 138 | 6 | | ● |
| **6,0** | 200 | 162,0 | 150 | 6 | | ● |
| **6,5** | 215 | 175,5 | 163 | 8 | | ● |
| **6,8** | 230 | 183,6 | 170 | 8 | | ● |
| **7,0** | 230 | 189,0 | 175 | 8 | | ● |
| **8,0** | 255 | 216,0 | 200 | 8 | | ● |
| **8,5** | 285 | 229,5 | 213 | 10 | | ● |
| **8,8** | 310 | 237,6 | 220 | 10 | | ● |
| **9,0** | 310 | 243,0 | 225 | 10 | | ● |
| **10,0** | 315 | 270,0 | 250 | 10 | | ● |
| **10,2** | 325 | 275,4 | 255 | 12 | | ● |
| **10,8** | 340 | 291,6 | 270 | 12 | | ● |
| **12,0** | 375 | 324,0 | 300 | 12 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6043 |
|---|---|---|---|---|---|---|

# RECORD DH i ALU

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW ∅ | ILIX NORM DIN | ≤30xd | 6535 HA | 137° | A | SHRINK FIT | P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6044 |
|---|---|---|---|---|---|---|
| • **2,0** | 110 | 64,0 | 60 | 4 | | ● |
| • **2,2** | 110 | 70,4 | 66 | 4 | | ● |
| • **2,3** | 110 | 73,6 | 69 | 4 | | ● |
| • **2,4** | 110 | 76,8 | 72 | 4 | | ● |
| • **2,5** | 115 | 80,0 | 75 | 4 | | ● |
| • **2,7** | 120 | 86,4 | 81 | 4 | | ● |
| • **2,8** | 125 | 89,6 | 84 | 4 | | ● |
| **3,0** | 140 | 96,0 | 90 | 6 | | ● |
| • **3,2** | 150 | 102,4 | 96 | 6 | | ● |
| • **3,3** | 150 | 105,6 | 99 | 6 | | ● |
| • **3,5** | 155 | 112,0 | 105 | 6 | | ● |
| • **3,8** | 170 | 121,6 | 114 | 6 | | ● |
| **4,0** | 170 | 128,0 | 120 | 6 | | ● |
| • **4,2** | 185 | 134,4 | 126 | 6 | | ● |
| **4,5** | 185 | 144,0 | 135 | 6 | | ● |
| • **4,8** | 200 | 153,6 | 144 | 6 | | ● |
| **5,0** | 200 | 160,0 | 150 | 6 | | ● |
| **5,5** | 215 | 176,0 | 165 | 6 | | ● |
| • **5,8** | 230 | 185,6 | 174 | 6 | | ● |
| **6,0** | 230 | 192,0 | 180 | 6 | | ● |
| **6,5** | 250 | 208,0 | 195 | 8 | | ● |
| • **6,8** | 265 | 217,6 | 204 | 8 | | ● |
| **7,0** | 265 | 224,0 | 210 | 8 | | ● |
| • **7,5** | 280 | 240,0 | 225 | 8 | | ● |
| • **7,8** | 315 | 249,6 | 234 | 8 | | ● |
| • **8,0** | 315 | 256,0 | 240 | 8 | | ● |
| • **8,5** | 315 | 272,0 | 255 | 10 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6044 |
|---|---|---|---|---|---|---|
| • **8,8** | 325 | 281,6 | 264 | 10 | | ● |
| • **9,0** | 335 | 288,0 | 270 | 10 | | ● |
| • **9,8** | 360 | 313,6 | 294 | 10 | | ● |
| • **10,0** | 365 | 320,0 | 300 | 10 | | ● |
| • **10,2** | 375 | 326,4 | 306 | 12 | | ● |
| • **10,8** | 395 | 345,6 | 324 | 12 | | ● |
| • **11,8** | 425 | 377,6 | 354 | 12 | | ● |
| • **12,0** | 430 | 384,0 | 360 | 12 | | ● |

• **Nuovi diametri** | New diameters

# RECORD DH i ALU

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

≤40xd

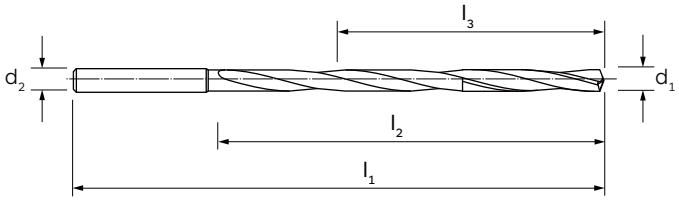
6535 HA

137°

A

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6045 |
|---|---|---|---|---|---|---|
| **4** | 210 | 168 | 160 | 6 | | ● |
| **5** | 250 | 210 | 210 | 6 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6045 |
|---|---|---|---|---|---|---|

**Le punte in metallo duro della serie MICRO DRILL sono progettate per eseguire microforature profonde su acciai, acciai inossidabili, ghise e leghe resistenti al calore.**

The solid carbide MICRO DRILL series are designed to perform deep micro-drilling on steels, stainless steels, cast irons and heat-resistant alloys.

# Micro drill

# MICRO DRILL i

**DISPONIBILE DALLA VERSIONE 5xD FINO ALLA 20xD CON E SENZA FORI DI REFRIGERAZIONE INTERNA.**
Available from 5xD to 20xD with and without internal coolant.

**IL RIVESTIMENTO TF (TiAlN Futura Top), DEPOSITATO CON TECNICA PVD SUL TRATTO INIZIALE DELLA PUNTA, ASSICURA UN' ELEVATA RESISTENZA ALL'USURA E BASSO COEFFICIENTE D'ATTRITO.**
The TF (TiAlN Futura Top) coating, with PVD technique on the drill's tip, ensures high wear resistance and low friction coefficient.

**CODOLO DIN 6535HA IN TOLLERANZA h6 IDONEO PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA shank in h6 tolerance suitable for shrink fit.

**IL DESIGN ESCLUSIVO DEL VANO ED IL PROCESSO DI LUCIDATURA SUPERFICIALE GARANTISCONO UNA MIGLIORE EVACUAZIONE DEL TRUCIOLO.**
Special flute design and polished surface ensure better chip evacuation.

**I QUATTRO PATTINI DI GUIDA CONSENTONO UNA MIGLIORE LINEARITÀ DEL FORO.**
The four margin lands allow a better straightness of the hole.

**DAL DIAMETRO 0.8 mm A 1.45 mm COMPRESO, È STATA SVILUPPATA UNA SPECIALE CAMERA PER IL REFRIGERANTE CHE, RISPETTO ALLE TRADIZIONALI PUNTE CON FORI DI REFRIGERAZIONE, MIGLIORA NOTEVOLMENTE LA PORTATA CON LA STESSA PRESSIONE.**
A special coolant chamber has been studied, from diameter 0.80 mm to 1.45 mm, to improve the flow rate by considerably with the same pressure, compared to traditional drills with internal coolant lubrication.

ILIX® PRECISION

# MICRO DRILL

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

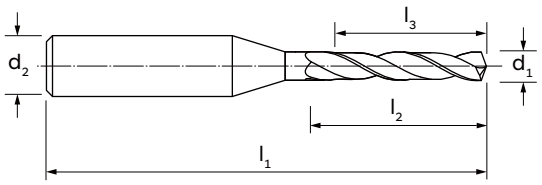
≤5xd

6535 HA

140°

SHRINK FIT

P. 132




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | H |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6118TF |
|---|---|---|---|---|---|---|
| **0,10** | 38 | 1,50 | 0,50 | 3 | | ● |
| **0,15** | 38 | 1,80 | 0,75 | 3 | | ● |
| **0,20** | 38 | 2,40 | 1,00 | 3 | | ● |
| **0,25** | 38 | 2,70 | 1,25 | 3 | | ● |
| **0,30** | 38 | 3,00 | 1,50 | 3 | | ● |
| **0,35** | 38 | 3,30 | 1,75 | 3 | | ● |
| **0,40** | 38 | 3,60 | 2,00 | 3 | | ● |
| **0,45** | 38 | 3,80 | 2,25 | 3 | | ● |
| **0,50** | 38 | 4,00 | 2,50 | 3 | | ● |
| **0,55** | 38 | 4,60 | 2,75 | 3 | | ● |
| **0,60** | 38 | 4,80 | 3,00 | 3 | | ● |
| **0,65** | 38 | 5,00 | 3,25 | 3 | | ● |
| **0,70** | 38 | 6,00 | 3,50 | 3 | | ● |
| **0,75** | 38 | 6,20 | 3,75 | 3 | | ● |
| **0,80** | 38 | 6,40 | 4,00 | 3 | | ● |
| **0,85** | 38 | 6,70 | 4,25 | 3 | | ● |
| **0,90** | 38 | 7,00 | 4,50 | 3 | | ● |
| **0,95** | 38 | 7,25 | 4,75 | 3 | | ● |
| **1,00** | 38 | 7,50 | 5,00 | 3 | | ● |
| **1,05** | 38 | 7,75 | 5,25 | 3 | | ● |
| **1,10** | 38 | 8,00 | 5,50 | 3 | | ● |
| **1,15** | 38 | 8,25 | 5,75 | 3 | | ● |
| **1,20** | 38 | 8,50 | 6,00 | 3 | | ● |
| **1,25** | 38 | 8,75 | 6,25 | 3 | | ● |
| **1,30** | 38 | 9,00 | 6,50 | 3 | | ● |
| **1,35** | 38 | 9,50 | 6,75 | 3 | | ● |
| **1,40** | 38 | 10,00 | 7,00 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6118TF |
|---|---|---|---|---|---|---|
| **1,45** | 38 | 10,50 | 7,25 | 3 | | ● |
| **1,50** | 38 | 11,00 | 7,50 | 3 | | ● |
| **1,55** | 38 | 11,25 | 7,75 | 3 | | ● |
| **1,60** | 38 | 11,50 | 8,00 | 3 | | ● |
| **1,65** | 38 | 11,75 | 8,25 | 3 | | ● |
| **1,70** | 38 | 12,00 | 8,50 | 3 | | ● |
| **1,75** | 38 | 12,25 | 8,75 | 3 | | ● |
| **1,80** | 38 | 12,50 | 9,00 | 3 | | ● |
| **1,85** | 38 | 12,75 | 9,25 | 3 | | ● |
| **1,90** | 38 | 13,00 | 9,50 | 3 | | ● |
| **1,95** | 38 | 13,50 | 9,75 | 3 | | ● |
| **2,00** | 46 | 14,00 | 10,00 | 4 | | ● |
| **2,05** | 46 | 14,50 | 10,25 | 4 | | ● |
| **2,10** | 46 | 15,00 | 10,50 | 4 | | ● |
| **2,15** | 46 | 15,50 | 10,75 | 4 | | ● |
| **2,20** | 46 | 16,00 | 11,00 | 4 | | ● |
| **2,25** | 46 | 16,50 | 11,25 | 4 | | ● |
| **2,30** | 46 | 17,00 | 11,50 | 4 | | ● |
| **2,35** | 46 | 17,50 | 11,75 | 4 | | ● |
| **2,40** | 46 | 18,00 | 12,00 | 4 | | ● |
| **2,45** | 46 | 18,50 | 12,25 | 4 | | ● |
| **2,50** | 46 | 19,00 | 12,50 | 4 | | ● |
| **2,55** | 50 | 19,50 | 12,75 | 4 | | ● |
| **2,60** | 50 | 20,00 | 13,00 | 4 | | ● |
| **2,65** | 50 | 20,50 | 13,25 | 4 | | ● |
| **2,70** | 50 | 21,00 | 13,50 | 4 | | ● |
| **2,75** | 50 | 21,50 | 13,75 | 4 | | ● |

01/02 →

ILIX PRECISION

# MICRO DRILL

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6118TF |
|---|---|---|---|---|---|---|
| **2,80** | 50 | 22,00 | 14,00 | 4 | | ● |
| **2,85** | 50 | 22,50 | 14,25 | 4 | | ● |
| **2,90** | 50 | 23,00 | 14,50 | 4 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6118TF |
|---|---|---|---|---|---|---|
| **2,95** | 50 | 23,50 | 14,75 | 4 | | ● |
| **3,00** | 50 | 24,00 | 15,00 | 4 | | ● |

02/02

# MICRO DRILL i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤5xd

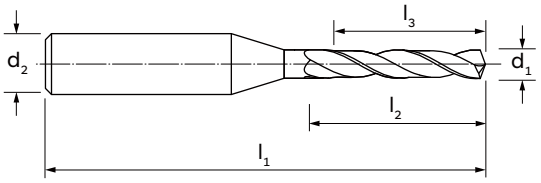
6535 HA

135°

A

SHRINK FIT

P. 132





**CAMERA REFRIGERANTE** | COOLANT HOLE

| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6019TF |
|---|---|---|---|---|---|---|
| • **0,80** | 50 | 5,5 | 4,00 | 3 | | ● |
| • **0,85** | 50 | 5,8 | 4,25 | 3 | | ● |
| • **0,90** | 50 | 6,0 | 4,50 | 3 | | ● |
| • **0,95** | 50 | 6,2 | 4,75 | 3 | | ● |
| • **1,00** | 50 | 6,5 | 5,0 | 3 | | ● |
| • **1,05** | 50 | 6,8 | 5,2 | 3 | | ● |
| • **1,10** | 50 | 7,2 | 5,6 | 3 | | ● |
| • **1,15** | 50 | 7,5 | 5,8 | 3 | | ● |
| • **1,20** | 50 | 7,8 | 6,0 | 3 | | ● |
| • **1,25** | 50 | 8,1 | 6,2 | 3 | | ● |
| • **1,30** | 50 | 8,5 | 6,6 | 3 | | ● |
| • **1,35** | 50 | 8,8 | 6,8 | 3 | | ● |
| • **1,40** | 50 | 9,1 | 7,0 | 3 | | ● |
| • **1,45** | 50 | 9,4 | 7,2 | 3 | | ● |
| **1,50** | 50 | 9,8 | 7,6 | 3 | | ● |
| **1,55** | 50 | 10,1 | 7,8 | 3 | | ● |
| **1,60** | 50 | 10,4 | 8,0 | 3 | | ● |
| **1,65** | 55 | 10,7 | 8,2 | 3 | | ● |
| **1,70** | 55 | 11,1 | 8,6 | 3 | | ● |
| **1,75** | 55 | 11,4 | 8,8 | 3 | | ● |
| **1,80** | 55 | 11,7 | 9,0 | 3 | | ● |
| **1,85** | 55 | 12,0 | 9,2 | 3 | | ● |
| **1,90** | 55 | 12,4 | 9,6 | 3 | | ● |
| **1,95** | 55 | 12,7 | 9,8 | 3 | | ● |
| **2,00** | 55 | 13,0 | 10,0 | 3 | | ● |
| **2,05** | 55 | 13,3 | 10,2 | 3 | | ● |
| **2,10** | 55 | 13,7 | 10,6 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6019TF |
|---|---|---|---|---|---|---|
| **2,15** | 55 | 14,0 | 10,8 | 3 | | ● |
| **2,20** | 55 | 14,3 | 11,0 | 3 | | ● |
| **2,25** | 55 | 14,6 | 11,2 | 3 | | ● |
| **2,30** | 55 | 15,0 | 11,6 | 3 | | ● |
| **2,35** | 55 | 15,3 | 11,8 | 3 | | ● |
| **2,40** | 55 | 15,6 | 12,0 | 3 | | ● |
| **2,45** | 55 | 15,9 | 12,2 | 3 | | ● |
| **2,50** | 55 | 16,3 | 12,6 | 3 | | ● |
| **2,55** | 55 | 16,6 | 12,8 | 3 | | ● |
| **2,60** | 55 | 16,9 | 13,0 | 3 | | ● |
| **2,65** | 55 | 17,2 | 13,2 | 3 | | ● |
| **2,70** | 55 | 17,6 | 13,6 | 3 | | ● |
| **2,75** | 55 | 17,9 | 13,8 | 3 | | ● |
| **2,80** | 55 | 18,2 | 14,0 | 3 | | ● |
| **2,85** | 55 | 18,5 | 14,2 | 3 | | ● |
| **2,90** | 55 | 18,9 | 14,6 | 3 | | ● |
| **2,95** | 55 | 19,2 | 14,8 | 3 | | ● |
| **3,00** | 55 | 19,5 | 15,0 | 3 | | ● |

• **Nei diametri da 0,8 mm a 1,45 mm compreso è stata sviluppata una speciale "camera per il refrigerante". Rispetto alle punte convenzionali con fori di refrigerazione, migliora notevolmente la portata con la stessa pressione.** | In the diameters from 0,8 mm to 1,45 mm included it has been developed a special coolant hole. It improves considerably the flow rate with the same pressure, compared to the conventional drills with internal coolant holes.

# MICRO DRILL i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤8xd

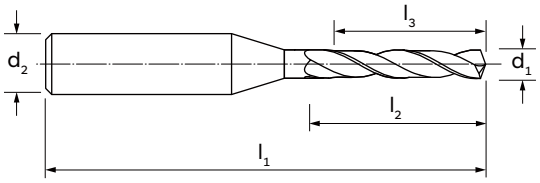
6535 HA

135°

A

SHRINK FIT

P. 132




Ø
● 0,8÷1,45

Ø
1,50÷3,00

**CAMERA REFRIGERANTE** | COOLANT HOLE

| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6029TF |
|---|---|---|---|---|---|---|
| ● **0,80** | 50 | 8,0 | 6,4 | 3 | | ● |
| ● **0,85** | 50 | 8,5 | 6,8 | 3 | | ● |
| ● **0,90** | 50 | 9,0 | 7,2 | 3 | | ● |
| ● **0,95** | 50 | 9,5 | 7,6 | 3 | | ● |
| ● **1,00** | 50 | 9,5 | 8,0 | 3 | | ● |
| ● **1,05** | 50 | 10,0 | 8,4 | 3 | | ● |
| ● **1,10** | 50 | 10,5 | 8,9 | 3 | | ● |
| ● **1,15** | 50 | 10,9 | 9,2 | 3 | | ● |
| ● **1,20** | 50 | 11,4 | 9,6 | 3 | | ● |
| ● **1,25** | 50 | 11,9 | 10,0 | 3 | | ● |
| ● **1,30** | 50 | 12,4 | 10,5 | 3 | | ● |
| ● **1,35** | 50 | 12,8 | 10,8 | 3 | | ● |
| ● **1,40** | 50 | 13,3 | 11,2 | 3 | | ● |
| ● **1,45** | 50 | 13,8 | 11,6 | 3 | | ● |
| **1,50** | 50 | 14,3 | 12,1 | 3 | | ● |
| **1,55** | 50 | 14,7 | 12,4 | 3 | | ● |
| **1,60** | 50 | 15,2 | 12,8 | 3 | | ● |
| **1,65** | 60 | 15,7 | 13,2 | 3 | | ● |
| **1,70** | 60 | 16,2 | 13,7 | 3 | | ● |
| **1,75** | 60 | 16,6 | 14,0 | 3 | | ● |
| **1,80** | 60 | 17,1 | 14,4 | 3 | | ● |
| **1,85** | 60 | 17,6 | 14,8 | 3 | | ● |
| **1,90** | 60 | 18,1 | 15,3 | 3 | | ● |
| **1,95** | 60 | 18,5 | 15,6 | 3 | | ● |
| **2,00** | 60 | 19,0 | 16,0 | 3 | | ● |
| **2,05** | 60 | 19,5 | 16,4 | 3 | | ● |
| **2,10** | 60 | 20,0 | 16,9 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6029TF |
|---|---|---|---|---|---|---|
| **2,15** | 60 | 20,4 | 17,2 | 3 | | ● |
| **2,20** | 60 | 20,9 | 17,6 | 3 | | ● |
| **2,25** | 60 | 21,4 | 18,0 | 3 | | ● |
| **2,30** | 60 | 21,9 | 18,5 | 3 | | ● |
| **2,35** | 60 | 22,3 | 18,8 | 3 | | ● |
| **2,40** | 60 | 22,8 | 19,2 | 3 | | ● |
| **2,45** | 60 | 23,3 | 19,6 | 3 | | ● |
| **2,50** | 60 | 23,8 | 20,1 | 3 | | ● |
| **2,55** | 60 | 24,2 | 20,4 | 3 | | ● |
| **2,60** | 60 | 24,7 | 20,8 | 3 | | ● |
| **2,65** | 60 | 25,2 | 21,2 | 3 | | ● |
| **2,70** | 60 | 25,7 | 21,7 | 3 | | ● |
| **2,75** | 60 | 26,1 | 22,0 | 3 | | ● |
| **2,80** | 60 | 26,6 | 22,4 | 3 | | ● |
| **2,85** | 60 | 27,1 | 22,8 | 3 | | ● |
| **2,90** | 60 | 27,6 | 23,3 | 3 | | ● |
| **2,95** | 60 | 28,0 | 23,6 | 3 | | ● |
| **3,00** | 60 | 28,5 | 24,0 | 3 | | ● |

● **Nei diametri da 0,8 mm a 1,45 mm compreso è stata sviluppata una speciale "camera per il refrigerante". Rispetto alle punte convenzionali con fori di refrigerazione, migliora notevolmente la portata con la stessa pressione.** | In the diameters from 0,8 mm to 1,45 mm included it has been developed a special coolant hole. It improves considerably the flow rate with the same pressure, compared to the conventional drills with internal coolant holes.

# MICRO DRILL i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤12xd

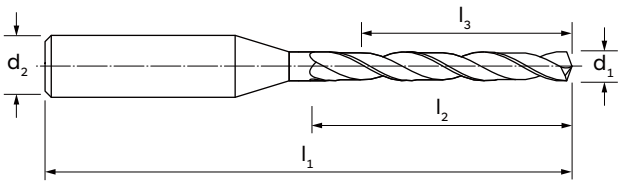
6535 HA

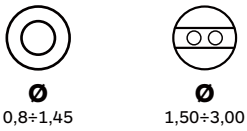
135°

A

SHRINK FIT

P. 132




**CAMERA REFRIGERANTE** | COOLANT HOLE

| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6030TF |
|---|---|---|---|---|---|---|
| • **0,80** | 55 | 11,2 | 9,6 | 3 | | ● |
| • **0,85** | 55 | 11,9 | 10,2 | 3 | | ● |
| • **0,90** | 55 | 12,6 | 10,8 | 3 | | ● |
| • **0,95** | 55 | 13,5 | 11,4 | 3 | | ● |
| • **1,00** | 55 | 13,5 | 12,0 | 3 | | ● |
| • **1,05** | 55 | 14,2 | 12,6 | 3 | | ● |
| • **1,10** | 55 | 14,9 | 13,3 | 3 | | ● |
| • **1,15** | 55 | 15,5 | 13,8 | 3 | | ● |
| • **1,20** | 55 | 16,2 | 14,4 | 3 | | ● |
| • **1,25** | 55 | 16,9 | 15,0 | 3 | | ● |
| • **1,30** | 55 | 17,6 | 15,7 | 3 | | ● |
| • **1,35** | 55 | 18,2 | 16,2 | 3 | | ● |
| • **1,40** | 55 | 18,9 | 16,8 | 3 | | ● |
| • **1,45** | 55 | 19,6 | 17,4 | 3 | | ● |
| **1,50** | 55 | 20,3 | 18,1 | 3 | | ● |
| **1,55** | 55 | 20,9 | 18,6 | 3 | | ● |
| **1,60** | 65 | 21,6 | 19,2 | 3 | | ● |
| **1,65** | 65 | 22,3 | 19,8 | 3 | | ● |
| **1,70** | 65 | 23,0 | 20,5 | 3 | | ● |
| **1,75** | 65 | 23,6 | 21,0 | 3 | | ● |
| **1,80** | 65 | 24,3 | 21,6 | 3 | | ● |
| **1,85** | 65 | 25,0 | 22,2 | 3 | | ● |
| **1,90** | 65 | 25,7 | 22,9 | 3 | | ● |
| **1,95** | 65 | 26,3 | 23,4 | 3 | | ● |
| **2,00** | 65 | 27,0 | 24,0 | 3 | | ● |
| **2,05** | 65 | 27,7 | 24,6 | 3 | | ● |
| **2,10** | 65 | 28,4 | 25,3 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6030TF |
|---|---|---|---|---|---|---|
| **2,15** | 65 | 29,0 | 25,8 | 3 | | ● |
| **2,20** | 65 | 29,7 | 26,4 | 3 | | ● |
| **2,25** | 65 | 30,4 | 27,0 | 3 | | ● |
| **2,30** | 65 | 31,1 | 27,7 | 3 | | ● |
| **2,35** | 75 | 31,7 | 28,2 | 3 | | ● |
| **2,40** | 75 | 32,4 | 28,8 | 3 | | ● |
| **2,45** | 75 | 33,1 | 29,4 | 3 | | ● |
| **2,50** | 75 | 33,8 | 30,1 | 3 | | ● |
| **2,55** | 75 | 34,4 | 30,6 | 3 | | ● |
| **2,60** | 75 | 35,1 | 31,2 | 3 | | ● |
| **2,65** | 75 | 35,8 | 31,8 | 3 | | ● |
| **2,70** | 75 | 36,5 | 32,5 | 3 | | ● |
| **2,75** | 75 | 37,1 | 33,0 | 3 | | ● |
| **2,80** | 75 | 37,8 | 33,6 | 3 | | ● |
| **2,85** | 75 | 38,5 | 34,2 | 3 | | ● |
| **2,90** | 75 | 39,2 | 34,9 | 3 | | ● |
| **2,95** | 75 | 39,8 | 35,4 | 3 | | ● |
| **3,00** | 75 | 40,5 | 36,0 | 3 | | ● |

• **Nei diametri da 0,8 mm a 1,45 mm compreso è stata sviluppata una speciale "camera per il refrigerante". Rispetto alle punte convenzionali con fori di refrigerazione, migliora notevolmente la portata con la stessa pressione.** | In the diameters from 0,8 mm to 1,45 mm included it has been developed a special coolant hole. It improves considerably the flow rate with the same pressure, compared to the conventional drills with internal coolant holes.

ILIX PRECISION

# MICRO DRILL i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM

DIN

≤15xd

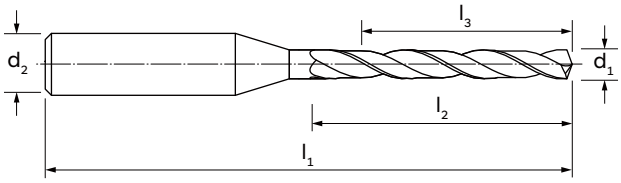
6535 HA

135°

A

SHRINK FIT

P. 132




Ø
● 0,8÷1,45

Ø
1,50÷3,00

**CAMERA REFRIGERANTE** | COOLANT HOLE

**MATERIALE** | MATERIAL — M.D.I.-HM

**RIVESTIMENTO** | COATING — TiAlN Futura Top

**DIREZIONE TAGLIO** | CUTTING DIRECTION

**GRUPPO MATERIALI** MATERIAL GROUPS

- **P** | **Acciai** | Steels — P
- **M** | **Acciai Inossidabili** | Stainless Steels — M
- **K** | **Ghise** | Cast Irons — K
- **N** | **Metalli non ferrosi** | Non-ferrous metals —
- **S** | **Leghe resistenti al calore e Titanio** | HRSA and Titanium — S
- **H** | **Acciai Temprati** | Hardened Steels —

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6136TF |
|---|---|---|---|---|---|---|
| ● **0,80** | 60 | 13,60 | 12,00 | 3 | | ● |
| ● **0,85** | 60 | 14,45 | 12,75 | 3 | | ● |
| ● **0,90** | 60 | 15,30 | 13,50 | 3 | | ● |
| ● **0,95** | 60 | 16,15 | 14,25 | 3 | | ● |
| ● **1,00** | 60 | 16,50 | 15,00 | 3 | | ● |
| ● **1,05** | 60 | 17,30 | 15,80 | 3 | | ● |
| ● **1,10** | 60 | 18,20 | 16,50 | 3 | | ● |
| ● **1,15** | 60 | 19,00 | 17,30 | 3 | | ● |
| ● **1,20** | 60 | 19,80 | 18,00 | 3 | | ● |
| ● **1,25** | 60 | 20,60 | 18,80 | 3 | | ● |
| ● **1,30** | 60 | 21,50 | 19,50 | 3 | | ● |
| ● **1,35** | 60 | 22,30 | 20,30 | 3 | | ● |
| ● **1,40** | 60 | 23,10 | 21,00 | 3 | | ● |
| ● **1,45** | 60 | 23,90 | 21,80 | 3 | | ● |
| **1,50** | 60 | 24,80 | 22,50 | 3 | | ● |
| **1,55** | 60 | 25,60 | 23,30 | 3 | | ● |
| **1,60** | 65 | 26,40 | 24,00 | 3 | | ● |
| **1,65** | 65 | 27,20 | 24,80 | 3 | | ● |
| **1,70** | 65 | 28,10 | 25,50 | 3 | | ● |
| **1,75** | 65 | 28,90 | 26,30 | 3 | | ● |
| **1,80** | 65 | 29,70 | 27,00 | 3 | | ● |
| **1,85** | 75 | 30,50 | 27,80 | 3 | | ● |
| **1,90** | 75 | 31,40 | 28,50 | 3 | | ● |
| **1,95** | 75 | 32,20 | 29,30 | 3 | | ● |
| **2,00** | 75 | 33,00 | 30,00 | 3 | | ● |
| **2,05** | 75 | 33,80 | 30,80 | 3 | | ● |
| **2,10** | 75 | 34,70 | 31,50 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6136TF |
|---|---|---|---|---|---|---|
| **2,15** | 75 | 35,50 | 32,30 | 3 | | ● |
| **2,20** | 75 | 36,30 | 33,00 | 3 | | ● |
| **2,25** | 75 | 37,10 | 33,80 | 3 | | ● |
| **2,30** | 82 | 38,00 | 34,50 | 3 | | ● |
| **2,35** | 82 | 38,80 | 35,30 | 3 | | ● |
| **2,40** | 82 | 39,60 | 36,00 | 3 | | ● |
| **2,45** | 82 | 40,40 | 36,80 | 3 | | ● |
| **2,50** | 82 | 41,30 | 37,50 | 3 | | ● |
| **2,55** | 82 | 42,10 | 38,30 | 3 | | ● |
| **2,60** | 82 | 42,90 | 39,00 | 3 | | ● |
| **2,65** | 82 | 43,70 | 39,80 | 3 | | ● |
| **2,70** | 82 | 44,60 | 40,50 | 3 | | ● |
| **2,75** | 82 | 45,40 | 41,30 | 3 | | ● |
| **2,80** | 82 | 46,20 | 42,00 | 3 | | ● |
| **2,85** | 82 | 47,00 | 42,80 | 3 | | ● |
| **2,90** | 82 | 47,90 | 43,50 | 3 | | ● |
| **2,95** | 82 | 48,70 | 44,30 | 3 | | ● |
| **3,00** | 82 | 49,50 | 45,00 | 3 | | ● |

● **Nei diametri da 0,8 mm a 1,45 mm compreso è stata sviluppata una speciale "camera per il refrigerante". Rispetto alle punte convenzionali con fori di refrigerazione, migliora notevolmente la portata con la stessa pressione.** | In the diameters from 0,8 mm to 1,45 mm included it has been developed a special coolant hole. It improves considerably the flow rate with the same pressure, compared to the conventional drills with internal coolant holes.

# MICRO DRILL i

Punte Evolute in Metallo Duro Micro Grana | Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

≤20xd

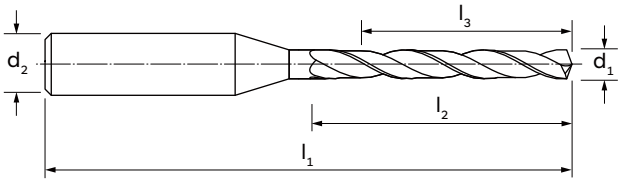
6535 HA

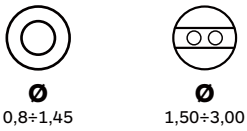
135°

A

SHRINK FIT

P. 132



Ø
● 0,8÷1,45

Ø
1,50÷3,00

**CAMERA REFRIGERANTE** | COOLANT HOLE

| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6031TF |
|---|---|---|---|---|---|---|
| ● **0,80** | 65 | 17,6 | 16 | 3 | | ● |
| ● **0,85** | 65 | 18,7 | 17 | 3 | | ● |
| ● **0,90** | 65 | 19,8 | 18 | 3 | | ● |
| ● **0,95** | 65 | 20,9 | 19 | 3 | | ● |
| ● **1,00** | 65 | 21,5 | 20 | 3 | | ● |
| ● **1,05** | 65 | 22,6 | 21 | 3 | | ● |
| ● **1,10** | 65 | 23,7 | 22 | 3 | | ● |
| ● **1,15** | 65 | 24,7 | 23 | 3 | | ● |
| ● **1,20** | 65 | 25,8 | 24 | 3 | | ● |
| ● **1,25** | 65 | 26,9 | 25 | 3 | | ● |
| ● **1,30** | 65 | 28,0 | 26 | 3 | | ● |
| ● **1,35** | 65 | 29,0 | 27 | 3 | | ● |
| ● **1,40** | 65 | 30,1 | 28 | 3 | | ● |
| ● **1,45** | 75 | 31,2 | 29 | 3 | | ● |
| **1,50** | 75 | 32,3 | 30 | 3 | | ● |
| **1,55** | 75 | 33,3 | 31 | 3 | | ● |
| **1,60** | 75 | 34,4 | 32 | 3 | | ● |
| **1,65** | 75 | 35,5 | 33 | 3 | | ● |
| **1,70** | 75 | 36,6 | 34 | 3 | | ● |
| **1,75** | 75 | 37,6 | 35 | 3 | | ● |
| **1,80** | 75 | 38,7 | 36 | 3 | | ● |
| **1,85** | 75 | 39,8 | 37 | 3 | | ● |
| **1,90** | 75 | 40,9 | 38 | 3 | | ● |
| **1,95** | 75 | 41,9 | 39 | 3 | | ● |
| **2,00** | 82 | 43,0 | 40 | 3 | | ● |
| **2,05** | 82 | 44,1 | 41 | 3 | | ● |
| **2,10** | 82 | 45,2 | 42 | 3 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6031TF |
|---|---|---|---|---|---|---|
| **2,15** | 82 | 46,2 | 43 | 3 | | ● |
| **2,20** | 82 | 47,3 | 44 | 3 | | ● |
| **2,25** | 82 | 48,4 | 45 | 3 | | ● |
| **2,30** | 100 | 49,5 | 46 | 3 | | ● |
| **2,35** | 100 | 50,5 | 47 | 3 | | ● |
| **2,40** | 100 | 51,6 | 48 | 3 | | ● |
| **2,45** | 100 | 52,7 | 49 | 3 | | ● |
| **2,50** | 100 | 53,8 | 50 | 3 | | ● |
| **2,55** | 100 | 54,8 | 51 | 3 | | ● |
| **2,60** | 100 | 55,9 | 52 | 3 | | ● |
| **2,65** | 100 | 57,0 | 53 | 3 | | ● |
| **2,70** | 100 | 58,1 | 54 | 3 | | ● |
| **2,75** | 100 | 59,1 | 55 | 3 | | ● |
| **2,80** | 100 | 60,2 | 56 | 3 | | ● |
| **2,85** | 100 | 61,3 | 57 | 3 | | ● |
| **2,90** | 100 | 62,4 | 58 | 3 | | ● |
| **2,95** | 100 | 63,4 | 59 | 3 | | ● |
| **3,00** | 100 | 64,5 | 60 | 3 | | ● |

● **Nei diametri da 0,8 mm a 1,45 mm compreso è stata sviluppata una speciale "camera per il refrigerante". Rispetto alle punte convenzionali con fori di refrigerazione, migliora notevolmente la portata con la stessa pressione.** | In the diameters from 0,8 mm to 1,45 mm included it has been developed a special coolant hole. It improves considerably the flow rate with the same pressure, compared to the conventional drills with internal coolant holes.

**Le punte in metallo duro della serie 4S i sono progettate per lavorazioni di materiali in lega di Alluminio, ghise e materiali non ferrosi.**

The solid carbide drills of the 4S i series are designed for machining Aluminum alloy materials, cast irons and non-ferrous materials.

# Record 4S i

**GEOMETRIA X IDONEA PER FORI DA PRESSOFUSIONE, LAVORAZIONI DI FORI INCROCIATI E SUPERFICI INCLINATE.**
Geometry X suitable for die-casting holes, cross-holes machining and inclined surfaces.

**DISPONIBILI NELLE VERSIONI 5xD, 7xD E 10xD CON FORI DI REFRIGERAZIONE INTERNA.**
Available in 5xD, 7xD and 10xD versions with internal coolant.

**NELLA VERSIONE 5xD È DISPONIBILE IL RIVESTIMENTO TF (TiAlN Futura Plus), DEPOSITATO CON TECNICA PVD CHE ASSICURA UN'ELEVATA RESISTENZA ALL'USURA E BASSO COEFFICIENTE D'ATTRITO SU GHISE SFEROIDALI E ALLUMINIO AD ALTO CONTENUTO DI SILICIO.**
In the 5xD version, the TF (TiAlN Futura Plus) coating, with PVD technology, is available to ensure high wear resistance and low coefficient of friction on nodular cast irons and aluminium with a high silicon content.

**CODOLI DIN 6535HA IN TOLLERANZA h6 IDONEI PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA shanks in h6 tolerance suitable for shrink fit.

**DUE TAGLIENTI CON VANO TRUCIOLO DRITTO E QUATTRO PATTINI DI GUIDA.**
Two cutting edges with straight flute and four margin lands.

**IL DOPPIO PATTINO DI GUIDA MIGLIORA LA QUALITÀ SUPERFICIALE DEL FORO OTTENENDO TOLLERANZE PIÙ PRECISE E OTTIMA LINEARITÀ.**
The double margins lands improves the hole surface quality achieving more precise tolerances and excellent straightness.

ILIX® PRECISION

# RECORD 4S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

ILIX PRECISION

**ILIX NORM**
DIN

≤5xd

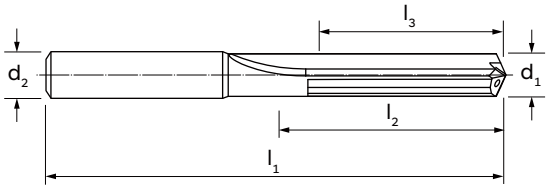
6535 HA

130°

A

SHRINK FIT

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040F5 |
|---|---|---|---|---|---|---|
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040F5 |
|---|---|---|---|---|---|---|
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

ILIX PRECISION

# RECORD 4S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**ILIX NORM**

**DIN**

≤5xd

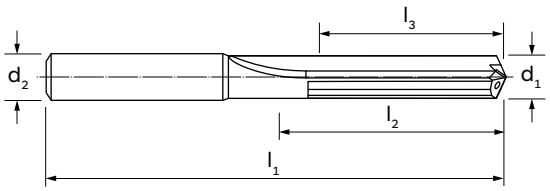
6535 HA

130°

A

SHRINK FIT

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/5 |
|---|---|---|---|---|---|---|
| **4,0** | 74 | 36 | 30 | 6 | | ● |
| **4,2** | 74 | 36 | 30 | 6 | | ● |
| **5,0** | 82 | 44 | 37 | 6 | | ● |
| **5,5** | 82 | 44 | 36 | 6 | | ● |
| **6,0** | 82 | 44 | 35 | 6 | | ● |
| **6,5** | 91 | 53 | 43 | 8 | | ● |
| **6,8** | 91 | 53 | 43 | 8 | | ● |
| **7,0** | 91 | 53 | 43 | 8 | | ● |
| **7,5** | 91 | 53 | 42 | 8 | | ● |
| **8,0** | 91 | 53 | 41 | 8 | | ● |
| **8,5** | 103 | 61 | 48 | 10 | | ● |
| **9,0** | 103 | 61 | 48 | 10 | | ● |
| **10,0** | 103 | 61 | 46 | 10 | | ● |
| **10,2** | 118 | 71 | 56 | 12 | | ● |
| **10,5** | 118 | 71 | 55 | 12 | | ● |
| **11,0** | 118 | 71 | 55 | 12 | | ● |
| **11,5** | 118 | 71 | 54 | 12 | | ● |
| **12,0** | 118 | 71 | 53 | 12 | | ● |
| **12,5** | 124 | 77 | 58 | 14 | | ● |
| **13,0** | 124 | 77 | 58 | 14 | | ● |
| **14,0** | 124 | 77 | 56 | 14 | | ● |
| **15,0** | 133 | 83 | 61 | 16 | | ● |
| **15,5** | 133 | 83 | 60 | 16 | | ● |
| **16,0** | 133 | 83 | 59 | 16 | | ● |
| **17,0** | 143 | 93 | 68 | 18 | | ● |
| **17,5** | 143 | 93 | 67 | 18 | | ● |
| **18,0** | 143 | 93 | 66 | 18 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/5 |
|---|---|---|---|---|---|---|
| **19,5** | 153 | 101 | 72 | 20 | | ● |
| **20,0** | 153 | 101 | 71 | 20 | | ● |

# RECORD 4S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**ILIX NORM**
DIN

≤7xd

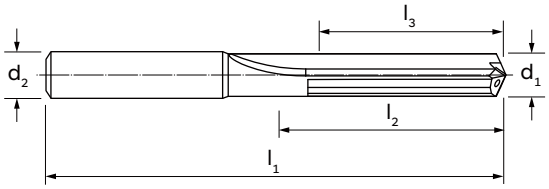
6535 HA

130°

A

SHRINK FIT

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/7 |
|---|---|---|---|---|---|---|
| **5,0** | 98 | 60 | 53 | 6 | | ● |
| **6,0** | 98 | 60 | 51 | 6 | | ● |
| **7,0** | 114 | 76 | 66 | 8 | | ● |
| **8,0** | 114 | 76 | 64 | 8 | | ● |
| **9,0** | 134 | 92 | 79 | 10 | | ● |
| **10,0** | 134 | 92 | 77 | 10 | | ● |
| **11,0** | 155 | 108 | 92 | 12 | | ● |
| **12,0** | 155 | 108 | 90 | 12 | | ● |
| **14,0** | 172 | 125 | 104 | 14 | | ● |
| **15,0** | 193 | 143 | 121 | 16 | | ● |
| **16,0** | 193 | 143 | 119 | 16 | | ● |
| **17,0** | 210 | 160 | 135 | 18 | | ● |
| **17,5** | 210 | 160 | 134 | 18 | | ● |
| **18,0** | 210 | 160 | 133 | 18 | | ● |
| **20,0** | 229 | 177 | 147 | 20 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/7 |
|---|---|---|---|---|---|---|

ILIX PRECISION

# RECORD 4S i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**ILIX NORM**

DIN

≤10xd

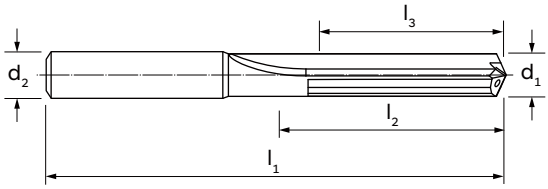
6535 HA

130°

A

SHRINK FIT

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/L |
|---|---|---|---|---|---|---|
| **5,0** | 121 | 82 | 75 | 6 | | ● |
| **5,5** | 121 | 82 | 74 | 6 | | ● |
| **6,0** | 121 | 82 | 73 | 6 | | ● |
| **6,5** | 146 | 106 | 96 | 8 | | ● |
| **6,8** | 146 | 106 | 96 | 8 | | ● |
| **7,0** | 146 | 106 | 96 | 8 | | ● |
| **7,5** | 146 | 106 | 95 | 8 | | ● |
| **8,0** | 146 | 106 | 94 | 8 | | ● |
| **8,5** | 175 | 130 | 117 | 10 | | ● |
| **9,0** | 175 | 130 | 117 | 10 | | ● |
| **10,0** | 175 | 130 | 115 | 10 | | ● |
| **10,2** | 209 | 159 | 144 | 12 | | ● |
| **10,5** | 209 | 159 | 143 | 12 | | ● |
| **11,0** | 209 | 159 | 143 | 12 | | ● |
| **11,5** | 209 | 159 | 142 | 12 | | ● |
| **12,0** | 209 | 159 | 141 | 12 | | ● |
| **12,5** | 233 | 183 | 164 | 14 | | ● |
| **13,0** | 233 | 183 | 164 | 14 | | ● |
| **14,0** | 233 | 183 | 162 | 14 | | ● |
| **15,0** | 260 | 207 | 185 | 16 | | ● |
| **16,0** | 260 | 207 | 183 | 16 | | ● |
| **17,0** | 284 | 231 | 206 | 18 | | ● |
| **18,0** | 284 | 231 | 204 | 18 | | ● |
| **20,0** | 308 | 255 | 225 | 20 | | ● |

| $d_1$ (m7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6040/L |
|---|---|---|---|---|---|---|

**Le punte in metallo duro della serie RECORD STL e STL i garantiscono il massimo volume truciolo asportato su acciai e ghise.**

The solid carbide drills of the RECORD STL and STL i series ensure maximum chip removal on steels and cast irons.

# Record STL-STLi

**GEOMETRIA STL.**
STL geometry.

**DISPONIBILI NELLE VERSIONI 5xD, 7xD E 8xD CON E SENZA FORI DI REFRIGERAZIONE INTERNA.**
Available in versions 5xD, 7xD and 8xD with and without internal coolant.

**IL RIVESTIMENTO TF (TiAlN Futura Plus), DEPOSITATO CON TECNICA PVD ASSICURA UN'ELEVATA RESISTENZA ALL'USURA E BASSO COEFFICIENTE D'ATTRITO E STABILITÀ ANCHE SU APPLICAZIONI CON QUANTITÀ MINIMA DI REFRIGERAZIONE (MQL).**
TF coating (TiAlN Futura Plus), with PVD technology, ensures high wear resistance, low coefficient of friction and stability even in case of applications with minimum quantity lubrication (MQL).

**NELLA VERSIONE 7/8xD È DISPONIBILE IL RIVESTIMENTO TP (TIN), DEPOSITATO CON TECNICA PVD SUL TRATTO INIZIALE DELLA PUNTA, GARANTISCE MAGGIOR DURATA DELL' UTENSILE E TEMPI DI LAVORAZIONE RIDOTTI.**
In version 7/8xD is available the coating TP (Tin on the tip), with PVD technique, ensures longer tool life and reduced machining time.

**CODOLI DIN 6535HA DIN6535HE IN TOLLERANZA h6 IDONEI PER MANDRINI A CALETTAMENTO A CALDO.**
DIN 6535HA and DIN 6535HE shanks in tolerance h6 suitable for shrink fit.

**DESIGN ESCLUSIVO DEL VANO PER UN'EFFICIENTE E RAPIDA EVACUAZIONE DEL TRUCIOLO.**
Specific flute designed for an efficient and fast chip evacuation.

**MIGLIORE QUALITÀ DI FORATURA GRAZIE A RIDOTTE FORZE ASSIALI.**
Improved drilling quality thanks to reduced axial forces.

**ECCELLENTE CAPACITÀ DI AUTO CENTRATURA.**
Excellent self-centering capability.

ILIX® PRECISION

ILIX PRECISION

# RECORD STL

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

**6537 L**

DIN

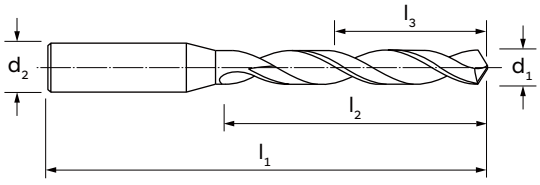
≤5xd

6535 HA

130°

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | – |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6236TF |
|---|---|---|---|---|---|---|
| **3,0** | 66 | 28 | 24 | 6 | | ■ |
| **3,3** | 66 | 28 | 23 | 6 | | ■ |
| **3,5** | 66 | 28 | 23 | 6 | | ■ |
| **4,0** | 74 | 36 | 30 | 6 | | ■ |
| **4,2** | 74 | 36 | 30 | 6 | | ■ |
| **5,0** | 82 | 44 | 37 | 6 | | ■ |
| **5,5** | 82 | 44 | 36 | 6 | | ■ |
| **6,0** | 82 | 44 | 35 | 6 | | ■ |
| **6,5** | 91 | 53 | 43 | 8 | | ■ |
| **6,8** | 91 | 53 | 43 | 8 | | ■ |
| **7,0** | 91 | 53 | 43 | 8 | | ■ |
| **7,5** | 91 | 53 | 42 | 8 | | ■ |
| **8,0** | 91 | 53 | 41 | 8 | | ■ |
| **9,0** | 103 | 61 | 48 | 10 | | ■ |
| **9,5** | 103 | 61 | 47 | 10 | | ■ |
| **10,0** | 103 | 61 | 46 | 10 | | ■ |
| **10,2** | 118 | 71 | 56 | 12 | | ■ |
| **10,5** | 118 | 71 | 55 | 12 | | ■ |
| **11,5** | 118 | 71 | 54 | 12 | | ■ |
| **12,0** | 118 | 71 | 53 | 12 | | ■ |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6236TF |
|---|---|---|---|---|---|---|

■ **Fino ad esaurimento scorte** | Till stocks last

# RECORD STL

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

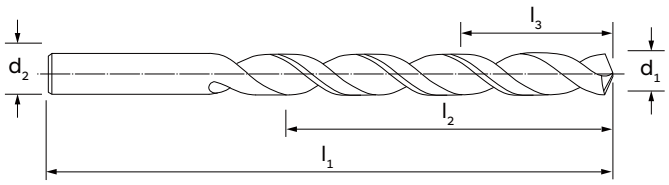
~338
DIN

≤8xd

130°

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6238TF |
|---|---|---|---|---|---|---|
| **3,0** | 61 | 33 | 29 | 3,0 | | ● |
| **3,1** | 65 | 36 | 31 | 3,1 | | ● |
| **3,2** | 65 | 36 | 31 | 3,2 | | ● |
| **3,3** | 65 | 36 | 31 | 3,3 | | ● |
| **3,4** | 70 | 39 | 34 | 3,4 | | ● |
| **3,5** | 70 | 39 | 34 | 3,5 | | ● |
| **3,7** | 70 | 39 | 34 | 3,7 | | ● |
| **3,8** | 75 | 43 | 37 | 3,8 | | ● |
| **4,0** | 75 | 43 | 37 | 4,0 | | ● |
| **4,2** | 75 | 43 | 37 | 4,2 | | ● |
| **4,3** | 80 | 47 | 41 | 4,3 | | ● |
| **4,5** | 80 | 47 | 40 | 4,5 | | ● |
| **4,7** | 80 | 47 | 40 | 4,7 | | ● |
| **4,8** | 86 | 52 | 45 | 4,8 | | ● |
| **5,0** | 86 | 52 | 45 | 5,0 | | ● |
| **5,1** | 86 | 52 | 44 | 5,1 | | ● |
| **5,2** | 86 | 52 | 44 | 5,2 | | ● |
| **5,5** | 93 | 57 | 49 | 5,5 | | ● |
| **5,8** | 93 | 57 | 48 | 5,8 | | ● |
| **6,0** | 93 | 57 | 48 | 6,0 | | ● |
| **6,1** | 101 | 63 | 54 | 6,1 | | ● |
| **6,5** | 101 | 63 | 53 | 6,5 | | ● |
| **6,6** | 101 | 63 | 53 | 6,6 | | ● |
| **6,8** | 109 | 69 | 59 | 6,8 | | ● |
| **7,0** | 109 | 69 | 59 | 7,0 | | ● |
| **7,5** | 109 | 69 | 58 | 7,5 | | ● |
| **7,8** | 117 | 75 | 63 | 7,8 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6238TF |
|---|---|---|---|---|---|---|
| **8,0** | 117 | 75 | 63 | 8,0 | | ● |
| **8,1** | 117 | 75 | 63 | 8,1 | | ● |
| **8,5** | 117 | 75 | 62 | 8,5 | | ● |
| **9,0** | 125 | 81 | 68 | 9,0 | | ● |
| **9,5** | 125 | 81 | 67 | 9,5 | | ● |
| **10,0** | 133 | 87 | 72 | 10,0 | | ● |
| **10,2** | 133 | 87 | 72 | 10,2 | | ● |
| **10,5** | 133 | 87 | 71 | 10,5 | | ● |
| **11,0** | 142 | 94 | 78 | 11,0 | | ● |
| **11,5** | 142 | 94 | 77 | 11,5 | | ● |
| **12,0** | 151 | 101 | 83 | 12,0 | | ● |

ILIX PRECISION

# RECORD STL i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

~338
DIN

≤7/8 xd

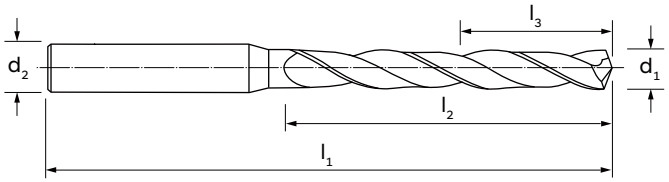
6535 HA

130°

A

SHRINK FIT

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiN Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | – |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6080TP |
|---|---|---|---|---|---|---|
| **5,0** | 101 | 63 | 56 | 6 | | ■ |
| **5,1** | 101 | 63 | 55 | 6 | | ■ |
| **5,2** | 101 | 63 | 55 | 6 | | ■ |
| **5,5** | 101 | 63 | 55 | 6 | | ■ |
| **5,8** | 101 | 63 | 54 | 6 | | ■ |
| **6,0** | 101 | 63 | 54 | 6 | | ■ |
| **6,1** | 117 | 79 | 70 | 8 | | ■ |
| **6,6** | 117 | 79 | 69 | 8 | | ■ |
| **6,8** | 117 | 79 | 69 | 8 | | ■ |
| **7,0** | 117 | 79 | 69 | 8 | | ■ |
| **7,5** | 117 | 79 | 68 | 8 | | ■ |
| **7,8** | 117 | 79 | 67 | 8 | | ■ |
| **8,0** | 117 | 79 | 67 | 8 | | ■ |
| **8,1** | 133 | 91 | 79 | 10 | | ■ |
| **8,5** | 133 | 91 | 78 | 10 | | ■ |
| **9,0** | 133 | 91 | 78 | 10 | | ■ |
| **9,5** | 133 | 91 | 77 | 10 | | ■ |
| **10,0** | 133 | 91 | 76 | 10 | | ■ |
| **10,2** | 151 | 104 | 89 | 12 | | ■ |
| **10,5** | 151 | 104 | 88 | 12 | | ■ |
| **11,0** | 151 | 104 | 88 | 12 | | ■ |
| **11,5** | 151 | 104 | 87 | 12 | | ■ |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6080TP |
|---|---|---|---|---|---|---|

■ **Fino ad esaurimento scorte** | Till stocks last

# RECORD STL i

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

ILIX PRECISION

~338
DIN

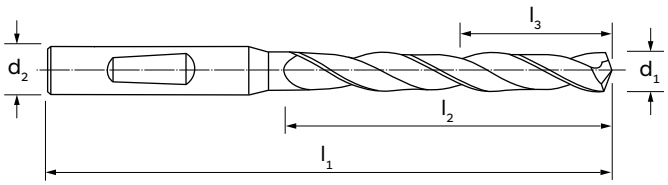
≤7/8 xd

6535 HE

130°

A

P. 128




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | TiN Top |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6081TP |
|---|---|---|---|---|---|---|
| **5,0** | 101 | 63 | 56 | 6 | | ■ |
| **5,1** | 101 | 63 | 55 | 6 | | ■ |
| **5,2** | 101 | 63 | 55 | 6 | | ■ |
| **5,5** | 101 | 63 | 55 | 6 | | ■ |
| **5,8** | 101 | 63 | 54 | 6 | | ■ |
| **6,0** | 101 | 63 | 54 | 6 | | ■ |
| **6,1** | 117 | 79 | 70 | 8 | | ■ |
| **6,6** | 117 | 79 | 69 | 8 | | ■ |
| **6,8** | 117 | 79 | 69 | 8 | | ■ |
| **7,0** | 117 | 79 | 69 | 8 | | ■ |
| **7,5** | 117 | 79 | 68 | 8 | | ■ |
| **7,8** | 117 | 79 | 67 | 8 | | ■ |
| **8,0** | 117 | 79 | 67 | 8 | | ■ |
| **8,1** | 133 | 91 | 79 | 10 | | ■ |
| **8,5** | 133 | 91 | 78 | 10 | | ■ |
| **9,0** | 133 | 91 | 78 | 10 | | ■ |
| **9,5** | 133 | 91 | 77 | 10 | | ■ |
| **10,0** | 133 | 91 | 76 | 10 | | ■ |
| **10,2** | 151 | 104 | 89 | 12 | | ■ |
| **10,5** | 151 | 104 | 88 | 12 | | ■ |
| **11,0** | 151 | 104 | 88 | 12 | | ■ |
| **11,5** | 151 | 104 | 87 | 12 | | ■ |
| **12,0** | 151 | 104 | 86 | 12 | | ■ |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6081TP |
|---|---|---|---|---|---|---|

■ **Fino ad esaurimento scorte** | Till stocks last

**Le punte in metallo duro della serie RECORD 3S-3BX sono progettate per applicazioni su ghise grigie, ghise duttili e alluminio garantendo un elevato volume truciolo asportato.**

The solid carbide drills of the RECORD 3S-3BX series are designed for applications on grey cast iron, ductile cast iron and aluminium ensuring high chip removal volume.

# Record 3S-3BX

**GEOMETRIA 3S E 3BX.**
Geometry 3S and 3BX.

**DISPONIBILI NELLE VERSIONI 3xD, 4xD E 5xD SENZA FORI DI REFRIGERAZIONE INTERNI.**
Available in 3xD, 4xD and 5xD versions without internal coolant.

**IL RIVESTIMENTO TF (TiAlN Futura Plus), DEPOSITATO CON TECNICA PVD ASSICURA UN'ELEVATA RESISTENZA ALL'USURA ANCHE AD ALTA VELOCITÀ DI TAGLIO.**
TF (TiAlN Futura Plus) coating, with PVD technique, ensures high wear resistance even at high cutting speed.

**TRE TAGLIENTI EFFETTIVI PER UNA VELOCITÀ DI AVANZAMENTO MAGGIORE RISPETTO ALLE PUNTE A DUE TAGLIENTI.**
Three effective cutting edges for a faster feed rate than two-edges drills.

**TRE AMPI VANI ELICA PER UNA RAPIDA EVACUAZIONE TRUCIOLO.**
Three large flutes for rapid chip evacuation.

**TRE PATTINI DI GUIDA FORNISCONO UNA MIGLIORE QUALITÀ DI FORATURA E LINEARITÀ RISPETTO ALLE PUNTE A DUE VANI.**
Three guide margin lands provide better drilling quality and straightness than two-fluted drills.

ILIX® PRECISION

# RECORD 3S

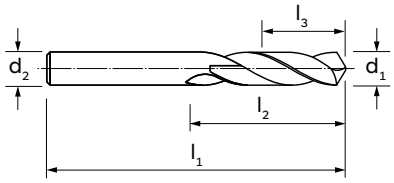
Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

~1897
DIN

≤3xd

150°

P. 130




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | P | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M | M |
| **K** \| **Ghise** \| Cast Irons | - | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6126K | 6126TF |
|---|---|---|---|---|---|---|
| **3,0** | 46 | 16 | 12 | 3,0 | ● | ● |
| **3,1** | 49 | 18 | 13 | 3,1 | ● | ● |
| **3,2** | 49 | 18 | 13 | 3,2 | ● | ● |
| **3,3** | 49 | 18 | 13 | 3,3 | ● | ● |
| **3,4** | 52 | 20 | 15 | 3,4 | ● | ● |
| **3,5** | 52 | 20 | 15 | 3,5 | ● | ● |
| **3,6** | 52 | 20 | 15 | 3,6 | ● | ● |
| **3,7** | 52 | 20 | 15 | 3,7 | ● | ● |
| **3,8** | 55 | 22 | 16 | 3,8 | ● | ● |
| **3,9** | 55 | 22 | 16 | 3,9 | ● | ● |
| **4,0** | 55 | 22 | 16 | 4,0 | ● | ● |
| **4,1** | 55 | 22 | 16 | 4,1 | ● | ● |
| **4,2** | 55 | 22 | 16 | 4,2 | ● | ● |
| **4,3** | 58 | 24 | 18 | 4,3 | ● | ● |
| **4,4** | 58 | 24 | 17 | 4,4 | ● | ● |
| **4,5** | 58 | 24 | 17 | 4,5 | ● | ● |
| **4,6** | 58 | 24 | 17 | 4,6 | ● | ● |
| **4,7** | 58 | 24 | 17 | 4,7 | ● | ● |
| **4,8** | 62 | 26 | 19 | 4,8 | ● | ● |
| **4,9** | 62 | 26 | 19 | 4,9 | ● | ● |
| **5,0** | 62 | 26 | 19 | 5,0 | ● | ● |
| **5,1** | 62 | 26 | 18 | 5,1 | ● | ● |
| **5,2** | 62 | 26 | 18 | 5,2 | ● | ● |
| **5,3** | 62 | 26 | 18 | 5,3 | ● | ● |
| **5,4** | 66 | 28 | 20 | 5,4 | ● | ● |
| **5,5** | 66 | 28 | 20 | 5,5 | ● | ● |
| **5,6** | 66 | 28 | 20 | 5,6 | ● | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6126K | 6126TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 5,7 | ● | ● |
| **5,8** | 66 | 28 | 19 | 5,8 | ● | ● |
| **5,9** | 66 | 28 | 19 | 5,9 | ● | ● |
| **6,0** | 66 | 28 | 19 | 6,0 | ● | ● |
| **6,1** | 70 | 31 | 22 | 6,1 | ● | ● |
| **6,2** | 70 | 31 | 22 | 6,2 | ● | ● |
| **6,3** | 70 | 31 | 22 | 6,3 | ● | ● |
| **6,4** | 70 | 31 | 21 | 6,4 | ● | ● |
| **6,5** | 70 | 31 | 21 | 6,5 | ● | ● |
| **6,6** | 70 | 31 | 21 | 6,6 | ● | ● |
| **6,7** | 70 | 31 | 21 | 6,7 | ● | ● |
| **6,8** | 74 | 34 | 24 | 6,8 | ● | ● |
| **6,9** | 74 | 34 | 24 | 6,9 | ● | ● |
| **7,0** | 74 | 34 | 24 | 7,0 | ● | ● |
| **7,1** | 74 | 34 | 23 | 7,1 | ● | ● |
| **7,2** | 74 | 34 | 23 | 7,2 | ● | ● |
| **7,3** | 74 | 34 | 23 | 7,3 | ● | ● |
| **7,4** | 74 | 34 | 23 | 7,4 | ● | ● |
| **7,5** | 74 | 34 | 23 | 7,5 | ● | ● |
| **7,6** | 79 | 37 | 26 | 7,6 | ● | ● |
| **7,7** | 79 | 37 | 26 | 7,7 | ● | ● |
| **7,8** | 79 | 37 | 25 | 7,8 | ● | ● |
| **7,9** | 79 | 37 | 25 | 7,9 | ● | ● |
| **8,0** | 79 | 37 | 25 | 8,0 | ● | ● |
| **8,1** | 79 | 37 | 25 | 8,1 | ● | ● |
| **8,2** | 79 | 37 | 25 | 8,2 | ● | ● |
| **8,3** | 79 | 37 | 25 | 8,3 | ● | ● |

01/02 →

ILIX PRECISION

# RECORD 3S

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6126K | 6126TF |
|---|---|---|---|---|---|---|
| **8,4** | 79 | 37 | 24 | 8,4 | ● | ● |
| **8,5** | 79 | 37 | 24 | 8,5 | ● | ● |
| **8,6** | 84 | 40 | 27 | 8,6 | ● | ● |
| **8,7** | 84 | 40 | 27 | 8,7 | ● | ● |
| **8,8** | 84 | 40 | 27 | 8,8 | ● | ● |
| **8,9** | 84 | 40 | 27 | 8,9 | ● | ● |
| **9,0** | 84 | 40 | 27 | 9,0 | ● | ● |
| **9,1** | 84 | 40 | 26 | 9,1 | ● | ● |
| **9,2** | 84 | 40 | 26 | 9,2 | ● | ● |
| **9,3** | 84 | 40 | 26 | 9,3 | ● | ● |
| **9,4** | 84 | 40 | 26 | 9,4 | ● | ● |
| **9,5** | 84 | 40 | 26 | 9,5 | ● | ● |
| **9,6** | 89 | 43 | 29 | 9,6 | ● | ● |
| **9,7** | 89 | 43 | 29 | 9,7 | ● | ● |
| **9,8** | 89 | 43 | 28 | 9,8 | ● | ● |
| **9,9** | 89 | 43 | 28 | 9,9 | ● | ● |
| **10,0** | 89 | 43 | 28 | 10,0 | ● | ● |
| **10,1** | 89 | 43 | 28 | 10,1 | ● | ● |
| **10,2** | 89 | 43 | 28 | 10,2 | ● | ● |
| **10,3** | 89 | 43 | 28 | 10,3 | ● | ● |
| **10,4** | 89 | 43 | 27 | 10,4 | ● | ● |
| **10,5** | 89 | 43 | 27 | 10,5 | ● | ● |
| **10,6** | 89 | 43 | 27 | 10,6 | ● | ● |
| **10,7** | 95 | 47 | 31 | 10,7 | ● | ● |
| **10,8** | 95 | 47 | 31 | 10,8 | ● | ● |
| **10,9** | 95 | 47 | 31 | 10,9 | ● | ● |
| **11,0** | 95 | 47 | 31 | 11,0 | ● | ● |
| **11,1** | 95 | 47 | 30 | 11,1 | ● | ● |
| **11,2** | 95 | 47 | 30 | 11,2 | ● | ● |
| **11,3** | 95 | 47 | 30 | 11,3 | ● | ● |
| **11,4** | 95 | 47 | 30 | 11,4 | ● | ● |
| **11,5** | 95 | 47 | 30 | 11,5 | ● | ● |
| **11,6** | 95 | 47 | 30 | 11,6 | ● | ● |
| **11,7** | 95 | 47 | 30 | 11,7 | ● | ● |
| **11,8** | 95 | 47 | 29 | 11,8 | ● | ● |
| **11,9** | 102 | 51 | 33 | 11,9 | ● | ● |
| **12,0** | 102 | 51 | 33 | 12,0 | ● | ● |
| **12,1** | 102 | 51 | 33 | 12,1 | ● | ● |
| **12,2** | 102 | 51 | 33 | 12,2 | ● | ● |
| **12,3** | 102 | 51 | 33 | 12,3 | ● | ● |
| **12,4** | 102 | 51 | 32 | 12,4 | ● | ● |
| **12,5** | 102 | 51 | 32 | 12,5 | ● | ● |
| **12,6** | 102 | 51 | 32 | 12,6 | ● | ● |
| **12,7** | 102 | 51 | 32 | 12,7 | ● | ● |
| **12,8** | 102 | 51 | 32 | 12,8 | ● | ● |
| **12,9** | 102 | 51 | 32 | 12,9 | ● | ● |
| **13,0** | 102 | 51 | 32 | 13,0 | ● | ● |
| **13,1** | 102 | 51 | 31 | 13,1 | ● | ● |
| **13,2** | 102 | 51 | 31 | 13,2 | ● | ● |
| **13,3** | 107 | 54 | 34 | 13,3 | ● | ● |
| **13,4** | 107 | 54 | 34 | 13,4 | ● | ● |
| **13,5** | 107 | 54 | 34 | 13,5 | ● | ● |
| **13,6** | 107 | 54 | 34 | 13,6 | ● | ● |
| **13,7** | 107 | 54 | 34 | 13,7 | ● | ● |
| **13,8** | 107 | 54 | 33 | 13,8 | ● | ● |
| **13,9** | 107 | 54 | 33 | 13,9 | ● | ● |
| **14,0** | 107 | 54 | 33 | 14,0 | ● | ● |
| **14,1** | 111 | 56 | 35 | 14,1 | ● | ● |
| **14,2** | 111 | 56 | 35 | 14,2 | ● | ● |
| **14,3** | 111 | 56 | 35 | 14,3 | ● | ● |
| **14,4** | 111 | 56 | 34 | 14,4 | ● | ● |
| **14,5** | 111 | 56 | 34 | 14,5 | ● | ● |
| **14,6** | 111 | 56 | 34 | 14,6 | ● | ● |
| **14,7** | 111 | 56 | 34 | 14,7 | ● | ● |
| **14,8** | 111 | 56 | 34 | 14,8 | ● | ● |
| **14,9** | 111 | 56 | 34 | 14,9 | ● | ● |
| **15,0** | 111 | 56 | 34 | 15,0 | ● | ● |
| **15,1** | 115 | 58 | 35 | 15,1 | ● | ● |
| **15,2** | 115 | 58 | 35 | 15,2 | ● | ● |
| **15,3** | 115 | 58 | 35 | 15,3 | ● | ● |
| **15,4** | 115 | 58 | 35 | 15,4 | ● | ● |
| **15,5** | 115 | 58 | 35 | 15,5 | ● | ● |
| **15,6** | 115 | 58 | 35 | 15,6 | ● | ● |
| **15,7** | 115 | 58 | 35 | 15,7 | ● | ● |
| **15,8** | 115 | 58 | 34 | 15,8 | ● | ● |
| **15,9** | 115 | 58 | 34 | 15,9 | ● | ● |
| **16,0** | 115 | 58 | 34 | 16,0 | ● | ● |
| **16,5** | 119 | 60 | 35 | 16,5 | ● | ● |
| **17,0** | 119 | 60 | 35 | 17,0 | ● | ● |
| **17,5** | 123 | 62 | 36 | 17,5 | ● | ● |
| **18,0** | 123 | 62 | 35 | 18,0 | ● | ● |
| **18,5** | 127 | 64 | 36 | 18,5 | ● | ● |
| **19,0** | 127 | 64 | 36 | 19,0 | ● | ● |
| **19,5** | 131 | 66 | 37 | 19,5 | ● | ● |
| **20,0** | 131 | 66 | 36 | 20,0 | ● | ● |

02/02

# RECORD 3S

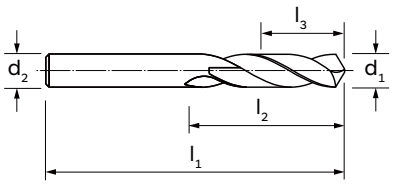
Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

**ILIX NORM**
DIN

≤4xd

150°

P. 130




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | - | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - | - |
| **K** \| **Ghise** \| Cast Irons | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6123K | 6123TF |
|---|---|---|---|---|---|---|
| **3,0** | 46 | 22 | 18 | 3,0 | ● | ● |
| **3,1** | 49 | 24 | 19 | 3,1 | ● | ● |
| **3,2** | 49 | 24 | 19 | 3,2 | ● | ● |
| **3,3** | 49 | 24 | 19 | 3,3 | ● | ● |
| **3,4** | 52 | 27 | 22 | 3,4 | ● | ● |
| **3,5** | 52 | 27 | 22 | 3,5 | ● | ● |
| **3,6** | 52 | 27 | 22 | 3,6 | ● | ● |
| **3,7** | 52 | 27 | 22 | 3,7 | ● | ● |
| **3,8** | 55 | 30 | 24 | 3,8 | ● | ● |
| **3,9** | 55 | 30 | 24 | 3,9 | ● | ● |
| **4,0** | 55 | 30 | 24 | 4,0 | ● | ● |
| **4,1** | 55 | 30 | 24 | 4,1 | ● | ● |
| **4,2** | 55 | 30 | 24 | 4,2 | ● | ● |
| **4,3** | 58 | 32 | 26 | 4,3 | ● | ● |
| **4,4** | 58 | 32 | 25 | 4,4 | ● | ● |
| **4,5** | 58 | 32 | 25 | 4,5 | ● | ● |
| **4,6** | 58 | 32 | 25 | 4,6 | ● | ● |
| **4,7** | 58 | 32 | 25 | 4,7 | ● | ● |
| **4,8** | 62 | 35 | 28 | 4,8 | ● | ● |
| **4,9** | 62 | 35 | 28 | 4,9 | ● | ● |
| **5,0** | 62 | 35 | 28 | 5,0 | ● | ● |
| **5,1** | 62 | 35 | 27 | 5,1 | ● | ● |
| **5,2** | 62 | 35 | 27 | 5,2 | ● | ● |
| **5,3** | 62 | 35 | 27 | 5,3 | ● | ● |
| **5,4** | 66 | 39 | 31 | 5,4 | ● | ● |
| **5,5** | 66 | 39 | 31 | 5,5 | ● | ● |
| **5,6** | 66 | 39 | 31 | 5,6 | ● | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6123K | 6123TF |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 39 | 31 | 5,7 | ● | ● |
| **5,8** | 66 | 39 | 30 | 5,8 | ● | ● |
| **5,9** | 66 | 39 | 30 | 5,9 | ● | ● |
| **6,0** | 66 | 39 | 30 | 6,0 | ● | ● |
| **6,1** | 70 | 42 | 33 | 6,1 | ● | ● |
| **6,2** | 70 | 42 | 33 | 6,2 | ● | ● |
| **6,3** | 70 | 42 | 33 | 6,3 | ● | ● |
| **6,4** | 70 | 42 | 32 | 6,4 | ● | ● |
| **6,5** | 70 | 42 | 32 | 6,5 | ● | ● |
| **6,6** | 70 | 42 | 32 | 6,6 | ● | ● |
| **6,7** | 70 | 42 | 32 | 6,7 | ● | ● |
| **6,8** | 74 | 42 | 32 | 6,8 | ● | ● |
| **6,9** | 74 | 42 | 32 | 6,9 | ● | ● |
| **7,0** | 74 | 45 | 35 | 7,0 | ● | ● |
| **7,1** | 74 | 45 | 34 | 7,1 | ● | ● |
| **7,2** | 74 | 45 | 34 | 7,2 | ● | ● |
| **7,3** | 74 | 45 | 34 | 7,3 | ● | ● |
| **7,4** | 74 | 45 | 34 | 7,4 | ● | ● |
| **7,5** | 74 | 45 | 34 | 7,5 | ● | ● |
| **7,6** | 79 | 48 | 37 | 7,6 | ● | ● |
| **7,7** | 79 | 48 | 37 | 7,7 | ● | ● |
| **7,8** | 79 | 48 | 36 | 7,8 | ● | ● |
| **7,9** | 79 | 48 | 36 | 7,9 | ● | ● |
| **8,0** | 79 | 48 | 36 | 8,0 | ● | ● |
| **8,1** | 79 | 48 | 36 | 8,1 | ● | ● |
| **8,2** | 79 | 48 | 36 | 8,2 | ● | ● |
| **8,3** | 79 | 48 | 36 | 8,3 | ● | ● |

01/02 →

ILIX PRECISION

# RECORD 3S

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

| Ø (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | 6123K | 6123TF |
|---|---|---|---|---|---|---|
| **8,4** | 79 | 48 | 35 | 8,4 | ● | ● |
| **8,5** | 79 | 48 | 35 | 8,5 | ● | ● |
| **8,6** | 84 | 52 | 39 | 8,6 | ● | ● |
| **8,7** | 84 | 52 | 39 | 8,7 | ● | ● |
| **8,8** | 84 | 52 | 39 | 8,8 | ● | ● |
| **8,9** | 84 | 52 | 39 | 8,9 | ● | ● |
| **9,0** | 84 | 52 | 39 | 9,0 | ● | ● |
| **9,1** | 84 | 52 | 38 | 9,1 | ● | ● |
| **9,2** | 84 | 52 | 38 | 9,2 | ● | ● |
| **9,3** | 84 | 52 | 38 | 9,3 | ● | ● |
| **9,4** | 84 | 52 | 38 | 9,4 | ● | ● |
| **9,5** | 84 | 52 | 38 | 9,5 | ● | ● |
| **9,6** | 89 | 55 | 41 | 9,6 | ● | ● |
| **9,7** | 89 | 55 | 41 | 9,7 | ● | ● |
| **9,8** | 89 | 55 | 40 | 9,8 | ● | ● |
| **9,9** | 89 | 55 | 40 | 9,9 | ● | ● |
| **10,0** | 89 | 55 | 40 | 10,0 | ● | ● |
| **10,1** | 89 | 55 | 40 | 10,1 | ● | ● |
| **10,2** | 89 | 55 | 40 | 10,2 | ● | ● |
| **10,3** | 89 | 55 | 40 | 10,3 | ● | ● |
| **10,4** | 89 | 55 | 39 | 10,4 | ● | ● |
| **10,5** | 89 | 55 | 39 | 10,5 | ● | ● |
| **10,6** | 89 | 55 | 39 | 10,6 | ● | ● |
| **10,7** | 95 | 60 | 44 | 10,7 | ● | ● |
| **10,8** | 95 | 60 | 44 | 10,8 | ● | ● |
| **10,9** | 95 | 60 | 44 | 10,9 | ● | ● |
| **11,0** | 95 | 60 | 44 | 11,0 | ● | ● |
| **11,1** | 95 | 60 | 43 | 11,1 | ● | ● |
| **11,2** | 95 | 60 | 43 | 11,2 | ● | ● |
| **11,3** | 95 | 60 | 43 | 11,3 | ● | ● |
| **11,4** | 95 | 60 | 43 | 11,4 | ● | ● |
| **11,5** | 95 | 60 | 43 | 11,5 | ● | ● |
| **11,6** | 95 | 60 | 43 | 11,6 | ● | ● |
| **11,7** | 95 | 60 | 43 | 11,7 | ● | ● |
| **11,8** | 95 | 60 | 42 | 11,8 | ● | ● |
| **11,9** | 102 | 65 | 47 | 11,9 | ● | ● |
| **12,0** | 102 | 65 | 47 | 12,0 | ● | ● |
| **12,1** | 102 | 65 | 47 | 12,1 | ● | ● |
| **12,2** | 102 | 65 | 47 | 12,2 | ● | ● |
| **12,3** | 102 | 65 | 47 | 12,3 | ● | ● |
| **12,4** | 102 | 65 | 46 | 12,4 | ● | ● |
| **12,5** | 102 | 65 | 46 | 12,5 | ● | ● |
| **12,6** | 102 | 65 | 46 | 12,6 | ● | ● |
| **12,7** | 102 | 65 | 46 | 12,7 | ● | ● |
| **12,8** | 102 | 65 | 46 | 12,8 | ● | ● |
| **12,9** | 102 | 65 | 46 | 12,9 | ● | ● |
| **13,0** | 102 | 65 | 46 | 13,0 | ● | ● |
| **13,1** | 102 | 65 | 45 | 13,1 | ● | ● |
| **13,2** | 102 | 65 | 45 | 13,2 | ● | ● |
| **13,3** | 107 | 66 | 46 | 13,3 | ● | ● |
| **13,4** | 107 | 66 | 46 | 13,4 | ● | ● |
| **13,5** | 107 | 66 | 46 | 13,5 | ● | ● |
| **13,6** | 107 | 66 | 46 | 13,6 | ● | ● |
| **13,7** | 107 | 66 | 46 | 13,7 | ● | ● |
| **13,8** | 107 | 66 | 45 | 13,8 | ● | ● |
| **13,9** | 107 | 66 | 45 | 13,9 | ● | ● |
| **14,0** | 107 | 66 | 45 | 14,0 | ● | ● |
| **14,1** | 111 | 70 | 49 | 14,1 | ● | ● |
| **14,2** | 111 | 70 | 49 | 14,2 | ● | ● |
| **14,3** | 111 | 70 | 49 | 14,3 | ● | ● |
| **14,4** | 111 | 70 | 48 | 14,4 | ● | ● |
| **14,5** | 111 | 70 | 48 | 14,5 | ● | ● |
| **14,6** | 111 | 70 | 48 | 14,6 | ● | ● |
| **14,7** | 111 | 70 | 48 | 14,7 | ● | ● |
| **14,8** | 111 | 70 | 48 | 14,8 | ● | ● |
| **14,9** | 111 | 70 | 48 | 14,9 | ● | ● |
| **15,0** | 111 | 70 | 48 | 15,0 | ● | ● |
| **15,1** | 115 | 73 | 50 | 15,1 | ● | ● |
| **15,2** | 115 | 73 | 50 | 15,2 | ● | ● |
| **15,3** | 115 | 73 | 50 | 15,3 | ● | ● |
| **15,4** | 115 | 73 | 50 | 15,4 | ● | ● |
| **15,5** | 115 | 73 | 50 | 15,5 | ● | ● |
| **15,6** | 115 | 73 | 50 | 15,6 | ● | ● |
| **15,7** | 115 | 73 | 50 | 15,7 | ● | ● |
| **15,8** | 115 | 73 | 49 | 15,8 | ● | ● |
| **15,9** | 115 | 73 | 49 | 15,9 | ● | ● |
| **16,0** | 115 | 73 | 49 | 16,0 | ● | ● |
| **16,5** | 119 | 73 | 48 | 16,5 | ● | ● |
| **17,0** | 119 | 73 | 48 | 17,0 | ● | ● |
| **17,5** | 123 | 76 | 50 | 17,5 | ● | ● |
| **18,0** | 123 | 76 | 49 | 18,0 | ● | ● |
| **18,5** | 127 | 76 | 48 | 18,5 | ● | ● |
| **19,0** | 127 | 76 | 48 | 19,0 | ● | ● |
| **19,5** | 131 | 79 | 50 | 19,5 | ● | ● |
| **20,0** | 131 | 79 | 49 | 20,0 | ● | ● |

02/02

# RECORD 3S

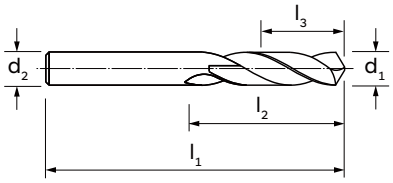
Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

**ILIX NORM**
DIN

≤4xd

150°

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6127K |
|---|---|---|---|---|---|---|
| **3,0** | 46 | 22 | 18 | 3,0 | | ● |
| **3,1** | 49 | 24 | 19 | 3,1 | | ● |
| **3,2** | 49 | 24 | 19 | 3,2 | | ● |
| **3,3** | 49 | 24 | 19 | 3,3 | | ● |
| **3,4** | 52 | 27 | 22 | 3,4 | | ● |
| **3,5** | 52 | 27 | 22 | 3,5 | | ● |
| **3,6** | 52 | 27 | 22 | 3,6 | | ● |
| **3,7** | 52 | 27 | 22 | 3,7 | | ● |
| **3,8** | 55 | 30 | 24 | 3,8 | | ● |
| **3,9** | 55 | 30 | 24 | 3,9 | | ● |
| **4,0** | 55 | 30 | 24 | 4,0 | | ● |
| **4,1** | 55 | 30 | 24 | 4,1 | | ● |
| **4,2** | 55 | 30 | 24 | 4,2 | | ● |
| **4,3** | 58 | 32 | 26 | 4,3 | | ● |
| **4,4** | 58 | 32 | 25 | 4,4 | | ● |
| **4,5** | 58 | 32 | 25 | 4,5 | | ● |
| **4,6** | 58 | 32 | 25 | 4,6 | | ● |
| **4,7** | 58 | 32 | 25 | 4,7 | | ● |
| **4,8** | 62 | 35 | 28 | 4,8 | | ● |
| **4,9** | 62 | 35 | 28 | 4,9 | | ● |
| **5,0** | 62 | 35 | 28 | 5,0 | | ● |
| **5,1** | 62 | 35 | 27 | 5,1 | | ● |
| **5,2** | 62 | 35 | 27 | 5,2 | | ● |
| **5,3** | 62 | 35 | 27 | 5,3 | | ● |
| **5,4** | 66 | 39 | 31 | 5,4 | | ● |
| **5,5** | 66 | 39 | 31 | 5,5 | | ● |
| **5,6** | 66 | 39 | 31 | 5,6 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6127K |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 39 | 31 | 5,7 | | ● |
| **5,8** | 66 | 39 | 30 | 5,8 | | ● |
| **5,9** | 66 | 39 | 30 | 5,9 | | ● |
| **6,0** | 66 | 39 | 30 | 6,0 | | ● |
| **6,1** | 70 | 42 | 33 | 6,1 | | ● |
| **6,2** | 70 | 42 | 33 | 6,2 | | ● |
| **6,3** | 70 | 42 | 33 | 6,3 | | ● |
| **6,4** | 70 | 42 | 32 | 6,4 | | ● |
| **6,5** | 70 | 42 | 32 | 6,5 | | ● |
| **6,6** | 70 | 42 | 32 | 6,6 | | ● |
| **6,7** | 70 | 42 | 32 | 6,7 | | ● |
| **6,8** | 74 | 42 | 32 | 6,8 | | ● |
| **6,9** | 74 | 42 | 32 | 6,9 | | ● |
| **7,0** | 74 | 45 | 35 | 7,0 | | ● |
| **7,1** | 74 | 45 | 34 | 7,1 | | ● |
| **7,2** | 74 | 45 | 34 | 7,2 | | ● |
| **7,3** | 74 | 45 | 34 | 7,3 | | ● |
| **7,4** | 74 | 45 | 34 | 7,4 | | ● |
| **7,5** | 74 | 45 | 34 | 7,5 | | ● |
| **7,6** | 79 | 48 | 37 | 7,6 | | ● |
| **7,7** | 79 | 48 | 37 | 7,7 | | ● |
| **7,8** | 79 | 48 | 36 | 7,8 | | ● |
| **7,9** | 79 | 48 | 36 | 7,9 | | ● |
| **8,0** | 79 | 48 | 36 | 8,0 | | ● |
| **8,1** | 79 | 48 | 36 | 8,1 | | ● |
| **8,2** | 79 | 48 | 36 | 8,2 | | ● |
| **8,3** | 79 | 48 | 36 | 8,3 | | ● |

01/02 →

ILIX PRECISION

# RECORD 3S

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6127K |
|---|---|---|---|---|---|---|
| **8,4** | 79 | 48 | 35 | 8,4 | | ● |
| **8,5** | 79 | 48 | 35 | 8,5 | | ● |
| **8,6** | 84 | 52 | 39 | 8,6 | | ● |
| **8,7** | 84 | 52 | 39 | 8,7 | | ● |
| **8,8** | 84 | 52 | 39 | 8,8 | | ● |
| **8,9** | 84 | 52 | 39 | 8,9 | | ● |
| **9,0** | 84 | 52 | 39 | 9,0 | | ● |
| **9,1** | 84 | 52 | 38 | 9,1 | | ● |
| **9,2** | 84 | 52 | 38 | 9,2 | | ● |
| **9,3** | 84 | 52 | 38 | 9,3 | | ● |
| **9,4** | 84 | 52 | 38 | 9,4 | | ● |
| **9,5** | 84 | 52 | 38 | 9,5 | | ● |
| **9,6** | 89 | 55 | 41 | 9,6 | | ● |
| **9,7** | 89 | 55 | 41 | 9,7 | | ● |
| **9,8** | 89 | 55 | 40 | 9,8 | | ● |
| **9,9** | 89 | 55 | 40 | 9,9 | | ● |
| **10,0** | 89 | 55 | 40 | 10,0 | | ● |
| **10,1** | 89 | 55 | 40 | 10,1 | | ● |
| **10,2** | 89 | 55 | 40 | 10,2 | | ● |
| **10,3** | 89 | 55 | 40 | 10,3 | | ● |
| **10,4** | 89 | 55 | 39 | 10,4 | | ● |
| **10,5** | 89 | 55 | 39 | 10,5 | | ● |
| **10,6** | 89 | 55 | 39 | 10,6 | | ● |
| **10,7** | 95 | 60 | 44 | 10,7 | | ● |
| **10,8** | 95 | 60 | 44 | 10,8 | | ● |
| **10,9** | 95 | 60 | 44 | 10,9 | | ● |
| **11,0** | 95 | 60 | 44 | 11,0 | | ● |
| **11,1** | 95 | 60 | 43 | 11,1 | | ● |
| **11,2** | 95 | 60 | 43 | 11,2 | | ● |
| **11,3** | 95 | 60 | 43 | 11,3 | | ● |
| **11,4** | 95 | 60 | 43 | 11,4 | | ● |
| **11,5** | 95 | 60 | 43 | 11,5 | | ● |
| **11,6** | 95 | 60 | 43 | 11,6 | | ● |
| **11,7** | 95 | 60 | 43 | 11,7 | | ● |
| **11,8** | 95 | 60 | 42 | 11,8 | | ● |
| **11,9** | 102 | 65 | 47 | 11,9 | | ● |
| **12,0** | 102 | 65 | 47 | 12,0 | | ● |
| **12,1** | 102 | 65 | 47 | 12,1 | | ● |
| **12,2** | 102 | 65 | 47 | 12,2 | | ● |
| **12,3** | 102 | 65 | 47 | 12,3 | | ● |
| **12,4** | 102 | 65 | 46 | 12,4 | | ● |
| **12,5** | 102 | 65 | 46 | 12,5 | | ● |
| **12,6** | 102 | 65 | 46 | 12,6 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6127K |
|---|---|---|---|---|---|---|
| **12,7** | 102 | 65 | 46 | 12,7 | | ● |
| **12,8** | 102 | 65 | 46 | 12,8 | | ● |
| **12,9** | 102 | 65 | 46 | 12,9 | | ● |
| **13,0** | 102 | 65 | 46 | 13,0 | | ● |
| **13,1** | 102 | 65 | 45 | 13,1 | | ● |
| **13,2** | 102 | 65 | 45 | 13,2 | | ● |
| **13,3** | 107 | 66 | 46 | 13,3 | | ● |
| **13,4** | 107 | 66 | 46 | 13,4 | | ● |
| **13,5** | 107 | 66 | 46 | 13,5 | | ● |
| **13,6** | 107 | 66 | 46 | 13,6 | | ● |
| **13,7** | 107 | 66 | 46 | 13,7 | | ● |
| **13,8** | 107 | 66 | 45 | 13,8 | | ● |
| **13,9** | 107 | 66 | 45 | 13,9 | | ● |
| **14,0** | 107 | 66 | 45 | 14,0 | | ● |
| **14,1** | 111 | 70 | 49 | 14,1 | | ● |
| **14,2** | 111 | 70 | 49 | 14,2 | | ● |
| **14,3** | 111 | 70 | 49 | 14,3 | | ● |
| **14,4** | 111 | 70 | 48 | 14,4 | | ● |
| **14,5** | 111 | 70 | 48 | 14,5 | | ● |
| **14,6** | 111 | 70 | 48 | 14,6 | | ● |
| **14,7** | 111 | 70 | 48 | 14,7 | | ● |
| **14,8** | 111 | 70 | 48 | 14,8 | | ● |
| **14,9** | 111 | 70 | 48 | 14,9 | | ● |
| **15,0** | 111 | 70 | 48 | 15,0 | | ● |
| **15,1** | 115 | 73 | 50 | 15,1 | | ● |
| **15,2** | 115 | 73 | 50 | 15,2 | | ● |
| **15,3** | 115 | 73 | 50 | 15,3 | | ● |
| **15,4** | 115 | 73 | 50 | 15,4 | | ● |
| **15,5** | 115 | 73 | 50 | 15,5 | | ● |
| **15,6** | 115 | 73 | 50 | 15,6 | | ● |
| **15,7** | 115 | 73 | 50 | 15,7 | | ● |
| **15,8** | 115 | 73 | 49 | 15,8 | | ● |
| **15,9** | 115 | 73 | 49 | 15,9 | | ● |
| **16,0** | 115 | 73 | 49 | 16,0 | | ● |
| **16,5** | 119 | 73 | 48 | 16,5 | | ● |
| **17,0** | 119 | 73 | 48 | 17,0 | | ● |
| **17,5** | 123 | 76 | 50 | 17,5 | | ● |
| **18,0** | 123 | 76 | 49 | 18,0 | | ● |
| **18,5** | 127 | 76 | 48 | 18,5 | | ● |
| **19,0** | 127 | 76 | 48 | 19,0 | | ● |
| **19,5** | 131 | 79 | 50 | 19,5 | | ● |
| **20,0** | 131 | 79 | 49 | 20,0 | | ● |

02/02

# RECORD 3S

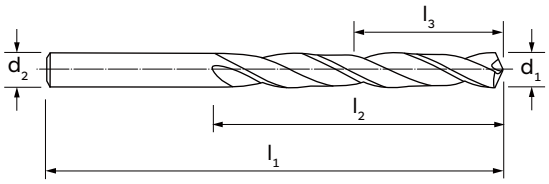
Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

**ILIX NORM**
DIN

≤5xd

150°

P. 130




| | |
|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | P |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | M |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | - |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6001K |
|---|---|---|---|---|---|---|
| **3,0** | 61 | 22 | 18 | 3,0 | | ● |
| **3,1** | 65 | 24 | 19 | 3,1 | | ● |
| **3,2** | 65 | 24 | 19 | 3,2 | | ● |
| **3,3** | 65 | 24 | 19 | 3,3 | | ● |
| **3,5** | 70 | 27 | 22 | 3,5 | | ● |
| **3,6** | 70 | 27 | 22 | 3,6 | | ● |
| **3,7** | 70 | 27 | 22 | 3,7 | | ● |
| **3,8** | 75 | 30 | 24 | 3,8 | | ● |
| **3,9** | 75 | 30 | 24 | 3,9 | | ● |
| **4,0** | 75 | 30 | 24 | 4,0 | | ● |
| **4,1** | 75 | 30 | 24 | 4,1 | | ● |
| **4,2** | 75 | 30 | 24 | 4,2 | | ● |
| **4,3** | 80 | 32 | 26 | 4,3 | | ● |
| **4,5** | 80 | 32 | 25 | 4,5 | | ● |
| **4,6** | 80 | 32 | 25 | 4,6 | | ● |
| **4,7** | 80 | 32 | 25 | 4,7 | | ● |
| **5,0** | 86 | 35 | 28 | 5,0 | | ● |
| **5,1** | 86 | 35 | 27 | 5,1 | | ● |
| **5,2** | 86 | 35 | 27 | 5,2 | | ● |
| **5,4** | 93 | 39 | 31 | 5,4 | | ■ |
| **5,5** | 93 | 39 | 31 | 5,5 | | ● |
| **5,7** | 93 | 39 | 31 | 5,7 | | ● |
| **5,8** | 93 | 39 | 30 | 5,8 | | ● |
| **5,9** | 93 | 39 | 30 | 5,9 | | ■ |
| **6,0** | 93 | 39 | 30 | 6,0 | | ● |
| **6,2** | 101 | 42 | 33 | 6,2 | | ● |
| **6,5** | 101 | 42 | 32 | 6,5 | | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6001K |
|---|---|---|---|---|---|---|
| **6,6** | 101 | 43 | 33 | 6,6 | | ● |
| **6,8** | 109 | 45 | 35 | 6,8 | | ● |
| **7,0** | 109 | 45 | 35 | 7,0 | | ● |
| **7,2** | 109 | 47 | 36 | 7,2 | | ● |
| **7,4** | 109 | 48 | 37 | 7,4 | | ● |
| **7,5** | 109 | 49 | 38 | 7,5 | | ● |
| **7,8** | 117 | 51 | 39 | 7,8 | | ● |
| **7,9** | 117 | 51 | 39 | 7,9 | | ■ |
| **8,0** | 117 | 52 | 40 | 8,0 | | ● |
| **8,5** | 117 | 55 | 42 | 8,5 | | ● |
| **8,7** | 125 | 57 | 44 | 8,7 | | ● |
| **8,8** | 125 | 57 | 44 | 8,8 | | ● |
| **9,0** | 125 | 59 | 46 | 9,0 | | ● |
| **9,2** | 125 | 60 | 46 | 9,2 | | ● |
| **9,3** | 125 | 60 | 46 | 9,3 | | ● |
| **9,4** | 125 | 61 | 47 | 9,4 | | ● |
| **9,5** | 125 | 62 | 48 | 9,5 | | ● |
| **9,8** | 133 | 64 | 49 | 9,8 | | ● |
| **9,9** | 133 | 64 | 49 | 9,9 | | ■ |
| **10,0** | 133 | 65 | 50 | 10,0 | | ● |
| **10,2** | 133 | 66 | 51 | 10,2 | | ● |
| **10,5** | 133 | 68 | 52 | 10,5 | | ● |
| **10,7** | 142 | 70 | 54 | 10,7 | | ● |
| **10,8** | 142 | 70 | 54 | 10,8 | | ● |
| **11,0** | 142 | 71 | 55 | 11,0 | | ● |
| **11,2** | 142 | 73 | 56 | 11,2 | | ● |
| **11,5** | 142 | 75 | 58 | 11,5 | | ● |

01/02 →

■ **Fino ad esaurimento scorte** | Till stocks last

ILIX PRECISION

# RECORD 3S

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ | | 6001K |
|---|---|---|---|---|---|---|
| **11,8** | 142 | 77 | 59 | 11,8 | | ● |
| **11,9** | 151 | 77 | 59 | 11,9 | | ■ |
| **12,0** | 151 | 78 | 60 | 12,0 | | ● |
| **12,2** | 151 | 79 | 61 | 12,2 | | ● |
| **12,5** | 151 | 81 | 62 | 12,5 | | ● |
| **12,8** | 151 | 83 | 64 | 12,8 | | ● |
| **13,0** | 151 | 84 | 65 | 13,0 | | ● |
| **13,5** | 160 | 88 | 68 | 13,5 | | ● |
| **14,0** | 160 | 91 | 70 | 14,0 | | ● |
| **14,5** | 169 | 94 | 72 | 14,5 | | ● |
| **15,0** | 169 | 98 | 76 | 15,0 | | ● |
| **15,5** | 178 | 101 | 78 | 15,5 | | ● |
| **16,0** | 178 | 104 | 80 | 16,0 | | ● |
| **16,5** | 184 | 108 | 83 | 16,5 | | ● |
| **17,0** | 184 | 111 | 86 | 17,0 | | ● |
| **17,5** | 191 | 114 | 88 | 17,5 | | ● |
| **18,0** | 191 | 117 | 90 | 18,0 | | ● |
| **18,5** | 198 | 120 | 92 | 18,5 | | ● |
| **19,0** | 198 | 124 | 96 | 19,0 | | ● |
| **19,5** | 205 | 125 | 96 | 19,5 | | ● |
| **20,0** | 205 | 130 | 100 | 20,0 | | ● |

02/02

# RECORD 3BX

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

**6537 L**
DIN

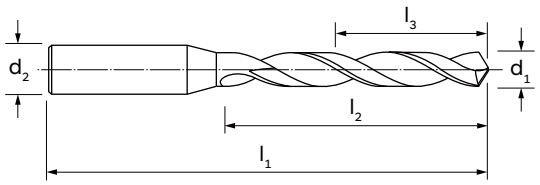
≤5xd

6535 HA

130°

SHRINK FIT

P. 130




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | – | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | – | – |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | – | – |
| **K** \| **Ghise** \| Cast Irons | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | – | – |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6003K | 6003TF |
|---|---|---|---|---|---|---|
| **3,00** | 66 | 28 | 24 | 6 | ● | ● |
| **3,15** | 66 | 28 | 23 | 6 | ● | ● |
| **3,30** | 66 | 28 | 23 | 6 | ● | ● |
| **3,50** | 66 | 28 | 23 | 6 | ● | ● |
| **3,70** | 66 | 28 | 23 | 6 | ● | ● |
| **3,80** | 74 | 36 | 30 | 6 | ● | ● |
| **4,00** | 74 | 36 | 30 | 6 | ● | ● |
| **4,20** | 74 | 36 | 30 | 6 | ● | ● |
| **4,30** | 74 | 36 | 30 | 6 | ● | ● |
| **4,45** | 74 | 36 | 29 | 6 | ● | ● |
| **4,50** | 74 | 36 | 29 | 6 | ● | ● |
| **4,65** | 74 | 36 | 29 | 6 | ● | ● |
| **5,00** | 82 | 44 | 37 | 6 | ● | ● |
| **5,50** | 82 | 44 | 36 | 6 | ● | ● |
| **5,55** | 82 | 44 | 36 | 6 | ● | ● |
| **5,75** | 82 | 44 | 35 | 6 | ● | ● |
| **5,90** | 82 | 44 | 35 | 6 | ● | ● |
| **6,00** | 82 | 44 | 35 | 6 | ● | ● |
| **6,50** | 91 | 53 | 43 | 8 | ● | ● |
| **6,55** | 91 | 53 | 43 | 8 | ● | ● |
| **6,80** | 91 | 53 | 43 | 8 | ● | ● |
| **7,00** | 91 | 53 | 43 | 8 | ● | ● |
| **7,25** | 91 | 53 | 42 | 8 | ● | ● |
| **7,40** | 91 | 53 | 42 | 8 | ● | ● |
| **7,50** | 91 | 53 | 42 | 8 | ● | ● |
| **7,55** | 91 | 53 | 42 | 8 | ● | ● |
| **8,00** | 91 | 53 | 41 | 8 | ● | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6003K | 6003TF |
|---|---|---|---|---|---|---|
| **8,50** | 103 | 61 | 48 | 10 | ● | ● |
| **8,75** | 103 | 61 | 48 | 10 | ● | ● |
| **9,00** | 103 | 61 | 48 | 10 | ● | ● |
| **9,30** | 103 | 61 | 47 | 10 | ● | ● |
| **9,40** | 103 | 61 | 47 | 10 | ● | ● |
| **9,50** | 103 | 61 | 47 | 10 | ● | ● |
| **10,00** | 103 | 61 | 46 | 10 | ● | ● |
| **10,20** | 118 | 71 | 56 | 12 | ● | ● |
| **10,50** | 118 | 71 | 55 | 12 | ● | ● |
| **11,00** | 118 | 71 | 55 | 12 | ● | ● |
| **11,20** | 118 | 71 | 54 | 12 | ● | ● |
| **11,30** | 118 | 71 | 54 | 12 | ● | ● |
| **11,50** | 118 | 71 | 54 | 12 | ● | ● |
| **11,70** | 118 | 71 | 54 | 12 | ● | ● |
| **12,00** | 118 | 71 | 53 | 12 | ● | ● |
| **12,50** | 124 | 77 | 58 | 14 | ● | ● |
| **13,00** | 124 | 77 | 58 | 14 | ● | ● |
| **13,10** | 124 | 77 | 57 | 14 | ● | ● |
| **13,30** | 124 | 77 | 57 | 14 | ● | ● |
| **13,50** | 124 | 77 | 57 | 14 | ● | ● |
| **14,00** | 124 | 77 | 56 | 14 | ● | ● |
| **14,50** | 133 | 83 | 61 | 16 | ● | ● |
| **15,00** | 133 | 83 | 61 | 16 | ● | ● |
| **15,10** | 133 | 83 | 60 | 16 | ● | ● |
| **15,30** | 133 | 83 | 60 | 16 | ● | ● |
| **15,50** | 133 | 83 | 60 | 16 | ● | ● |
| **16,00** | 133 | 83 | 59 | 16 | ● | ● |

ILIX PRECISION

# RECORD 3BX

Punte Evolute a 3 taglienti in Metallo Duro Integrale
Solid Carbide high performance twist drills with 3 flutes

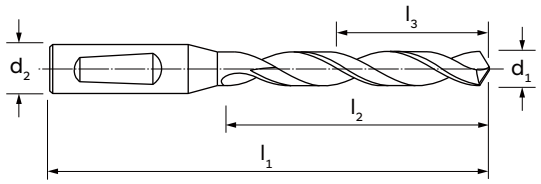
**6537 L**
DIN

≤5xd

6535 HE

130°

P. 130




| | | |
|---|---|---|
| **MATERIALE** \| MATERIAL | M.D.I.-HM | M.D.I.-HM |
| **RIVESTIMENTO** \| COATING | - | TiAlN Futura |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ | ↻ |

**GRUPPO MATERIALI** MATERIAL GROUPS

| | | |
|---|---|---|
| **P** \| **Acciai** \| Steels | - | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - | - |
| **K** \| **Ghise** \| Cast Iron | K | K |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | S | S |
| **H** \| **Acciai Temprati** \| Hardened Steels | - | - |

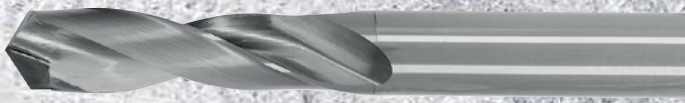
| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6002K | 6002TF |
|---|---|---|---|---|---|---|
| **3,00** | 66 | 28 | 24 | 6 | ● | ● |
| **3,15** | 66 | 28 | 23 | 6 | ● | ● |
| **3,30** | 66 | 28 | 23 | 6 | ● | ● |
| **3,50** | 66 | 28 | 23 | 6 | ● | ● |
| **3,70** | 66 | 28 | 23 | 6 | ● | ● |
| **3,80** | 74 | 36 | 30 | 6 | ● | ● |
| **4,00** | 74 | 36 | 30 | 6 | ● | ● |
| **4,20** | 74 | 36 | 30 | 6 | ● | ● |
| **4,30** | 74 | 36 | 30 | 6 | ● | ● |
| **4,45** | 74 | 36 | 29 | 6 | ● | ● |
| **4,50** | 74 | 36 | 29 | 6 | ● | ● |
| **4,65** | 74 | 36 | 29 | 6 | ● | ● |
| **5,00** | 82 | 44 | 37 | 6 | ● | ● |
| **5,50** | 82 | 44 | 36 | 6 | ● | ● |
| **5,55** | 82 | 44 | 36 | 6 | ● | ● |
| **5,75** | 82 | 44 | 35 | 6 | ● | ● |
| **5,90** | 82 | 44 | 35 | 6 | ● | ● |
| **6,00** | 82 | 44 | 35 | 6 | ● | ● |
| **6,50** | 91 | 53 | 43 | 8 | ● | ● |
| **6,55** | 91 | 53 | 43 | 8 | ● | ● |
| **6,80** | 91 | 53 | 43 | 8 | ● | ● |
| **7,00** | 91 | 53 | 43 | 8 | ● | ● |
| **7,25** | 91 | 53 | 42 | 8 | ● | ● |
| **7,40** | 91 | 53 | 42 | 8 | ● | ● |
| **7,50** | 91 | 53 | 42 | 8 | ● | ● |
| **7,55** | 91 | 53 | 42 | 8 | ● | ● |
| **8,00** | 91 | 53 | 41 | 8 | ● | ● |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | 6002K | 6002TF |
|---|---|---|---|---|---|---|
| **8,50** | 103 | 61 | 48 | 10 | ● | ● |
| **8,75** | 103 | 61 | 48 | 10 | ● | ● |
| **9,00** | 103 | 61 | 48 | 10 | ● | ● |
| **9,30** | 103 | 61 | 47 | 10 | ● | ● |
| **9,40** | 103 | 61 | 47 | 10 | ● | ● |
| **9,50** | 103 | 61 | 47 | 10 | ● | ● |
| **10,00** | 103 | 61 | 46 | 10 | ● | ● |
| **10,20** | 118 | 71 | 56 | 12 | ● | ● |
| **10,50** | 118 | 71 | 55 | 12 | ● | ● |
| **11,00** | 118 | 71 | 55 | 12 | ● | ● |
| **11,20** | 118 | 71 | 54 | 12 | ● | ● |
| **11,30** | 118 | 71 | 54 | 12 | ● | ● |
| **11,50** | 118 | 71 | 54 | 12 | ● | ● |
| **11,70** | 118 | 71 | 54 | 12 | ● | ● |
| **12,00** | 118 | 71 | 53 | 12 | ● | ● |
| **12,50** | 124 | 77 | 58 | 14 | ● | ● |
| **13,00** | 124 | 77 | 58 | 14 | ● | ● |
| **13,10** | 124 | 77 | 57 | 14 | ● | ● |
| **13,30** | 124 | 77 | 57 | 14 | ● | ● |
| **13,50** | 124 | 77 | 57 | 14 | ● | ● |
| **14,00** | 124 | 77 | 56 | 14 | ● | ● |
| **14,50** | 133 | 83 | 61 | 16 | ● | ● |
| **15,00** | 133 | 83 | 61 | 16 | ● | ● |
| **15,10** | 133 | 83 | 60 | 16 | ● | ● |
| **15,30** | 133 | 83 | 60 | 16 | ● | ● |
| **15,50** | 133 | 83 | 60 | 16 | ● | ● |
| **16,00** | 133 | 83 | 59 | 16 | ● | ● |

**Le punte in metallo duro con riporto in diamante policristallino della serie PKD sono progettate per far fronte alle nuove esigenze di mercato dell'industria automobilistica e aerospaziale.**

The solide carbide drills with polycrystalline diamond coating of the PCD series are designed to meet the new market needs of the automotive and aerospace industry.

# PKD DRILLS



**GEOMETRIA TIPO N.**
Geometry type N.

**DISPONIBILE NELLE VERSIONI 3xD E 8xD SENZA FORI DI REFRIGERAZIONE INTERNI.**
Available in 3xD and 8xD versions without internal coolant.

**PATTINI DI GUIDA PER UNA MIGLIORE RETTILINEITÀ DEL FORO.**
Margin lands for better hole straightness.

**CODOLO CILINDRICO IN TOLLERANZA h6 IDONEO PER MANDRINI A CALETTAMENTO A CALDO.**
Cylindrical shank in h6 tolerance suitable for shrink fit.

**IDONEA PER LAVORAZIONI DI ALLUMINIO, MATERIALI COMPOSITI E LEGHE LEGGERE.**
Suitable for processing Aluminium, composite materials and light alloys.

ILIX® PRECISION

ILIX PRECISION

# PKD

Punte Evolute in metallo duro integrale con riporto in diamante policristallino
Solid Carbide with polycrystalline diamond high performance twist drills

**1897**

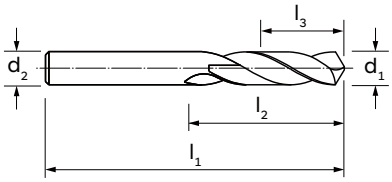
**DIN**

≤3xd

120°

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | PKD |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

GRUPPO MATERIALI
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6005 |
|---|---|---|---|---|---|---|
| **3,0** | 46 | 16 | 12 | 3,0 | | ▲ |
| **3,1** | 49 | 18 | 13 | 3,1 | | ▲ |
| **3,2** | 49 | 18 | 13 | 3,2 | | ▲ |
| **3,3** | 49 | 18 | 13 | 3,3 | | ▲ |
| **3,4** | 52 | 20 | 15 | 3,4 | | ▲ |
| **3,5** | 52 | 20 | 15 | 3,5 | | ▲ |
| **3,6** | 52 | 20 | 15 | 3,6 | | ▲ |
| **3,7** | 52 | 20 | 15 | 3,7 | | ▲ |
| **3,8** | 55 | 22 | 16 | 3,8 | | ▲ |
| **3,9** | 55 | 22 | 16 | 3,9 | | ▲ |
| **4,0** | 55 | 22 | 16 | 4,0 | | ▲ |
| **4,1** | 55 | 22 | 16 | 4,1 | | ▲ |
| **4,2** | 55 | 22 | 16 | 4,2 | | ▲ |
| **4,3** | 52 | 24 | 18 | 4,3 | | ▲ |
| **4,4** | 52 | 24 | 17 | 4,4 | | ▲ |
| **4,5** | 52 | 24 | 17 | 4,5 | | ▲ |
| **4,6** | 52 | 24 | 17 | 4,6 | | ▲ |
| **4,7** | 52 | 24 | 17 | 4,7 | | ▲ |
| **4,8** | 62 | 26 | 19 | 4,8 | | ▲ |
| **4,9** | 62 | 26 | 19 | 4,9 | | ▲ |
| **5,0** | 62 | 26 | 19 | 5,0 | | ▲ |
| **5,1** | 62 | 26 | 18 | 5,1 | | ▲ |
| **5,2** | 62 | 26 | 18 | 5,2 | | ▲ |
| **5,3** | 62 | 26 | 18 | 5,3 | | ▲ |
| **5,4** | 66 | 28 | 20 | 5,4 | | ▲ |
| **5,5** | 66 | 28 | 20 | 5,5 | | ▲ |
| **5,6** | 66 | 28 | 20 | 5,6 | | ▲ |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6005 |
|---|---|---|---|---|---|---|
| **5,7** | 66 | 28 | 20 | 5,7 | | ▲ |
| **5,8** | 66 | 28 | 19 | 5,8 | | ▲ |
| **5,9** | 66 | 28 | 19 | 5,9 | | ▲ |
| **6,0** | 66 | 28 | 19 | 6,0 | | ▲ |
| **6,1** | 70 | 31 | 22 | 6,1 | | ▲ |
| **6,2** | 70 | 31 | 22 | 6,2 | | ▲ |
| **6,3** | 70 | 31 | 22 | 6,3 | | ▲ |
| **6,4** | 70 | 31 | 21 | 6,4 | | ▲ |
| **6,5** | 70 | 31 | 21 | 6,5 | | ▲ |
| **7,0** | 74 | 34 | 24 | 7,0 | | ▲ |
| **7,5** | 74 | 34 | 23 | 7,5 | | ▲ |
| **8,0** | 79 | 37 | 25 | 8,0 | | ▲ |
| **8,5** | 79 | 37 | 24 | 8,5 | | ▲ |
| **9,0** | 84 | 40 | 27 | 9,0 | | ▲ |
| **9,5** | 84 | 40 | 26 | 9,5 | | ▲ |
| **10,0** | 89 | 43 | 28 | 10,0 | | ▲ |
| **10,5** | 89 | 43 | 27 | 10,5 | | ▲ |
| **11,0** | 95 | 47 | 31 | 11,0 | | ▲ |
| **11,5** | 95 | 47 | 30 | 11,5 | | ▲ |
| **12,0** | 102 | 51 | 33 | 12,0 | | ▲ |
| **12,7** | 102 | 51 | 32 | 12,7 | | ▲ |
| **14,0** | 107 | 54 | 33 | 14,0 | | ▲ |
| **16,0** | 115 | 58 | 34 | 16,0 | | ▲ |
| **20,0** | 131 | 66 | 36 | 20,0 | | ▲ |

▲ **Su richiesta** | On request

# PKD

Punte Evolute in metallo duro integrale con riporto in diamante policristallino
Solid Carbide with polycrystalline diamond high performance twist drills

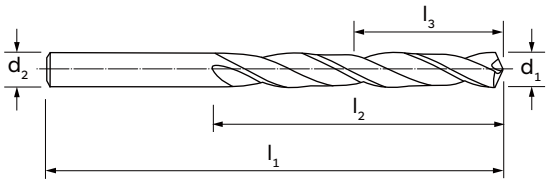
**338**
**DIN**

≤8xd

120°

SHRINK FIT

P. 126




| | |
|---|---|
| **MATERIALE** \| MATERIAL | PKD |
| **RIVESTIMENTO** \| COATING | - |
| **DIREZIONE TAGLIO** \| CUTTING DIRECTION | ↻ |

**GRUPPO MATERIALI**
MATERIAL GROUPS

| | |
|---|---|
| **P** \| **Acciai** \| Steels | - |
| **M** \| **Acciai Inossidabili** \| Stainless Steels | - |
| **K** \| **Ghise** \| Cast Irons | - |
| **N** \| **Metalli non ferrosi** \| Non-ferrous metals | N |
| **S** \| **Leghe resistenti al calore e Titanio** \| HRSA and Titanium | - |
| **H** \| **Acciai Temprati** \| Hardened Steels | - |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6007 |
|---|---|---|---|---|---|---|
| **3,0** | 61 | 33 | 29 | 3,0 | | ▲ |
| **3,1** | 65 | 36 | 31 | 3,1 | | ▲ |
| **3,2** | 65 | 36 | 31 | 3,2 | | ▲ |
| **3,3** | 65 | 36 | 31 | 3,3 | | ▲ |
| **3,4** | 70 | 39 | 34 | 3,4 | | ▲ |
| **3,5** | 70 | 39 | 34 | 3,5 | | ▲ |
| **3,6** | 70 | 39 | 34 | 3,6 | | ▲ |
| **3,7** | 70 | 39 | 34 | 3,7 | | ▲ |
| **3,8** | 75 | 43 | 37 | 3,8 | | ▲ |
| **3,9** | 75 | 43 | 37 | 3,9 | | ▲ |
| **4,0** | 75 | 43 | 37 | 4,0 | | ▲ |
| **4,1** | 75 | 43 | 37 | 4,1 | | ▲ |
| **4,2** | 75 | 43 | 37 | 4,2 | | ▲ |
| **4,3** | 80 | 47 | 41 | 4,3 | | ▲ |
| **4,4** | 80 | 47 | 40 | 4,4 | | ▲ |
| **4,5** | 80 | 47 | 40 | 4,5 | | ▲ |
| **4,6** | 80 | 47 | 40 | 4,6 | | ▲ |
| **4,7** | 80 | 47 | 40 | 4,7 | | ▲ |
| **4,8** | 86 | 52 | 45 | 4,8 | | ▲ |
| **4,9** | 86 | 52 | 45 | 4,9 | | ▲ |
| **5,0** | 86 | 52 | 45 | 5,0 | | ▲ |
| **5,1** | 86 | 52 | 44 | 5,1 | | ▲ |
| **5,2** | 86 | 52 | 44 | 5,2 | | ▲ |
| **5,3** | 86 | 52 | 44 | 5,3 | | ▲ |
| **5,4** | 93 | 57 | 49 | 5,4 | | ▲ |
| **5,5** | 93 | 57 | 49 | 5,5 | | ▲ |
| **5,6** | 93 | 57 | 49 | 5,6 | | ▲ |

| $d_1$ (h7) | $l_1$ | $l_2$ | $l_3$ | $d_2$ (h6) | | 6007 |
|---|---|---|---|---|---|---|
| **5,7** | 93 | 57 | 49 | 5,7 | | ▲ |
| **5,8** | 93 | 57 | 48 | 5,8 | | ▲ |
| **5,9** | 93 | 57 | 48 | 5,9 | | ▲ |
| **6,0** | 93 | 57 | 48 | 6,0 | | ▲ |
| **6,1** | 101 | 63 | 54 | 6,1 | | ▲ |
| **6,2** | 101 | 63 | 54 | 6,2 | | ▲ |
| **6,3** | 101 | 63 | 54 | 6,3 | | ▲ |
| **6,4** | 101 | 63 | 53 | 6,4 | | ▲ |
| **6,5** | 101 | 63 | 53 | 6,5 | | ▲ |
| **7,0** | 109 | 69 | 59 | 7,0 | | ▲ |
| **7,5** | 109 | 69 | 58 | 7,5 | | ▲ |
| **8,0** | 117 | 75 | 63 | 8,0 | | ▲ |
| **8,5** | 117 | 75 | 62 | 8,5 | | ▲ |
| **9,0** | 125 | 81 | 68 | 9,0 | | ▲ |
| **9,5** | 125 | 81 | 67 | 9,5 | | ▲ |
| **10,0** | 133 | 87 | 72 | 10,0 | | ▲ |
| **10,5** | 133 | 87 | 71 | 10,5 | | ▲ |
| **11,0** | 142 | 94 | 78 | 11,0 | | ▲ |
| **11,5** | 142 | 94 | 77 | 11,5 | | ▲ |
| **12,0** | 151 | 101 | 83 | 12,0 | | ▲ |
| **12,7** | 151 | 101 | 82 | 12,7 | | ▲ |
| **14,0** | 160 | 108 | 87 | 14,0 | | ▲ |
| **16,0** | 178 | 120 | 96 | 16,0 | | ▲ |
| **20,0** | 205 | 140 | 110 | 20,0 | | ▲ |

▲ **Su richiesta** | On request

# PUNTE EVOLUTE
## HIGH PERFORMANCE DRILLS

# A.01.03

**Parametri di taglio**
Cutting data

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in HSS-Co / HSS-Co-PM | HSS-Co / HSS-Co-PM high performance twist drills

| **Famiglia prodotto** Family product | **Codice utensile** Tool Code | | **Acciaio debolmente legato** Low-Alloyed Steel **<800 N/mm²** | **Acciaio mediamente legato** Medium-Alloyed Steel **700/1000 N/mm²** | **Acciaio fortemente legato** High-Alloyed Steel **1000/1300 N/mm²** | **Acciao inossidabile Martensitico/Ferritico** Stainless steel Martensitic/Ferritic | **Acciao inossidabile Austenitico** Stainless steel Austenitic | **Ghisa grigia** Grey cast iron | **Ghisa sferoidale** Nodular cast iron |
|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | P2 | P3 | M1 | M2 | K1 | K2 |

| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RECORD HD | **6133TN** |  | **40** | **6** | **25** | **4** | **18** | **3** | 15 | 3 | 10 | 3 | **45** | **6** | **30** | **6** |
| | **6143TF** |  | **45** | **7** | **28** | **5** | **20** | **4** | 18 | 4 | 12 | 3 | **50** | **7** | **35** | **7** |
| | **6208TN** |  | **40** | **6** | **25** | **4** | **18** | **3** | 15 | 3 | 10 | 3 | **45** | **6** | **30** | **6** |
| | **6228TF** |  | **45** | **7** | **28** | **5** | **20** | **4** | 18 | 4 | 12 | 3 | **50** | **7** | **35** | **7** |
| | **6248TF** |  | **40** | **6** | **20** | **4** | **15** | **3** | 15 | 3 | 10 | 3 | **35** | **6** | **27** | **6** |
| | **6248TP** |  | **37** | **6** | **18** | **4** | **12** | **3** | 12 | 3 | 8 | 3 | **32** | **6** | **25** | **6** |
| RECORD EVO. VA | **6134TN** |  | 50 | 5 | - | - | - | - | **25** | **4** | **15** | **4** | - | - | - | - |
| | **6229TN** |  | 50 | 5 | - | - | - | - | **25** | **4** | **15** | **4** | - | - | - | - |
| RECORD HD i | **6522TN** |  | **50** | **7** | **35** | **5** | **25** | **4** | **20** | **4** | 13 | 3 | **55** | **7** | **40** | **6** |
| RECORD HX | **6205NX** |  | **40** | **7** | **25** | **5** | **15** | **3** | 15 | 4 | 10 | 3 | **35** | **7** | **15** | **5** |
| RECORD PM | **6178NX** |  | **45** | **6** | **30** | **5** | **17** | **4** | 18 | 3 | - | - | **50** | **6** | **35** | **5** |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per punte in HSS-Co / HSS-Co-PM | Feed $f_n$ (mm/rev) for HSS-Co / HSS-Co-PM drills

| **Numero avanzamento** Feed Number | **Ø 1** | **Ø 2** | **Ø 3** | **Ø 4** | **Ø 5** | **Ø 6** |
|---|---|---|---|---|---|---|
| **1** | 0,005 | 0,018 | 0,025 | 0,032 | 0,035 | 0,048 |
| **2** | 0,008 | 0,023 | 0,032 | 0,040 | 0,045 | 0,060 |
| **3** | 0,011 | 0,030 | 0,040 | 0,045 | 0,055 | 0,073 |
| **4** | 0,013 | 0,037 | 0,045 | 0,053 | 0,070 | 0,090 |
| **5** | 0,017 | 0,045 | 0,053 | 0,066 | 0,080 | 0,100 |
| **6** | 0,020 | 0,053 | 0,066 | 0,080 | 0,092 | 0,110 |
| **7** | 0,023 | 0,066 | 0,080 | 0,088 | 0,100 | 0,125 |
| **8** | 0,027 | 0,080 | 0,088 | 0,100 | 0,110 | 0,140 |
| **9** | 0,030 | 0,088 | 0,100 | 0,110 | 0,125 | 0,155 |
| **10** | 0,033 | 0,100 | 0,110 | 0,125 | 0,140 | 0,162 |
| **12** | 0,037 | 0,110 | 0,125 | 0,140 | 0,155 | 0,170 |

**Esempio della scelta dei dati di lavoro**: 6133TN Ø 5 | Gruppo di materiale da lavorare P1 | **$V_c$** = 40 m/min | **$f_n$= 0,092 mm/giro** (coefficiente f=6)
**Cutting data example**: 6133TN Ø 5 | Working material group P1 | **$V_c$** = 40 m/min | **$f_n$= 0,092** mm/rev (coefficient f=6)

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in HSS-Co / HSS-Co-PM | HSS-Co / HSS-Co-PM high performance twist drills

ILIX PRECISION

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | | **Materiali non ferrosi** Non ferrous materials | | **Titanio e leghe di Titanio** Titanium and Titanium alloys | | **HRSA Leghe resistenti al calore** Heat resistant alloys | | **Acciai temprati** Hardened steels **38/48 HRC** | | **Acciai temprati** Hardened steels **48/58 HRC** | | **Acciai temprati** Hardened steels **58/68 HRC** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **N1** | | **N2** | | **S1** | | **S2** | | **H1** | | **H2** | | **H3** | | **Gruppo Materiali** \| Materials Group | | |
| $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | | | |
| - | - | **50** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6133TN** | 17 |
| - | - | **60** | **6** | - | - | - | - | - | - | - | - | - | - |  | **6143TF** | 17 |
| - | - | **50** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6208TN** | 19 |
| - | - | **60** | **6** | - | - | - | - | - | - | - | - | - | - |  | **6228TF** | 19 |
| 70 | 7 | **40** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6248TF** | 21 |
| - | - | **36** | **4** | - | - | - | - | - | - | - | - | - | - |  | **6248TP** | 21 |
| 80 | 6 | 50 | 5 | **10** | **2** | - | - | - | - | - | - | - | - |  | **6134TN** | 24 |
| 80 | 6 | 50 | 5 | **10** | **2** | - | - | - | - | - | - | - | - |  | **6229TN** | 26 |
| **70** | **7** | **60** | **5** | 8 | 2 | - | - | - | - | - | - | - | - |  | **6522TN** | 29 |
| 70 | 7 | 35 | 5 | **9** | **2** | **7** | **2** | 5 | 2 | - | - | - | - |  | **6205NX** | 32 |
| 60 | 6 | 40 | 5 | - | - | - | - | - | - | - | - | - | - |  | **6178NX** | 34 |

| **Ø 8** | **Ø 10** | **Ø 15** | **Ø 20** | **Ø 25** | **Ø 32** | | |
|---|---|---|---|---|---|---|---|
| 0,060 | 0,080 | 0,092 | 0,125 | 0,140 | 0,140 | **1** | **Numero avanzamento** Feed Number |
| 0,073 | 0,092 | 0,110 | 0,140 | 0,165 | 0,165 | **2** | |
| 0,092 | 0,110 | 0,130 | 0,165 | 0,180 | 0,180 | **3** | |
| 0,100 | 0,130 | 0,155 | 0,180 | 0,210 | 0,210 | **4** | |
| 0,110 | 0,155 | 0,162 | 0,210 | 0,235 | 0,235 | **5** | |
| 0,125 | 0,162 | 0,170 | 0,235 | 0,250 | 0,250 | **6** | |
| 0,140 | 0,170 | 0,185 | 0,250 | 0,280 | 0,280 | **7** | |
| 0,155 | 0,185 | 0,190 | 0,280 | 0,310 | 0,310 | **8** | |
| 0,162 | 0,190 | 0,200 | 0,310 | 0,345 | 0,345 | **9** | |
| 0,170 | 0,200 | 0,220 | 0,335 | 0,370 | 0,370 | **10** | |
| 0,185 | 0,220 | 0,235 | 0,360 | 0,420 | 0,420 | **12** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Famiglia prodotto** Family product | **Codice utensile** Tool Code | | **Acciaio debolmente legato** Low-Alloyed Steel **<800 N/mm²** | **Acciaio mediamente legato** Medium-Alloyed Steel **700/1000 N/mm²** | **Acciaio fortemente legato** High-Alloyed Steel **1000/1300 N/mm²** | **Acciaio inossidabile Martensitico/Ferritico** Stainless steel Martensitic/Ferritic | **Acciaio inossidabile Austenitico** Stainless steel Austenitic | **Ghisa grigia** Grey cast iron | **Ghisa sferoidale** Nodular cast iron |
|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | P2 | P3 | M1 | M2 | K1 | K2 |

| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RECORD 2S | **6213TN** |  | **85** | **7** | **60** | **6** | **50** | **6** | 30 | 3 | 20 | 2 | **85** | **7** | **65** | **5** |
| | **6015TF** |  | **90** | **7** | **65** | **7** | **50** | **6** | 35 | 3 | 25 | 2 | **85** | **7** | **65** | **5** |
| | **6016TF** |  | **90** | **7** | **65** | **7** | **50** | **6** | 35 | 3 | 25 | 2 | **85** | **7** | **65** | **5** |
| | **6017TT** |  | **90** | **7** | **65** | **7** | **50** | **6** | 35 | 3 | 25 | 2 | **85** | **7** | **65** | **5** |
| | **6018TT** |  | **90** | **7** | **65** | **7** | **50** | **6** | 35 | 3 | 25 | 2 | **85** | **7** | **65** | **5** |
| RECORD 2S i | **6011TF** |  | **130** | **8** | **90** | **8** | **70** | **7** | 40 | 3 | 30 | 3 | **120** | **8** | **90** | **5** |
| | **6012TF** |  | **130** | **8** | **90** | **8** | **70** | **7** | 40 | 3 | 30 | 3 | **120** | **8** | **90** | **5** |
| | **6020TF** |  | **130** | **8** | **90** | **8** | **70** | **7** | 40 | 3 | 30 | 3 | **120** | **8** | **90** | **5** |
| | **6021TF** |  | **130** | **8** | **90** | **8** | **70** | **7** | 40 | 3 | 30 | 3 | **120** | **8** | **90** | **5** |
| RECORD HP i | **6022TF** |  | **150** | **7** | **120** | **6** | **100** | **6** | - | - | - | - | **160** | **7** | **130** | **6** |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per Metallo Duro Integrale | Feed $f_n$ (mm/rev) for solid carbide drills

| **Numero avanzamento** Feed Number | Ø 2 | Ø 3 | Ø 4 | Ø 5 | Ø 6 |
|---|---|---|---|---|---|
| **1** | 0,008 | 0,010 | 0,020 | 0,030 | 0,040 |
| **2** | 0,015 | 0,020 | 0,030 | 0,040 | 0,050 |
| **3** | 0,020 | 0,030 | 0,040 | 0,050 | 0,060 |
| **4** | 0,030 | 0,040 | 0,050 | 0,060 | 0,070 |
| **5** | 0,040 | 0,060 | 0,080 | 0,100 | 0,120 |
| **6** | 0,050 | 0,080 | 0,120 | 0,140 | 0,170 |
| **7** | 0,070 | 0,100 | 0,150 | 0,180 | 0,200 |
| **8** | 0,090 | 0,120 | 0,170 | 0,200 | 0,220 |

**Esempio della scelta dei dati di lavoro**: 6213TN Ø 5 | Gruppo di materiale da lavorare P1 | $V_c$ = 85 m/min | $f_n$ = **0,180 mm/giro** (coefficiente f=7)
**Cutting data example**: 6213TN Ø 5 | Working material group P1 | $V_c$ = 85 m/min | $f_n$ = **0,180** mm/rev (coefficient f=7)

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | **Materiali non ferrosi** Non ferrous materials | **Titanio e leghe di Titanio** Titanium and Titanium alloys | **HRSA Leghe resistenti al calore** Heat resistant alloys | **Acciai temprati** Hardened steels **38/48 HRC** | **Acciai temprati** Hardened steels **48/58 HRC** | **Acciai temprati** Hardened steels **58/68 HRC** | | **Codice utensile** Tool Code | **Pagina catalogo** Catalogue page |
|---|---|---|---|---|---|---|---|---|---|
| **N1** | **N2** | **S1** | **S2** | **H1** | **H2** | **H3** | **Gruppo Materiali** \| Materials Group | | |

| $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110 | 7 | 100 | 5 | - | - | - | - | - | - | - | - | - | - |  | **6213TN** | 37 |
| - | - | - | - | 25 | 2 | 35 | 3 | **15** | **1** | - | - | - | - |  | **6015TF** | 39 |
| - | - | - | - | 25 | 2 | 35 | 3 | **15** | **1** | - | - | - | - |  | **6016TF** | 41 |
| - | - | - | - | 25 | 2 | 35 | 3 | **15** | **1** | - | - | - | - |  | **6017TT** | 43 |
| - | - | - | - | 25 | 2 | 35 | 3 | **15** | **1** | - | - | - | - |  | **6018TT** | 45 |
| - | - | - | - | 30 | 2 | 40 | 4 | **15** | **1** | - | - | - | - |  | **6011TF** | 47 |
| - | - | - | - | 30 | 2 | 40 | 4 | **15** | **1** | - | - | - | - |  | **6012TF** | 49 |
| - | - | - | - | 30 | 2 | 40 | 4 | **15** | **1** | - | - | - | - |  | **6020TF** | 51 |
| - | - | - | - | 30 | 2 | 40 | 4 | **15** | **1** | - | - | - | - |  | **6021TF** | 53 |
| - | - | - | - | - | - | - | - | 20 | 2 | 10 | 1 | - | - |  | **6022TF** | 56 |

| **Ø 8** | **Ø 10** | **Ø 12** | **Ø 16** | **Ø 20** | | |
|---|---|---|---|---|---|---|
| 0,050 | 0,060 | 0,070 | 0,090 | 0,120 | **1** | **Numero avanzamento** Feed Number |
| 0,060 | 0,070 | 0,085 | 0,110 | 0,125 | **2** | |
| 0,070 | 0,090 | 0,110 | 0,130 | 0,150 | **3** | |
| 0,100 | 0,120 | 0,140 | 0,160 | 0,200 | **4** | |
| 0,140 | 0,180 | 0,200 | 0,240 | 0,280 | **5** | |
| 0,190 | 0,230 | 0,280 | 0,350 | 0,400 | **6** | |
| 0,250 | 0,300 | 0,350 | 0,400 | 0,500 | **7** | |
| 0,270 | 0,320 | 0,370 | 0,450 | 0,550 | **8** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale e PKD | Solid Carbide high performance twist drills and PKD

| Famiglia prodotto / Family product | Codice utensile / Tool Code | | Acciaio debolmente legato / Low-Alloyed Steel <800 N/mm² | | Acciaio mediamente legato / Medium-Alloyed Steel 700/1000 N/mm² | | Acciaio fortemente legato / High-Alloyed Steel 1000/1300 N/mm² | | Acciaio inossidabile Martensitico/Ferritico / Stainless steel Martensitic/Ferritic | | Acciaio inossidabile Austenitico / Stainless steel Austenitic | | Ghisa grigia / Grey cast iron | | Ghisa sferoidale / Nodular cast iron | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | | P2 | | P3 | | M1 | | M2 | | K1 | | K2 | |
| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
| RECORD VA | 6051XB |  | - | - | - | - | - | - | 50 | 3 | 35 | 2 | 80 | 7 | - | - |
| | 6050XB |  | - | - | - | - | - | - | 70 | 3 | 45 | 2 | 120 | 7 | - | - |
| RECORD VA i | 6052XB |  | - | - | - | - | - | - | 70 | 3 | 45 | 2 | 120 | 7 | - | - |
| | 6053XB |  | - | - | - | - | - | - | 70 | 3 | 45 | 2 | 120 | 7 | - | - |
| RECORD EVO. TP | 6014NX |  | - | - | - | - | - | - | - | - | - | - | 75 | 4 | - | - |
| RECORD DH i ALU | 6041 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6042 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6043 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6044 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6045 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| PKD | 6005 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6007 |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per Metallo Duro Integrale e PKD | Feed $f_n$ (mm/rev) for solid carbide and PKD drills

| Numero avanzamento / Feed Number | Ø 2 | Ø 3 | Ø 4 | Ø 5 | Ø 6 |
|---|---|---|---|---|---|
| 1 | 0,010 | 0,015 | 0,020 | 0,025 | 0,030 |
| 2 | 0,020 | 0,030 | 0,040 | 0,050 | 0,060 |
| 3 | 0,030 | 0,040 | 0,050 | 0,055 | 0,065 |
| 4 | 0,040 | 0,050 | 0,065 | 0,080 | 0,100 |
| 5 | 0,060 | 0,080 | 0,100 | 0,120 | 0,150 |
| 6 | 0,070 | 0,085 | 0,110 | 0,140 | 0,170 |
| 7 | 0,080 | 0,100 | 0,120 | 0,180 | 0,230 |

**Esempio della scelta dei dati di lavoro**: 6051XB Ø 5 | Gruppo di materiale da lavorare M1 | **$V_c$** = 50 m/min | **$f_n$= 0,055 mm/giro** (coefficiente f=3)
**Cutting data example**: 6051XB Ø 5 | Working material group M1 | **$V_c$** = 50 m/min | **$f_n$= 0,055** mm/rev (coefficient f=3)

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale e PKD | Solid Carbide high performance twist drills and PKD

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | | **Materiali non ferrosi** Non ferrous materials | | **Titanio e leghe di Titanio** Titanium and Titanium alloys | | **HRSA Leghe resistenti al calore** Heat resistant alloys | | **Acciai temprati** Hardened steels **38/48 HRC** | | **Acciai temprati** Hardened steels **48/58 HRC** | | **Acciai temprati** Hardened steels **58/68 HRC** | | | **Codice utensile** Tool Code | **Pagina catalogo** Catalogue page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **N1** | | **N2** | | **S1** | | **S2** | | **H1** | | **H2** | | **H3** | | **Gruppo Materiali** \| Materials Group | | |
| $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | | | |
| **220** | **5** | **120** | **5** | **35** | **2** | 40 | 2 | - | - | - | - | - | - |  | **6051XB** | 59 |
| **270** | **6** | **150** | **5** | **40** | **2** | 45 | 2 | - | - | - | - | - | - |  | **6050XB** | 60 |
| **270** | **6** | **150** | **5** | **40** | **2** | 45 | 2 | - | - | - | - | - | - |  | **6052XB** | 61 |
| **270** | **6** | **150** | **5** | **40** | **2** | 45 | 2 | - | - | - | - | - | - |  | **6053XB** | 62 |
| - | - | - | - | - | - | - | - | **23** | **2** | **18** | **1** | **12** | **1** |  | **6014NX** | 66 |
| **200** | **6** | **140** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6041** | 83 |
| **200** | **6** | **140** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6042** | 84 |
| **200** | **6** | **140** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6043** | 85 |
| **200** | **6** | **140** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6044** | 86 |
| **200** | **6** | **140** | **5** | - | - | - | - | - | - | - | - | - | - |  | **6045** | 87 |
| **350** | **7** | **200** | **6** | - | - | - | - | - | - | - | - | - | - |  | **6005** | 118 |
| **350** | **7** | **200** | **6** | - | - | - | - | - | - | - | - | - | - |  | **6007** | 119 |

| **Ø 8** | **Ø 10** | **Ø 12** | **Ø 16** | **Ø 20** | | |
|---|---|---|---|---|---|---|
| 0,035 | 0,040 | 0,050 | 0,065 | 0,080 | **1** | **Numero avanzamento** Feed Number |
| 0,070 | 0,080 | 0,100 | 0,140 | 0,170 | **2** | |
| 0,080 | 0,100 | 0,120 | 0,180 | 0,210 | **3** | |
| 0,120 | 0,140 | 0,180 | 0,250 | 0,300 | **4** | |
| 0,180 | 0,220 | 0,250 | 0,300 | 0,400 | **5** | |
| 0,230 | 0,290 | 0,330 | 0,450 | 0,550 | **6** | |
| 0,270 | 0,350 | 0,400 | 0,550 | 0,650 | **7** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Famiglia prodotto** Family product | **Codice utensile** Tool Code | | **Acciaio debolmente legato** Low-Alloyed Steel **<800 N/mm²** | | **Acciaio mediamente legato** Medium-Alloyed Steel **700/1000 N/mm²** | | **Acciaio fortemente legato** High-Alloyed Steel **1000/1300 N/mm²** | | **Acciaio inossidabile Martensitico/Ferritico** Stainless steel Martensitic/Ferritic | | **Acciaio inossidabile Austenitico** Stainless steel Austenitic | | **Ghisa grigia** Grey cast iron | | **Ghisa sferoidale** Nodular cast iron | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | | P2 | | P3 | | M1 | | M2 | | K1 | | K2 | |
| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
| RECORD STL | 6236TF |  | 70 | 6 | 60 | 5 | 50 | 4 | 40 | 4 | - | - | 70 | 7 | 45 | 6 |
| | 6238TF |  | 70 | 6 | 60 | 5 | 50 | 4 | 40 | 4 | - | - | 70 | 7 | 45 | 6 |
| RECORD STL i | 6080TP |  | 90 | 6 | 70 | 5 | 60 | 4 | 45 | 4 | 30 | 3 | 80 | 7 | 50 | 7 |
| | 6081TP |  | 90 | 6 | 70 | 5 | 60 | 4 | 45 | 4 | 30 | 3 | 80 | 7 | 50 | 7 |
| RECORD DH i | 6025TT |  | 130 | 8 | 90 | 8 | 70 | 7 | 40 | 3 | 30 | 3 | 120 | 8 | 90 | 5 |
| | 6026TT |  | 130 | 8 | 90 | 8 | 70 | 7 | 40 | 3 | 30 | 3 | 120 | 8 | 90 | 5 |
| | 6027TT |  | 115 | 6 | 80 | 6 | 60 | 5 | 45 | 3 | 30 | 2 | 100 | 6 | 80 | 5 |
| | 6028TT |  | 115 | 6 | 80 | 6 | 60 | 5 | 45 | 3 | 30 | 2 | 100 | 6 | 80 | 5 |
| | 6032TT |  | 105 | 5 | 75 | 4 | 55 | 3 | 45 | 3 | 30 | 3 | 105 | 6 | 95 | 4 |
| | 6034TT |  | 100 | 5 | 70 | 4 | 50 | 3 | 45 | 3 | 30 | 3 | 105 | 6 | 95 | 4 |
| | 6035TT |  | 100 | 5 | 70 | 4 | 50 | 3 | 45 | 3 | 30 | 3 | 105 | 6 | 95 | 4 |
| | 6036TT |  | 90 | 5 | 60 | 4 | 40 | 3 | 40 | 3 | 30 | 3 | 90 | 6 | 80 | 4 |
| | 6038TT |  | 70 | 4 | 50 | 4 | 40 | 3 | 35 | 3 | 30 | 2 | 70 | 5 | 60 | 4 |
| | 6039TT |  | 70 | 4 | 50 | 4 | 40 | 3 | 35 | 3 | 30 | 2 | 70 | 5 | 60 | 4 |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per Metallo Duro Integrale | Feed $f_n$ (mm/rev) for solid carbide drills

| **Numero avanzamento** Feed Number | Ø 2 | Ø 3 | Ø 4 | Ø 5 | Ø 6 |
|---|---|---|---|---|---|
| **1** | 0,008 | 0,010 | 0,020 | 0,030 | 0,040 |
| **2** | 0,015 | 0,020 | 0,030 | 0,040 | 0,050 |
| **3** | 0,020 | 0,030 | 0,040 | 0,050 | 0,060 |
| **4** | 0,030 | 0,040 | 0,050 | 0,060 | 0,070 |
| **5** | 0,040 | 0,060 | 0,080 | 0,100 | 0,120 |
| **6** | 0,050 | 0,080 | 0,120 | 0,140 | 0,170 |
| **7** | 0,070 | 0,100 | 0,150 | 0,180 | 0,200 |
| **8** | 0,090 | 0,120 | 0,170 | 0,200 | 0,220 |

**Esempio della scelta dei dati di lavoro**: 6236TF Ø 5 | Gruppo di materiale da lavorare P1 | $V_c$ = 70 m/min | $f_n$ = **0,140 mm/giro** (coefficiente f=6)
**Cutting data example**: 6236TF Ø 5 | Working material group P1 | $V_c$ = 70 m/min | $f_n$ = **0,140** mm/rev (coefficient f=6)

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | | **Materiali non ferrosi** Non ferrous materials | | **Titanio e leghe di Titanio** Titanium and Titanium alloys | | **HRSA Leghe resistenti al calore** Heat resistant alloys | | **Acciai temprati** Hardened steels **38/48 HRC** | | **Acciai temprati** Hardened steels **48/58 HRC** | | **Acciai temprati** Hardened steels **58/68 HRC** | | **Gruppo Materiali** \| Materials Group | **Codice utensile** Tool Code | **Pagina catalogo** Catalogue page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **N1** | | **N2** | | **S1** | | **S2** | | **H1** | | **H2** | | **H3** | | | | |
| $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | | | |
| **150** | **8** | **100** | **6** | 15 | 2 | - | - | - | - | - | - | - | - |  | **6236TF** | 102 |
| **150** | **8** | **100** | **6** | 15 | 2 | - | - | - | - | - | - | - | - |  | **6238TF** | 103 |
| **180** | **7** | **120** | **6** | 15 | 2 | 20 | 2 | - | - | - | - | - | - |  | **6080TP** | 104 |
| **180** | **7** | **120** | **6** | 15 | 2 | 20 | 2 | - | - | - | - | - | - |  | **6081TP** | 105 |
| - | - | - | - | 30 | 2 | 40 | 4 | 15 | 1 | - | - | - | - |  | **6025TT** | 68 |
| - | - | - | - | 30 | 2 | 40 | 4 | 15 | 1 | - | - | - | - |  | **6026TT** | 70 |
| - | - | - | - | 25 | 2 | 45 | 3 | 10 | 1 | - | - | - | - |  | **6027TT** | 72 |
| - | - | - | - | 25 | 2 | 45 | 3 | 10 | 1 | - | - | - | - |  | **6028TT** | 74 |
| - | - | - | - | 25 | 1 | 45 | 2 | - | - | - | - | - | - |  | **6032TT** | 76 |
| - | - | - | - | 25 | 1 | 45 | 2 | - | - | - | - | - | - |  | **6034TT** | 77 |
| - | - | - | - | 25 | 1 | 45 | 2 | - | - | - | - | - | - |  | **6035TT** | 78 |
| - | - | - | - | - | - | 35 | 2 | - | - | - | - | - | - |  | **6036TT** | 79 |
| - | - | - | - | - | - | 30 | 2 | - | - | - | - | - | - |  | **6038TT** | 80 |
| - | - | - | - | - | - | 30 | 2 | - | - | - | - | - | - |  | **6039TT** | 81 |

| **Ø 8** | **Ø 10** | **Ø 12** | **Ø 16** | **Ø 20** | | |
|---|---|---|---|---|---|---|
| 0,050 | 0,060 | 0,070 | 0,090 | 0,120 | **1** | **Numero avanzamento** Feed Number |
| 0,060 | 0,070 | 0,085 | 0,110 | 0,125 | **2** | |
| 0,070 | 0,090 | 0,110 | 0,130 | 0,150 | **3** | |
| 0,100 | 0,120 | 0,140 | 0,160 | 0,200 | **4** | |
| 0,140 | 0,180 | 0,200 | 0,240 | 0,280 | **5** | |
| 0,190 | 0,230 | 0,280 | 0,350 | 0,400 | **6** | |
| 0,250 | 0,300 | 0,350 | 0,400 | 0,500 | **7** | |
| 0,270 | 0,320 | 0,370 | 0,450 | 0,550 | **8** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Famiglia prodotto** Family product | **Codice utensile** Tool Code | | **Acciaio debolmente legato** Low-Alloyed Steel **<800 N/mm²** | **Acciaio mediamente legato** Medium-Alloyed Steel **700/1000 N/mm²** | **Acciaio fortemente legato** High-Alloyed Steel **1000/1300 N/mm²** | **Acciaio inossidabile Martensitico/Ferritico** Stainless steel Martensitic/Ferritic | **Acciaio inossidabile Austenitico** Stainless steel Austenitic | **Ghisa grigia** Grey cast iron | **Ghisa sferoidale** Nodular cast iron |
|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | P2 | P3 | M1 | M2 | K1 | K2 |

| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RECORD 3S | **6126K** |  | **60** | **5** | **50** | **4** | **35** | **3** | 40 | 4 | - | - | - | - | - | - |
| | **6126TF** |  | **65** | **5** | **55** | **4** | **35** | **3** | 40 | 4 | - | - | - | - | - | - |
| | **6123K** |  | - | - | - | - | - | - | - | - | - | - | **90** | **7** | **80** | **7** |
| | **6123TF** |  | - | - | - | - | - | - | - | - | - | - | **95** | **7** | **85** | **7** |
| | **6127K** |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **6001K** |  | **60** | **5** | **50** | **4** | **35** | **3** | 40 | 4 | - | - | - | - | - | - |
| RECORD 3BX | **6002K** |  | - | - | - | - | - | - | - | - | - | - | **90** | **8** | **80** | **8** |
| | **6002TF** |  | - | - | - | - | - | - | - | - | - | - | **95** | **8** | **85** | **8** |
| | **6003K** |  | - | - | - | - | - | - | - | - | - | - | **90** | **8** | **80** | **8** |
| | **6003TF** |  | - | - | - | - | - | - | - | - | - | - | **95** | **8** | **85** | **8** |
| RECORD 4S i | **6040F5** |  | - | - | - | - | - | - | - | - | - | - | **130** | **8** | - | - |
| | **6040/5** |  | - | - | - | - | - | - | - | - | - | - | **120** | **8** | - | - |
| | **6040/7** |  | - | - | - | - | - | - | - | - | - | - | **120** | **8** | - | - |
| | **6040/L** |  | - | - | - | - | - | - | - | - | - | - | **80** | **7** | - | - |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per Metallo Duro Integrale | Feed $f_n$ (mm/rev) for solid carbide drills

| **Numero avanzamento** Feed Number | **Ø 2** | **Ø 3** | **Ø 4** | **Ø 5** | **Ø 6** |
|---|---|---|---|---|---|
| **1** | 0,020 | 0,025 | 0,040 | 0,050 | 0,055 |
| **2** | 0,030 | 0,035 | 0,055 | 0,065 | 0,075 |
| **3** | 0,035 | 0,040 | 0,065 | 0,085 | 0,090 |
| **4** | 0,040 | 0,050 | 0,080 | 0,100 | 0,110 |
| **5** | 0,050 | 0,060 | 0,100 | 0,120 | 0,130 |
| **6** | 0,060 | 0,070 | 0,120 | 0,130 | 0,150 |
| **7** | 0,070 | 0,080 | 0,130 | 0,160 | 0,180 |
| **8** | 0,080 | 0,100 | 0,160 | 0,200 | 0,220 |

**Esempio della scelta dei dati di lavoro**: 6126K Ø 5 | Gruppo di materiale da lavorare P1 | $V_c$ = 60 m/min | $f_n$= **0,120 mm/giro** (coefficiente f=5)
**Cutting data example**: 6126K Ø 5 | Working material group P1 | $V_c$ = 60 m/min | $f_n$= **0,120** mm/rev (coefficient f=5)

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | | **Materiali non ferrosi** Non ferrous materials | | **Titanio e leghe di Titanio** Titanium and Titanium alloys | | **HRSA Leghe resistenti al calore** Heat resistant alloys | | **Acciai temprati** Hardened steels **38/48 HRC** | | **Acciai temprati** Hardened steels **48/58 HRC** | | **Acciai temprati** Hardened steels **58/68 HRC** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **N1** | | **N2** | | **S1** | | **S2** | | **H1** | | **H2** | | **H3** | | **Gruppo Materiali** \| Materials Group | | |
| $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | | | |
| - | - | - | - | 10 | 1 | 15 | 1 | - | - | - | - | - | - |  | **6126K** | 107 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | **6126TF** | 107 |
| **130** | **6** | **130** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6123K** | 109 |
| **140** | **6** | **140** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6123TF** | 109 |
| **200** | **7** | **150** | **6** | - | - | - | - | - | - | - | - | - | - |  | **6127K** | 111 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | **6001K** | 113 |
| **180** | **8** | **140** | **7** | **10** | **2** | - | - | - | - | - | - | - | - |  | **6002K** | 116 |
| **190** | **8** | **160** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6002TF** | 116 |
| **180** | **8** | **140** | **7** | **10** | **2** | - | - | - | - | - | - | - | - |  | **6003K** | 115 |
| **190** | **8** | **160** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6003TF** | 115 |
| **350** | **7** | **220** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6040F5** | 97 |
| **350** | **7** | **220** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6040/5** | 98 |
| **350** | **7** | **220** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6040/7** | 99 |
| **300** | **7** | **180** | **7** | - | - | - | - | - | - | - | - | - | - |  | **6040/L** | 100 |

| **Ø 8** | **Ø 10** | **Ø 12** | **Ø 16** | **Ø 20** | | |
|---|---|---|---|---|---|---|
| 0,065 | 0,070 | 0,080 | 0,090 | 0,100 | **1** | **Numero avanzamento** Feed Number |
| 0,085 | 0,095 | 0,100 | 0,120 | 0,130 | **2** | |
| 0,110 | 0,120 | 0,130 | 0,140 | 0,170 | **3** | |
| 0,130 | 0,140 | 0,150 | 0,170 | 0,200 | **4** | |
| 0,150 | 0,160 | 0,180 | 0,200 | 0,230 | **5** | |
| 0,170 | 0,190 | 0,210 | 0,230 | 0,270 | **6** | |
| 0,210 | 0,240 | 0,260 | 0,290 | 0,340 | **7** | |
| 0,250 | 0,280 | 0,310 | 0,350 | 0,400 | **8** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

# PARAMETRI DI TAGLIO | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Famiglia prodotto** Family product | **Codice utensile** Tool Code | | **Acciaio debolmente legato** Low-Alloyed Steel **<800 N/mm²** | | **Acciaio mediamente legato** Medium-Alloyed Steel **700/1000 N/mm²** | | **Acciaio fortemente legato** High-Alloyed Steel **1000/1300 N/mm²** | | **Acciaio inossidabile Martensitico/Ferritico** Stainless steel Martensitic/Ferritic | | **Acciaio inossidabile Austenitico** Stainless steel Austenitic | | **Ghisa grigia** Grey cast iron | | **Ghisa sferoidale** Nodular cast iron | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gruppo Materiali** \| Materials Group | | | P1 | | P2 | | P3 | | M1 | | M2 | | K1 | | K2 | |
| | | | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f | $V_c$ | f |
| MICRO DRILL | **6118TF** |  | **90** | **6** | **70** | **5** | **50** | **4** | **35** | **1** | 30 | 1 | **85** | **6** | **60** | **5** |
| | **6019TF** |  | **100** | **7** | **70** | **6** | 55 | 5 | **35** | **4** | 30 | 4 | **100** | **7** | **60** | **7** |
| | **6029TF** |  | **100** | **7** | **70** | **6** | 55 | 5 | **35** | **4** | 30 | 4 | **100** | **7** | **60** | **7** |
| MICRO DRILL i | **6030TF** |  | **100** | **7** | **70** | **6** | 55 | 5 | **35** | **4** | 30 | 4 | **100** | **7** | **60** | **7** |
| | **6136TF** |  | **95** | **6** | **65** | **4** | 50 | 4 | **35** | **3** | 30 | 3 | **95** | **6** | **55** | **6** |
| | **6031TF** |  | **95** | **6** | **65** | **4** | 50 | 4 | **35** | **3** | 30 | 3 | **95** | **6** | **55** | **6** |

**$V_c$: velocità di taglio (m/min)** | cutting speed (m/min) **f: Tabella avanzamenti (mm/giro)** | Feed table (mm/rev)

## Avanzamento $f_n$ (mm/g) per Metallo Duro Integrale | Feed $f_n$ (mm/rev) for solid carbide drills

| **Numero avanzamento** Feed Number | **Ø 0,25** | **Ø 0,5** | **Ø 0,8** | **Ø 1** | **Ø 1,25** | **Ø 1,5** |
|---|---|---|---|---|---|---|
| **1** | 0,004 | 0,008 | 0,010 | 0,012 | 0,015 | 0,020 |
| **2** | 0,005 | 0,010 | 0,012 | 0,015 | 0,020 | 0,025 |
| **3** | 0,006 | 0,010 | 0,015 | 0,018 | 0,025 | 0,030 |
| **4** | 0,070 | 0,012 | 0,018 | 0,020 | 0,030 | 0,040 |
| **5** | 0,008 | 0,015 | 0,020 | 0,030 | 0,040 | 0,050 |
| **6** | 0,010 | 0,020 | 0,030 | 0,040 | 0,055 | 0,075 |
| **7** | 0,010 | 0,020 | 0,040 | 0,050 | 0,070 | 0,085 |

**Esempio della scelta dei dati di lavoro**: 6118TF Ø 1 | Gruppo di materiale da lavorare P1 | $V_c$ = 90 m/min | $f_n$ = **0,040 mm/giro** (coefficiente f=6)
**Cutting data example**: 6118TF Ø 1 | Working material group P1 | $V_c$ = 90 m/min | $f_n$ = **0,040** mm/rev (coefficient f=6)

# **PARAMETRI DI TAGLIO** | CUTTING DATA

Punte Evolute in Metallo Duro Integrale | Solid Carbide high performance twist drills

| **Alluminio e leghe di Alluminio** Aluminum and Aluminum alloys | **Materiali non ferrosi** Non ferrous materials | **Titanio e leghe di Titanio** Titanium and Titanium alloys | **HRSA Leghe resistenti al calore** Heat resistant alloys | **Acciai temprati** Hardened steels **38/48 HRC** | **Acciai temprati** Hardened steels **48/58 HRC** | **Acciai temprati** Hardened steels **58/68 HRC** | | **Codice utensile** Tool Code | **Pagina catalogo** Catalogue page |
|---|---|---|---|---|---|---|---|---|---|
| **N1** | **N2** | **S1** | **S2** | **H1** | **H2** | **H3** | **Gruppo Materiali** \| Materials Group | | |
| $V_c$ f | $V_c$ f | $V_c$ f | $V_c$ f | $V_c$ f | $V_c$ f | $V_c$ f | | | |
| - - | - - | **30 1** | - - | 30 2 | - - | - - |  | **6118TF** | 89 |
| - - | - - | 30 4 | **40 4** | - - | - - | - - |  | **6019TF** | 91 |
| - - | - - | 30 4 | **40 4** | - - | - - | - - |  | **6029TF** | 92 |
| - - | - - | 30 4 | **40 4** | - - | - - | - - |  | **6030TF** | 93 |
| - - | - - | 25 3 | **35 3** | - - | - - | - - |  | **6136TF** | 94 |
| - - | - - | 25 3 | **35 3** | - - | - - | - - |  | **6031TF** | 95 |

| **Ø 1,75** | **Ø 2** | **Ø 2,25** | **Ø 2,5** | **Ø 3** | | |
|---|---|---|---|---|---|---|
| 0,025 | 0,030 | 0,033 | 0,036 | 0,040 | **1** | **Numero avanzamento** Feed Number |
| 0,030 | 0,033 | 0,036 | 0,040 | 0,050 | **2** | |
| 0,033 | 0,036 | 0,040 | 0,050 | 0,080 | **3** | |
| 0,045 | 0,050 | 0,070 | 0,080 | 0,100 | **4** | |
| 0,060 | 0,080 | 0,085 | 0,090 | 0,120 | **5** | |
| 0,090 | 0,100 | 0,110 | 0,125 | 0,140 | **6** | |
| 0,100 | 0,110 | 0,120 | 0,140 | 0,160 | **7** | |

▶ **I parametri di taglio indicati in tabella sono da considerarsi validi in condizioni macchina/pezzo ottimali**
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions