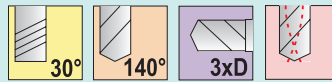


.1575" - .2720"  
(4,00mm - 6,91mm)

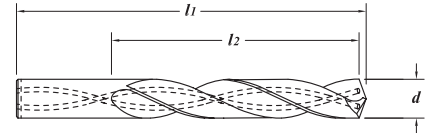
**NEW  
SERIES**



## TOLERANCES

| d              | +0,0000 -0,0127mm (+.0000" -.0005")                                              |
|----------------|----------------------------------------------------------------------------------|
| l <sub>1</sub> | ≤ 1/8" +3,175 -1,588mm (+.125" -.062")<br>> 1/8" +3,175 -3,175mm (+.125" -.125") |
| l <sub>2</sub> | ≤ 1/8" +3,175 -1,588mm (+.125" -.062")<br>> 1/8" +3,175 -3,175mm (+.125" -.125") |

**Balinit® HELICA Coated**  
**Balinit® HELICA-Beschichtet**  
**Recubrimiento de Balinit® HELICA**  
**Revêtement Balinit® HELICA**  
**Rivestimento in Balinit® HELICA**  
**Balinit® HELICA 涂层**



HIGH PERFORMANCE  
DRILLS



High performance - high penetration solid submicron grain carbide drill  
 Coolant through capabilities for high pressure coolant systems  
 Up to 70% faster than standard carbide drills  
 30° helix for better chip evacuation  
 Honed cutting edge

Recommended to run in high nickel, high temperature alloys, cobalt-based alloys, stainless steels and tool steels  
 Balinit® HELICA is a multi-layer AlCr-based coating designed exclusively for high performance drilling  
 Live tooling recommended on lathe processes  
 Shank tolerance: -0,0025 / -0,0100mm (-.0001" -.0004")



Hohe Leistung - Hohe Vorschubgeschwindigkeiten - Vollhartmetallbohrer aus Feinkornhartmetall  
 Kühlkanäle für Hochdruck Kühlmittelsysteme  
 Bis zu 70% schneller als Standard Hartmetallbohrer  
 30° Spirale für bessere Spanabfuhr  
 Gehönte Schneidkante

Empfohlen für Hoch Nickelhaltige und Hochwärmefeste Stähle, Kobaltbasislegierungen, Rostfreier- und Werkzeugstahl  
 Balinit HELICA ist eine Multi-Layer-Beschichtung auf AlCr-Basis, speziell entwickelt für Hochleistungsbohrer  
 Empfehlung fuer den Einsatz auf der Drehmaschine  
 Schaft-Toleranz: -0,0025 / -0,0100mm (-.0001" -.0004")



Broca de submicrograno sólido carburo de alto rendimiento  
 Orificios de paso refrigerante concebidos para sistemas de refrigeración de alta presión  
 Hasta un 70% más rápidas que las brocas de carburo convencionales  
 Hélice de 30° para una mejor evacuación de viruta

Labio cortante afilado  
 Recomendado para aleaciones con alto contenido de níquel, aleaciones de alta temperatura, aleaciones con base de cobalto, aceros inoxidables, y aceros de herramienta  
 Balinit HELICA es un recubrimiento Multi-Layer sobre la base AlCr, desarrollado especialmente para taladros de alto rendimiento  
 Recomendación para la aplicación en torno  
 Tolerancia del vástago: -0,0025 / -0,0100mm (-.0001" -.0004")



Forets carbure submicrograin a haute performance - haut pouvoir de coupe  
 Canaux de refroidissement pour forte pression de systèmes de liquide de refroidissement  
 70% plus rapide que les forets carbure standards  
 Hélice a 30° pour une meilleure évacuation de copeaux  
 Préparation de l'arête de coupe

Recommander pour base nickel, alliages a hautes températures, alliages de cobalt, aciers inoxydables et aciers a outils  
 Outillage allumé est conseillé pendant le process avec le tour  
 Tolerance de la tige: -0,0025 / -0,0100mm (-.0001" -.0004")



Alte prestazioni - Alta penetrazioni Super sub-micrograno metallo duro  
 Lubrificazione interna per sistemi ad alta pressione  
 Fino al 70% più veloce rispetto alle punte in metallo duro standard  
 Elica a 30° per una migliore evacuazione del truciolo  
 Tagliente onato

Raccomandata per lavorazioni su nickel, superleghe, leghe ad alta percentuale di cobalto, inox e acciai per utensili  
 Balinit HELICA è un rivestimento multi-layer su base Al-Cr specifico per alte prestazioni in foratura  
 Giri consigliati per forature su tornio  
 Tolleranza gambo: -0,0025 / -0,0100mm (-.0001" -.0004")



高效率—高进给 高效整体硬质合金钻头  
 通过加快切削速度延长刀具使用寿命、提高表面光洁度  
 跟普通的硬质合金钻头相比可提高速度高达70%  
 30°螺旋角更便于排屑  
 切削刃口经过珩磨  
 高镍耐高温合金、钴基合金、不锈钢和工具钢  
 巴尔查斯的 HELICA 涂层是基于 AlCr 的多层涂层，专为高效钻孔而设计  
 推荐在车床加工中  
 柄部公差: -0,0025 / -0,0100mm (-.0001" -.0004")

| EDP#  | d <sup>†</sup> |                    | l <sub>1</sub>    | l <sub>2</sub>  |
|-------|----------------|--------------------|-------------------|-----------------|
|       | Decimal        | Diameter<br>Metric | Overall<br>Length | Flute<br>Length |
| 22085 | .1575          | 4,00               | 56                | 21              |
| 22090 | .1590          | #21                | 2-3/16"           | 13/16"          |
| 22095 | .1610          | #20                | 2-3/16"           | 13/16"          |
| 22100 | .1660          | #19                | 2-9/32"           | 15/16"          |
| 22105 | .1695          | #18                | 2-9/32"           | 15/16"          |
| 22110 | .1719          | 11/64"             | 2-9/32"           | 15/16"          |
| 22115 | .1730          | #17                | 2-9/32"           | 15/16"          |
| 22120 | .1770          | #16                | 2-9/32"           | 15/16"          |
| 22125 | .1772          | 4,50               | 58                | 24              |
| 22130 | .1800          | #15                | 2-9/32"           | 15/16"          |
| 22135 | .1820          | #14                | 2-9/32"           | 15/16"          |
| 22140 | .1850          | #13                | 2-9/32"           | 15/16"          |
| 22145 | .1875          | 3/16"              | 2-13/32"          | 1"              |
| 22150 | .1890          | #12                | 2-13/32"          | 1"              |
| 22155 | .1910          | #11                | 2-13/32"          | 1"              |
| 22160 | .1935          | #10                | 2-13/32"          | 1"              |
| 22165 | .1960          | #9                 | 2-13/32"          | 1"              |
| 22170 | .1969          | 5,00               | 61                | 25              |
| 22175 | .1990          | #8                 | 2-13/32"          | 1"              |
| 22180 | .2010          | #7                 | 2-13/32"          | 1"              |
| 22185 | .2031          | 13/64"             | 2-13/32"          | 1"              |
| 22190 | .2040          | #6                 | 2-13/32"          | 1"              |
| 22195 | .2055          | #5                 | 2-13/32"          | 1"              |
| 22200 | .2090          | #4                 | 2-13/32"          | 1"              |
| 22205 | .2130          | #3                 | 2-5/8"            | 1-3/32"         |
| 22210 | .2165          | 5,50               | 67                | 28              |
| 22215 | .2188          | 7/32"              | 2-5/8"            | 1-3/32"         |
| 22220 | .2210          | #2                 | 2-5/8"            | 1-3/32"         |
| 22225 | .2280          | #1                 | 2-5/8"            | 1-3/32"         |
| 22230 | .2340          | A                  | 2-5/8"            | 1-3/32"         |
| 22235 | .2344          | 15/64"             | 2-5/8"            | 1-3/32"         |
| 22240 | .2362          | 6,00               | 67                | 28              |
| 22245 | .2380          | B                  | 2-3/4"            | 1-7/32"         |
| 22250 | .2420          | C                  | 2-3/4"            | 1-7/32"         |
| 22255 | .2460          | D                  | 2-3/4"            | 1-7/32"         |
| 22260 | .2500          | 1/4" / E           | 2-3/4"            | 1-7/32"         |
| 22265 | .2559          | 6,50               | 70                | 31              |
| 22270 | .2570          | F                  | 2-3/4"            | 1-7/32"         |
| 22275 | .2610          | G                  | 2-3/4"            | 1-7/32"         |
| 22280 | .2656          | 17/64"             | 2-15/16"          | 1-11/32"        |
| 22285 | .2660          | H                  | 2-15/16"          | 1-11/32"        |
| 22290 | .2720          | I                  | 2-15/16"          | 1-11/32"        |

continued →

**1580KH / z = 2 (continued)**.2756" - .6299"  
(7,00mm - 16,00mm)

| EDP#  | $d^{\dagger}$<br>Diameter |              | $l_1$<br>Overall<br>Length | $l_2$<br>Flute<br>Length |
|-------|---------------------------|--------------|----------------------------|--------------------------|
|       | Decimal                   | Metric       |                            |                          |
| 22295 | .2756                     | <b>7,00</b>  | <b>75</b>                  | <b>34</b>                |
| 22300 | .2770                     | J            | 7,03                       | 2-15/16"                 |
| 22305 | .2810                     | K            | 7,14                       | 2-15/16"                 |
| 22310 | .2812                     | 9/32"        | 7,14                       | 2-15/16"                 |
| 22315 | .2900                     | L            | 7,37                       | 2-15/16"                 |
| 22320 | .2950                     | M            | 7,49                       | 2-15/16"                 |
| 22325 | .2953                     | <b>7,50</b>  | <b>75</b>                  | <b>34</b>                |
| 22330 | .2969                     | 19/64"       | 7,54                       | 3-3/32"                  |
| 22335 | .3020                     | N            | 7,67                       | 3-3/32"                  |
| 22340 | .3125                     | 5/16"        | 7,94                       | 3-3/32"                  |
| 22345 | .3150                     | <b>8,00</b>  | <b>79</b>                  | <b>37</b>                |
| 22350 | .3160                     | O            | 8,03                       | 3-3/32"                  |
| 22355 | .3230                     | P            | 8,20                       | 3-3/32"                  |
| 22360 | .3281                     | 21/64"       | 8,33                       | 3-3/32"                  |
| 22365 | .3320                     | Q            | 8,43                       | 3-3/32"                  |
| 22370 | .3346                     | <b>8,50</b>  | <b>79</b>                  | <b>37</b>                |
| 22375 | .3390                     | R            | 8,61                       | 3-5/16"                  |
| 22380 | .3438                     | 11/32"       | 8,73                       | 3-5/16"                  |
| 22385 | .3480                     | S            | 8,84                       | 3-5/16"                  |
| 22390 | .3543                     | <b>9,00</b>  | <b>84</b>                  | <b>40</b>                |
| 22395 | .3580                     | T            | 9,09                       | 3-5/16"                  |
| 22400 | .3594                     | 23/64"       | 9,13                       | 3-5/16"                  |
| 22405 | .3680                     | U            | 9,35                       | 3-5/16"                  |
| 22410 | .3740                     | <b>9,50</b>  | <b>84</b>                  | <b>40</b>                |
| 22415 | .3750                     | 3/8"         | 9,52                       | 3-1/2"                   |
| 22420 | .3770                     | V            | 9,57                       | 3-1/2"                   |
| 22425 | .3860                     | W            | 9,80                       | 3-1/2"                   |
| 22430 | .3906                     | 25/64"       | 9,92                       | 3-1/2"                   |
| 22435 | .3937                     | <b>10,00</b> | <b>89</b>                  | <b>43</b>                |
| 22440 | .3970                     | X            | 10,08                      | 3-1/2"                   |
| 22445 | .4040                     | Y            | 10,26                      | 3-1/2"                   |
| 22450 | .4062                     | 13/32"       | 10,32                      | 3-1/2"                   |
| 22455 | .4130                     | Z            | 10,49                      | 3-1/2"                   |
| 22460 | .4134                     | <b>10,50</b> | <b>89</b>                  | <b>43</b>                |
| 22465 | .4219                     | 27/64"       | 10,72                      | 3-3/4"                   |
| 22470 | .4331                     | <b>11,00</b> | <b>95</b>                  | <b>46</b>                |
| 22475 | .4375                     | 7/16"        | 11,11                      | 3-3/4"                   |
| 22480 | .4528                     | <b>11,50</b> | <b>95</b>                  | <b>46</b>                |
| 22485 | .4531                     | 29/64"       | 11,51                      | 3-3/4"                   |
| 22490 | .4688                     | 15/32"       | 11,91                      | 4"                       |
| 22495 | .4724                     | <b>12,00</b> | <b>102</b>                 | <b>49</b>                |
| 22500 | .4844                     | 31/64"       | 12,30                      | 4"                       |
| 22505 | .4921                     | <b>12,50</b> | <b>102</b>                 | <b>49</b>                |
| 22510 | .5000                     | 1/2"         | 12,70                      | 4"                       |
| 22515 | .5118                     | <b>13,00</b> | <b>107</b>                 | <b>53</b>                |
| 22520 | .5156                     | 33/64"       | 13,10                      | 4-7/32"                  |
| 22525 | .5312                     | 17/32"       | 13,49                      | 4-7/32"                  |
| 22530 | .5315                     | <b>13,50</b> | <b>110</b>                 | <b>56</b>                |
| 22535 | .5469                     | 35/64"       | 13,89                      | 4-5/16"                  |
| 22540 | .5512                     | <b>14,00</b> | <b>110</b>                 | <b>56</b>                |
| 22545 | .5625                     | 9/16"        | 14,29                      | 4-9/16"                  |
| 22550 | .5709                     | <b>14,50</b> | <b>116</b>                 | <b>63</b>                |
| 22555 | .5781                     | 37/64"       | 14,68                      | 4-15/16"                 |
| 22560 | .5906                     | <b>15,00</b> | <b>125</b>                 | <b>65</b>                |
| 22565 | .5938                     | 19/32"       | 15,08                      | 4-15/16"                 |
| 22570 | .6094                     | 39/64"       | 15,48                      | 5-1/16"                  |
| 22575 | .6102                     | <b>15,50</b> | <b>129</b>                 | <b>71</b>                |
| 22580 | .6250                     | 5/8"         | 15,87                      | 5-1/4"                   |
| 22585 | .6299                     | <b>16,00</b> | <b>133</b>                 | <b>79</b>                |