

RECORD EVOLUTION **VA**



ähnlich / similar
DIN 1897 - 338

ähnlich / similar

DIN 1897 - 338

RECORD EVOLUTION VA

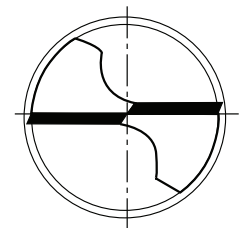
TECHNISCHE DATEN / TECHNICAL DATA

Der neue Record Evolution VA

garantiert durch seine spezielle Nutengeometrie idealen Spantransport bei hohen Schnittgeschwindigkeiten und, durch die Form der Schneidkanten, beste Effizienz besonders bei der Bearbeitung von rostfreiem Stahl, un- und niedrig legiertem Stahl, Aluminium, Titan und Kupfer.

The special helix geometry of the newly added **Record Evolution VA** guarantees ideal chip removal with high cutting parameters and the cutting edge design permits top efficiency especially on stainless steel, non and low alloy steel, aluminium, titanium and copper.

| | |
|---|---|
| Baumaße / Dimensions: | Ref. 6134TN – ähnlich / similar DIN 1897 Ref. 6229TN – ähnlich / similar DIN 338 |
| Schaftausführung / Shank: | Einheitsschaft / Unified shank DIN 6535 HA |
| Schneidstoff / Cutting material: | HSS-Co (S 6-5-2-5) |
| Oberfläche / Surface treatment: | TiN |
| Nutengeometrie / Flute profile: | STL |
| Spitzengeometrie / Tip profile: | Sonderanschliff / Special design Evolution VA |
| Lieferprogramm / Range: | Ø mm: 1 – 20 / 0,1 mm |



Anschliff
Tip geometry

Schnittwertempfehlung / Cutting data

| Werkstoff Material | Vc (m/min) | Vorschub f (mm/U) für Ø / Feed f (mm/r) for Ø | | | | | |
|---|------------|---|-------------|-------------|-------------|-------------|-------------|
| | | 1-3 | 3-4 | 4-6 | 6-9 | 9-14 | 14-20 |
| Stahl und Stahlguß Steel and cast steel – 700 N/mm ² | 40 - 50 | 0,015 - 0,08 | 0,10 - 0,12 | 0,12 - 0,15 | 0,16 - 0,23 | 0,23 - 0,30 | 0,29 - 0,40 |
| Rostfreier Stahl, martensitisch Stainless steel, martensitic | 18 - 20 | 0,014 - 0,05 | 0,07 - 0,10 | 0,10 - 0,15 | 0,17 - 0,20 | 0,18 - 0,24 | 0,25 - 0,32 |
| Rostfreier Stahl, geschwefelt Stainless steel, sulfured | 20 - 25 | 0,014 - 0,05 | 0,09 - 0,12 | 0,10 - 0,19 | 0,19 - 0,25 | 0,22 - 0,30 | 0,32 - 0,35 |
| Rostfreier Stahl, austenitisch Stainless steel, austenitic | 18 - 20 | 0,014 - 0,05 | 0,07 - 0,11 | 0,10 - 0,16 | 0,14 - 0,23 | 0,20 - 0,29 | 0,26 - 0,36 |
| Kupfer, unlegiert Copper, non alloyed | 50 - 60 | 0,016 - 0,063 | 0,03 - 0,05 | 0,04 - 0,07 | 0,06 - 0,10 | 0,09 - 0,13 | 0,12 - 0,16 |
| Messing, zäh Brass, tenacious (Ms 63) | 60 - 65 | 0,016 - 0,06 | 0,08 - 0,10 | 0,10 - 0,15 | 0,17 - 0,22 | 0,24 - 0,28 | 0,30 - 0,40 |
| Aluminium und Aluminiumlegierung Aluminium and aluminium alloys | 80 - 100 | 0,02 - 0,12 | 0,10 - 0,15 | 0,16 - 0,19 | 0,19 - 0,30 | 0,30 - 0,35 | 0,38 - 0,45 |
| Al-Si Legierungen Al-Si alloys – 10% Si | 70 - 80 | 0,018 - 0,10 | 0,09 - 0,13 | 0,11 - 0,19 | 0,17 - 0,27 | 0,24 - 0,35 | 0,32 - 0,43 |
| Titan und Titanlegierungen Titanium and titanium alloys – 700 N/mm ² | 10 - 12 | 0,015 - 0,02 | 0,03 - 0,05 | 0,04 - 0,07 | 0,06 - 0,10 | 0,09 - 0,13 | 0,12 - 0,16 |

Weitere Informationen sind im technischen Teil ab Seite 521 verfügbar.
For more information please consult our Technical Guide starting on page 521.

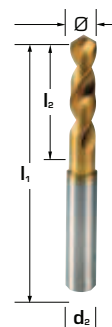


EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA

HSS-Co Hochleistungs-Spiralbohrer extra kurz
HSS-Co High performance twist drills stub length

Record Evolution VA



| Kat.-Nr. / Cat.-No. | | | | 6134TN |
|--------------------------------------|----------------|----------------|----------------|--------|
| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 1,00 | 26 | 6 | 3 | ● |
| 1,10 | 28 | 7 | 3 | ● |
| 1,20 | 30 | 8 | 3 | ● |
| 1,30 | 30 | 8 | 3 | ● |
| 1,40 | 32 | 9 | 3 | ● |
| 1,50 | 32 | 9 | 3 | ● |
| 1,60 | 34 | 10 | 3 | ● |
| 1,70 | 34 | 10 | 3 | ● |
| 1,80 | 36 | 11 | 3 | ● |
| 1,90 | 36 | 11 | 3 | ● |
| 2,00 | 38 | 12 | 3 | ● |
| 2,10 | 38 | 12 | 3 | ● |
| 2,20 | 40 | 13 | 3 | ● |
| 2,30 | 40 | 13 | 3 | ● |
| 2,40 | 43 | 14 | 3 | ● |
| 2,50 | 43 | 14 | 3 | ● |
| 2,60 | 43 | 14 | 3 | ● |
| 2,70 | 46 | 16 | 3 | ● |
| 2,80 | 46 | 16 | 3 | ● |
| 2,90 | 46 | 16 | 3 | ● |
| 3,00 | 46 | 16 | 3 | ● |
| 3,10 | 49 | 18 | 4 | ● |
| 3,20 | 49 | 18 | 4 | ● |
| 3,30 | 49 | 18 | 4 | ● |
| 3,40 | 52 | 20 | 4 | ● |
| 3,50 | 52 | 20 | 4 | ● |
| 3,60 | 52 | 20 | 4 | ● |
| 3,70 | 52 | 20 | 4 | ● |
| 3,80 | 55 | 22 | 4 | ● |
| 3,90 | 55 | 22 | 4 | ● |
| 4,00 | 55 | 22 | 4 | ● |

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| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 4,10 | 55 | 22 | 6 | ● |
| 4,20 | 55 | 22 | 6 | ● |
| 4,30 | 58 | 24 | 6 | ● |
| 4,40 | 58 | 24 | 6 | ● |
| 4,50 | 58 | 24 | 6 | ● |
| 4,60 | 58 | 24 | 6 | ● |
| 4,70 | 58 | 24 | 6 | ● |
| 4,80 | 62 | 26 | 6 | ● |
| 4,90 | 62 | 26 | 6 | ● |
| 5,00 | 62 | 26 | 6 | ● |
| 5,10 | 62 | 26 | 6 | ● |
| 5,20 | 62 | 26 | 6 | ● |
| 5,30 | 62 | 26 | 6 | ● |
| 5,40 | 66 | 28 | 6 | ● |
| 5,50 | 66 | 28 | 6 | ● |
| 5,60 | 66 | 28 | 6 | ● |
| 5,70 | 66 | 28 | 6 | ● |
| 5,80 | 66 | 28 | 6 | ● |
| 5,90 | 66 | 28 | 6 | ● |
| 6,00 | 66 | 28 | 6 | ● |
| 6,10 | 70 | 31 | 8 | ● |
| 6,20 | 70 | 31 | 8 | ● |
| 6,30 | 70 | 31 | 8 | ● |
| 6,40 | 70 | 31 | 8 | ● |
| 6,50 | 70 | 31 | 8 | ● |
| 6,60 | 70 | 31 | 8 | ● |
| 6,70 | 70 | 31 | 8 | ● |
| 6,80 | 74 | 34 | 8 | ● |
| 6,90 | 74 | 34 | 8 | ● |
| 7,00 | 74 | 34 | 8 | ● |
| 7,10 | 74 | 34 | 8 | ● |

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| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 7,20 | 74 | 34 | 8 | ● |
| 7,30 | 74 | 34 | 8 | ● |
| 7,40 | 74 | 34 | 8 | ● |
| 7,50 | 74 | 34 | 8 | ● |
| 7,60 | 79 | 37 | 8 | ● |
| 7,70 | 79 | 37 | 8 | ● |
| 7,80 | 79 | 37 | 8 | ● |
| 7,90 | 79 | 37 | 8 | ● |
| 8,00 | 79 | 37 | 8 | ● |
| 8,10 | 79 | 37 | 10 | ● |
| 8,20 | 79 | 37 | 10 | ● |
| 8,30 | 79 | 37 | 10 | ● |
| 8,40 | 79 | 37 | 10 | ● |
| 8,50 | 79 | 37 | 10 | ● |
| 8,60 | 84 | 40 | 10 | ● |
| 8,70 | 84 | 40 | 10 | ● |
| 8,80 | 84 | 40 | 10 | ● |
| 8,90 | 84 | 40 | 10 | ● |
| 9,00 | 84 | 40 | 10 | ● |
| 9,10 | 84 | 40 | 10 | ● |
| 9,20 | 84 | 40 | 10 | ● |
| 9,30 | 84 | 40 | 10 | ● |
| 9,40 | 84 | 40 | 10 | ● |
| 9,50 | 84 | 40 | 10 | ● |
| 9,60 | 89 | 43 | 10 | ● |
| 9,70 | 89 | 43 | 10 | ● |
| 9,80 | 89 | 43 | 10 | ● |
| 9,90 | 89 | 43 | 10 | ● |
| 10,00 | 89 | 43 | 10 | ● |
| 10,10 | 89 | 43 | 10 | ● |
| 10,20 | 89 | 43 | 10 | ● |

● Standardartikel / Items available ex stock

ähnlich / similar
DIN 1897



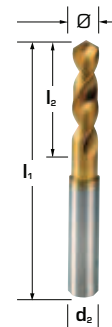
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA

HSS-Co Hochleistungs-Spiralbohrer extra kurz

HSS-Co High performance twist drills stub length

Record Evolution VA



| Kat.-Nr. / Cat.-No. | | | | 6134TN |
|--------------------------------------|----------------|----------------|----------------|--------|
| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 10,30 | 89 | 43 | 10 | ● |
| 10,40 | 89 | 43 | 10 | ● |
| 10,50 | 89 | 43 | 10 | ● |
| 10,60 | 89 | 43 | 12 | ● |
| 10,70 | 95 | 47 | 12 | ● |
| 10,80 | 95 | 47 | 12 | ● |
| 10,90 | 95 | 47 | 12 | ● |
| 11,00 | 95 | 47 | 12 | ● |
| 11,10 | 95 | 47 | 12 | ● |
| 11,20 | 95 | 47 | 12 | ● |
| 11,30 | 95 | 47 | 12 | ● |
| 11,40 | 95 | 47 | 12 | ● |
| 11,50 | 95 | 47 | 12 | ● |
| 11,60 | 95 | 47 | 12 | ● |
| 11,70 | 95 | 47 | 12 | ● |
| 11,80 | 95 | 47 | 12 | ● |
| 11,90 | 102 | 51 | 12 | ● |
| 12,00 | 102 | 51 | 12 | ● |
| 12,10 | 102 | 51 | 12 | ● |
| 12,20 | 102 | 51 | 12 | ● |
| 12,30 | 102 | 51 | 12 | ● |
| 12,40 | 102 | 51 | 12 | ● |
| 12,50 | 102 | 51 | 12 | ● |
| 12,60 | 102 | 51 | 12 | ● |
| 12,70 | 102 | 51 | 12 | ● |
| 12,80 | 102 | 51 | 12 | ● |
| 12,90 | 102 | 51 | 12 | ● |
| 13,00 | 102 | 51 | 12 | ● |
| 13,50 | 107 | 54 | 16 | ● |
| 14,00 | 107 | 54 | 16 | ● |
| 14,50 | 111 | 56 | 16 | ● |

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| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 15,00 | 111 | 56 | 16 | ● |
| 15,50 | 115 | 58 | 16 | ● |
| 16,00 | 115 | 58 | 16 | ● |
| 16,50 | 119 | 60 | 20 | ● |
| 17,00 | 119 | 60 | 20 | ● |
| 17,50 | 123 | 62 | 20 | ● |
| 18,00 | 123 | 62 | 20 | ● |
| 18,50 | 127 | 64 | 20 | ● |
| 19,00 | 127 | 64 | 20 | ● |
| 19,50 | 131 | 66 | 20 | ● |
| 20,00 | 131 | 66 | 20 | ● |

● Standardartikel / Items available ex stock

ähnlich / similar

DIN 338



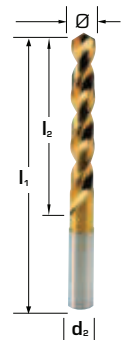
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA

HSS-Co Hochleistungs-Spiralbohrer kurz

HSS-Co High performance twist drills jobber length

Record Evolution VA



| Kat.-Nr. / Cat.-No. | | | | | 6229TN | Kat.-Nr. / Cat.-No. | | | | | 6229TN | Kat.-Nr. / Cat.-No. | | | | | 6229TN |
|--------------------------------------|----------------|----------------|----------------|---|------------|--------------------------------------|----------------|----------------|---|------------|----------------|--------------------------------------|----------------|---|--|--|--------|
| Typ / Type Record | | | | | VA | Typ / Type Record | | | | | VA | Typ / Type Record | | | | | VA |
| Schneidrichtung Cutting direction | | | | | | Schneidrichtung Cutting direction | | | | | | Schneidrichtung Cutting direction | | | | | |
| Schneidstoff / Material | | | | | HSS-Co | Schneidstoff / Material | | | | | HSS-Co | Schneidstoff / Material | | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | | Ø mm h8 | l ₁ | l ₂ | d ₂ | | Ø mm h8 | l ₁ | l ₂ | d ₂ | | | | |
| 1,00 | 34 | 12 | 3 | ● | 4,10 | 75 | 43 | 6 | ● | 7,20 | 109 | 69 | 8 | ● | | | |
| 1,10 | 34 | 12 | 3 | ● | 4,20 | 75 | 43 | 6 | ● | 7,30 | 109 | 69 | 8 | ● | | | |
| 1,20 | 38 | 16 | 3 | ● | 4,30 | 80 | 47 | 6 | ● | 7,40 | 109 | 69 | 8 | ● | | | |
| 1,30 | 38 | 16 | 3 | ● | 4,40 | 80 | 47 | 6 | ● | 7,50 | 109 | 69 | 8 | ● | | | |
| 1,40 | 40 | 17 | 3 | ● | 4,50 | 80 | 47 | 6 | ● | 7,60 | 117 | 75 | 8 | ● | | | |
| 1,50 | 40 | 17 | 3 | ● | 4,60 | 80 | 47 | 6 | ● | 7,70 | 117 | 75 | 8 | ● | | | |
| 1,60 | 43 | 20 | 3 | ● | 4,70 | 80 | 47 | 6 | ● | 7,80 | 117 | 75 | 8 | ● | | | |
| 1,70 | 43 | 20 | 3 | ● | 4,80 | 86 | 52 | 6 | ● | 7,90 | 117 | 75 | 8 | ● | | | |
| 1,80 | 46 | 22 | 3 | ● | 4,90 | 86 | 52 | 6 | ● | 8,00 | 117 | 75 | 8 | ● | | | |
| 1,90 | 46 | 22 | 3 | ● | 5,00 | 86 | 52 | 6 | ● | 8,10 | 117 | 75 | 10 | ● | | | |
| 2,00 | 49 | 25 | 3 | ● | 5,10 | 86 | 52 | 6 | ● | 8,20 | 117 | 75 | 10 | ● | | | |
| 2,10 | 49 | 25 | 3 | ● | 5,20 | 86 | 52 | 6 | ● | 8,30 | 117 | 75 | 10 | ● | | | |
| 2,20 | 53 | 28 | 3 | ● | 5,30 | 86 | 52 | 6 | ● | 8,40 | 117 | 75 | 10 | ● | | | |
| 2,30 | 53 | 28 | 3 | ● | 5,40 | 93 | 57 | 6 | ● | 8,50 | 117 | 75 | 10 | ● | | | |
| 2,40 | 57 | 31 | 3 | ● | 5,50 | 93 | 57 | 6 | ● | 8,60 | 125 | 81 | 10 | ● | | | |
| 2,50 | 57 | 31 | 3 | ● | 5,60 | 93 | 57 | 6 | ● | 8,70 | 125 | 81 | 10 | ● | | | |
| 2,60 | 57 | 31 | 3 | ● | 5,70 | 93 | 57 | 6 | ● | 8,80 | 125 | 81 | 10 | ● | | | |
| 2,70 | 61 | 34 | 3 | ● | 5,80 | 93 | 57 | 6 | ● | 8,90 | 125 | 81 | 10 | ● | | | |
| 2,80 | 61 | 34 | 3 | ● | 5,90 | 93 | 57 | 6 | ● | 9,00 | 125 | 81 | 10 | ● | | | |
| 2,90 | 61 | 34 | 3 | ● | 6,00 | 93 | 57 | 6 | ● | 9,10 | 125 | 81 | 10 | ● | | | |
| 3,00 | 61 | 33 | 3 | ● | 6,10 | 101 | 63 | 8 | ● | 9,20 | 125 | 81 | 10 | ● | | | |
| 3,10 | 65 | 36 | 4 | ● | 6,20 | 101 | 63 | 8 | ● | 9,30 | 125 | 81 | 10 | ● | | | |
| 3,20 | 65 | 36 | 4 | ● | 6,30 | 101 | 63 | 8 | ● | 9,40 | 125 | 81 | 10 | ● | | | |
| 3,30 | 65 | 36 | 4 | ● | 6,40 | 101 | 63 | 8 | ● | 9,50 | 125 | 81 | 10 | ● | | | |
| 3,40 | 70 | 39 | 4 | ● | 6,50 | 101 | 63 | 8 | ● | 9,60 | 133 | 87 | 10 | ● | | | |
| 3,50 | 70 | 39 | 4 | ● | 6,60 | 101 | 63 | 8 | ● | 9,70 | 133 | 87 | 10 | ● | | | |
| 3,60 | 70 | 39 | 4 | ● | 6,70 | 101 | 63 | 8 | ● | 9,80 | 133 | 87 | 10 | ● | | | |
| 3,70 | 70 | 39 | 4 | ● | 6,80 | 109 | 69 | 8 | ● | 9,90 | 133 | 87 | 10 | ● | | | |
| 3,80 | 75 | 43 | 4 | ● | 6,90 | 109 | 69 | 8 | ● | 10,00 | 133 | 87 | 10 | ● | | | |
| 3,90 | 75 | 43 | 4 | ● | 7,00 | 109 | 69 | 8 | ● | 10,10 | 133 | 87 | 10 | ● | | | |
| 4,00 | 75 | 43 | 4 | ● | 7,10 | 109 | 69 | 8 | ● | 10,20 | 133 | 87 | 10 | ● | | | |

● Standardartikel / Items available ex stock

1/2 ▶

ähnlich / similar
DIN 338

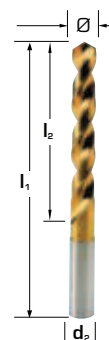


EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA

HSS-Co Hochleistungs-Spiralbohrer kurz
 HSS-Co High performance twist drills jobber length

Record Evolution VA



| Kat.-Nr. / Cat.-No. | | | | 6229TN |
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| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 10,30 | 133 | 87 | 10 | ● |
| 10,40 | 133 | 87 | 10 | ● |
| 10,50 | 133 | 87 | 10 | ● |
| 10,60 | 133 | 87 | 12 | ● |
| 10,70 | 142 | 94 | 12 | ● |
| 10,80 | 142 | 94 | 12 | ● |
| 10,90 | 142 | 94 | 12 | ● |
| 11,00 | 142 | 94 | 12 | ● |
| 11,10 | 142 | 94 | 12 | ● |
| 11,20 | 142 | 94 | 12 | ● |
| 11,30 | 142 | 94 | 12 | ● |
| 11,40 | 142 | 94 | 12 | ● |
| 11,50 | 142 | 94 | 12 | ● |
| 11,60 | 142 | 94 | 12 | ● |
| 11,70 | 142 | 94 | 12 | ● |
| 11,80 | 142 | 94 | 12 | ● |
| 11,90 | 142 | 94 | 12 | ● |
| 12,00 | 151 | 101 | 12 | ● |
| 12,10 | 151 | 101 | 12 | ● |
| 12,20 | 151 | 101 | 12 | ● |
| 12,30 | 151 | 101 | 12 | ● |
| 12,40 | 151 | 101 | 12 | ● |
| 12,50 | 151 | 101 | 12 | ● |
| 12,60 | 151 | 101 | 12 | ● |
| 12,70 | 151 | 101 | 12 | ● |
| 12,80 | 151 | 101 | 12 | ● |
| 12,90 | 151 | 101 | 12 | ● |
| 13,00 | 151 | 101 | 12 | ● |
| 13,50 | 160 | 108 | 16 | ● |
| 14,00 | 160 | 108 | 16 | ● |
| 14,50 | 169 | 114 | 16 | ● |

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|--------------------------------------|----------------|----------------|----------------|--------|
| Typ / Type Record | | | | VA |
| Schneidrichtung Cutting direction | | | | |
| Schneidstoff / Material | | | | HSS-Co |
| Ø mm h8 | l ₁ | l ₂ | d ₂ | |
| 15,00 | 169 | 114 | 16 | ● |
| 15,50 | 178 | 120 | 16 | ● |
| 16,00 | 178 | 120 | 16 | ● |
| 16,50 | 184 | 125 | 20 | ● |
| 17,00 | 184 | 125 | 20 | ● |
| 17,50 | 191 | 130 | 20 | ● |
| 18,00 | 191 | 130 | 20 | ● |
| 18,50 | 198 | 135 | 20 | ● |
| 19,00 | 198 | 135 | 20 | ● |
| 19,50 | 205 | 140 | 20 | ● |
| 20,00 | 205 | 140 | 20 | ● |

● Standardartikel / Items available ex stock