GÜHRING

RT 100 VA

Rostfreie Stähle einfach und sicher bohren!

Spitzenleistung bei

- **Verschleiß**
- **Standweg**
- **Stabilität**

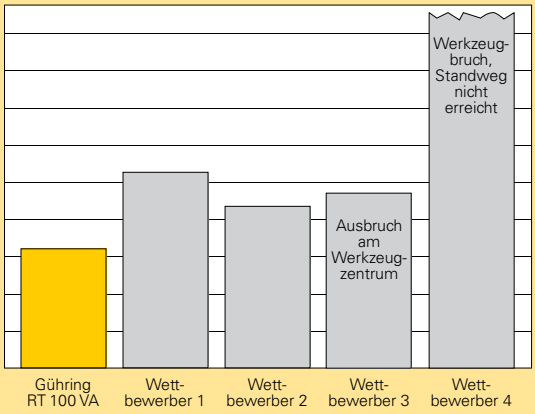
Ausgewählte Bearbeitungsergebnisse RT 100 VA

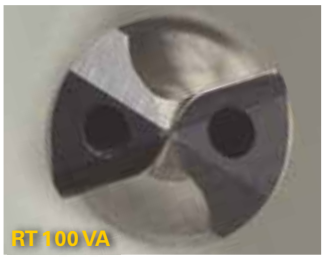
Art.-Nr.	8510	8511	8511	8611
Durchmesser	10,6	8,0	15,0	6,8
Beschichtung	TiAlN nanoA	TiAlN nanoA	TiAlN nanoA	TiAlN nanoA
Material-Gruppe	Rostfreier Stahl	Rostfreier Stahl	Rostfreier Stahl	Rostfreier Stahl
Material Bezeichnung	X10CrNiS18-9 1.4305	X5CrNi18 10 1.4301	X6CrNiMoTi17-12-2 1.4571	X6CrNiTi1810 1.4541
Bohrtiefe [mm]	9	34	58	28
Lochart	Sackloch	Durchgang	Sackloch	Sackloch
Kühlung	innen	innen	innen	innen
Schmierstoff	Öl	Emulsion	Emulsion	Emulsion
Maschinenart	Rundtakt	BAZ	BAZ	BAZ
v_c [m/min]	40	50	90	60
f [mm/U]	0,16	0,2	0,14	0,1
Standweg [m]	1800	190	63	150

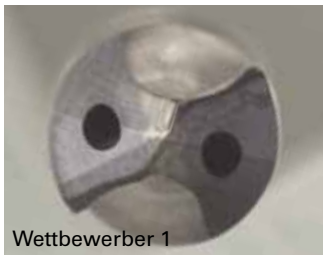
Verschleißentwicklung

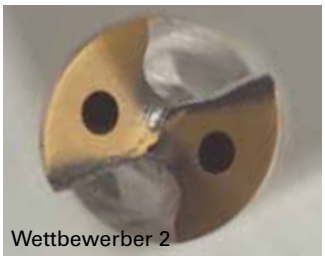
Seinen geringen Verschleiß dokumentierte der RT 100 VA in verschiedenen Einsatzvergleichen gegenüber Wettewerbswerkzeugen. Die unten stehende Grafik zeigt die Entwicklung der Verschleißmarkenbreite nach 100 m Standweg bei der Bearbeitung einer Platte für einen Wärmetauscher aus rostfreiem Stahl X6CrNiMoTi17-12-2 (1.4571). Während der Gühring RT 100 VA den geringsten Verschleiß und keine Ausbrüche im Werkzeugzentrum aufweist, lagen die Verschleißwerte bei den Wettbewerbswerkzeugen deutlich höher. Außerdem zeigten sich deutliche Ausbrüche im Zentrum. Ein weiteres Wettbewerbswerkzeug erreichte den geforderten Standweg nicht, sondern fiel wegen Werkzeugbruch vorzeitig aus.

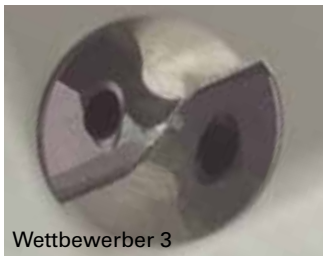
Entwickung Verschleißmarkenbreite nach 100 m Standweg











RT 100 VA

Für die Herstellung präziser Bohrungen in rostfreien Stählen mit höchsten Schnittwerten und langen Standwegen hat Gühring den neuen RT 100 VA entwickelt. Der RT 100 VA erreicht seine außergewöhnliche Leistungsfähigkeit durch

- sein speziell für die Bearbeitung von rostfreien Stählen entwickeltes Hartmetall.
- die verschleißfeste Beschichtung mit TiAlN nanoA.
- seine spezielle für die Bearbeitung von rostfreien Stählen entwickelte Geometrie.

Die mit dem RT 100 VA realisierbaren hohen Vorschübe führen außerdem zu einer optimalen Wärmeabfuhr über die Späne, die sehr gute Kühlschmierung durch die Kühlkanäle mit maximalem Querschnitt unterstützt die Wärme- sowie Spanabfuhr und wirkt der Randzonenaufhärtung zusätzlich entgegen.

Das Programm

Der RT 100 VA steht im Rahmen des Standardprogramms in vier Varianten zur Wahl:

Norm	Typ	Schaft-form	Kühlung	Schneid-richtung	Bohrtiefe	Toleranz	Werkzeug-Darstellung	Schneid-stoff	Ober-fläche	Durch-messer	Artikel Nr.
DIN 6537 K	RT 100 VA	HA		R	3xD	m7		VHM	TiAlN nanoA	3,00 - 20,00	**8510**
DIN 6537 K	RT 100 VA	HE		R	3xD	m7		VHM	TiAlN nanoA	3,00 - 20,00	**8610**
DIN 6537 L	RT 100 VA	HA		R	5xD	m7		VHM	TiAlN nanoA	3,00 - 20,00	**8511**
DIN 6537 L	RT 100 VA	HE		R	5xD	m7		VHM	TiAlN nanoA	3,00 - 20,00	**8611**

Sonderlösungen

Darüber liefern wir Sonderwerkzeuge mit Zwischenabmessungen oder als Stufenbohrer jederzeit nach Wunsch für Ihren spezifischen Anwendungsfall. Auch für Bohrtiefen größer 5xD sind entsprechende Auslegungen möglich. Verwenden Sie bitte das Formular auf Seite 15 oder sprechen Sie uns an!

Hinweise zum Einsatz

Die Schnittgeschwindigkeiten sollten nach Navigator gewählt werden, können aber stark von der jeweiligen Materialcharge abhängen. Bearbeitungsversuche sind daher für die Wahl der optimalen Schnittgeschwindigkeit unabdingbar.
Achten Sie aufgrund der hohen Arbeitsbelastung auf die maximale Stabilität von Maschine sowie Werkstück- und Werkzeugspannung. Wählen Sie immer das kürzest mögliche Werkzeug für Ihre Bearbeitung.

Anwendungsempfehlungen für Gühring RT 100 Hochleistungs-Ratiobohrer

Auf den folgenden Preis- und Programmseiten finden Sie zu jedem Werkzeug Empfehlungen zur Eignung für die nachfolgenden Anwendungsgruppen:

● optimal geeignet
○ bedingt geeignet
nicht geeignet

Anwendungsgruppe	Werkstoffbeispiele
P	Stahl, hochlegierter Stahl
M	Rostfreier Stahl
K	Grauguss, Sphäroguss und Temperguss
N	Aluminium und andere Nichteisenmetalle
S	Sonder-, Super- und Titanlegierungen
H	Gehärteter Stahl und Hartguss

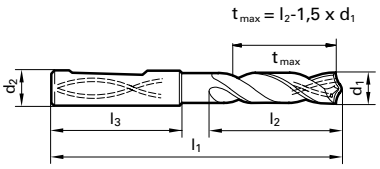
Piktogramme s. S. 14

RT 100 VA

VHM

DIN 6537 K | RT 100 VA | 3xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.



Artikel-Nr.	HA	HE
	8510	8610
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121

Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € HA	Stückpreis in € HE
3,000	3,000		6,000	62,000	20,000	36,000	69,00	71,00
3,100	3,100		6,000	62,000	20,000	36,000	74,00	76,00
3,170	3,170	1/8	6,000	62,000	20,000	36,000	74,00	76,00
3,200	3,200		6,000	62,000	20,000	36,000	74,00	76,00
3,250	3,250		6,000	62,000	20,000	36,000	74,00	76,00
3,300	3,300		6,000	62,000	20,000	36,000	74,00	76,00
3,400	3,400		6,000	62,000	20,000	36,000	74,00	76,00
3,500	3,500		6,000	62,000	20,000	36,000	74,00	76,00
3,570	3,570	9/64	6,000	62,000	20,000	36,000	74,00	76,00
3,600	3,600		6,000	62,000	20,000	36,000	74,00	76,00
3,700	3,700		6,000	62,000	20,000	36,000	74,00	76,00
3,800	3,800		6,000	66,000	24,000	36,000	74,00	76,00
3,900	3,900		6,000	66,000	24,000	36,000	74,00	76,00
3,970	3,970	5/32	6,000	66,000	24,000	36,000	74,00	76,00
4,000	4,000		6,000	66,000	24,000	36,000	75,00	78,00
4,100	4,100		6,000	66,000	24,000	36,000	80,00	83,00
4,200	4,200		6,000	66,000	24,000	36,000	80,00	83,00
4,300	4,300		6,000	66,000	24,000	36,000	80,00	83,00
4,370	4,370	11/64	6,000	66,000	24,000	36,000	80,00	83,00
4,400	4,400		6,000	66,000	24,000	36,000	80,00	83,00
4,500	4,500		6,000	66,000	24,000	36,000	80,00	83,00
4,600	4,600		6,000	66,000	24,000	36,000	80,00	83,00
4,650	4,650		6,000	66,000	24,000	36,000	80,00	83,00
4,700	4,700		6,000	66,000	24,000	36,000	80,00	83,00
4,760	4,760	3/16	6,000	66,000	28,000	36,000	80,00	83,00
4,800	4,800		6,000	66,000	28,000	36,000	80,00	83,00
4,900	4,900		6,000	66,000	28,000	36,000	80,00	83,00
5,000	5,000		6,000	66,000	28,000	36,000	75,00	78,00
5,100	5,100		6,000	66,000	28,000	36,000	80,00	83,00
5,160	5,160	13/64	6,000	66,000	28,000	36,000	80,00	83,00
5,200	5,200		6,000	66,000	28,000	36,000	80,00	83,00
5,300	5,300		6,000	66,000	28,000	36,000	80,00	83,00
5,400	5,400		6,000	66,000	28,000	36,000	80,00	83,00
5,500	5,500		6,000	66,000	28,000	36,000	80,00	83,00
5,550	5,550		6,000	66,000	28,000	36,000	80,00	83,00
5,560	5,560	7/32	6,000	66,000	28,000	36,000	80,00	83,00
5,600	5,600		6,000	66,000	28,000	36,000	80,00	83,00
5,700	5,700		6,000	66,000	28,000	36,000	80,00	83,00
5,800	5,800		6,000	66,000	28,000	36,000	80,00	83,00

Piktogramme s. S. 14

RT 100 VA

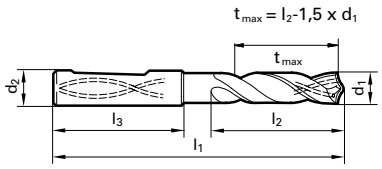
VHM

DIN 6537 K | RT 100 VA | 3xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.

Artikel-Nr.	8510	8610
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121

HA | HE



Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € 8510	Stückpreis in € 8610
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5,950	5,950	15/64	6,000	66,000	28,000	36,000	80,00	83,00
6,000	6,000		6,000	66,000	28,000	36,000	75,00	78,00
6,100	6,100		8,000	79,000	34,000	36,000	94,00	97,00
6,200	6,200		8,000	79,000	34,000	36,000	94,00	97,00
6,300	6,300		8,000	79,000	34,000	36,000	94,00	97,00
6,350	6,350	1/4	8,000	79,000	34,000	36,000	94,00	97,00
6,400	6,400		8,000	79,000	34,000	36,000	94,00	97,00
6,500	6,500		8,000	79,000	34,000	36,000	94,00	97,00
6,600	6,600		8,000	79,000	34,000	36,000	94,00	97,00
6,700	6,700		8,000	79,000	34,000	36,000	94,00	97,00
6,750	6,750	17/64	8,000	79,000	34,000	36,000	94,00	97,00
6,800	6,800		8,000	79,000	34,000	36,000	94,00	97,00
6,900	6,900		8,000	79,000	34,000	36,000	94,00	97,00
7,000	7,000		8,000	79,000	34,000	36,000	87,00	91,00
7,100	7,100		8,000	79,000	41,000	36,000	94,00	97,00
7,140	7,140	9/32	8,000	79,000	41,000	36,000	94,00	97,00
7,200	7,200		8,000	79,000	41,000	36,000	94,00	97,00
7,300	7,300		8,000	79,000	41,000	36,000	94,00	97,00
7,400	7,400		8,000	79,000	41,000	36,000	94,00	97,00
7,500	7,500		8,000	79,000	41,000	36,000	94,00	97,00
7,540	7,540	19/64	8,000	79,000	41,000	36,000	94,00	97,00
7,600	7,600		8,000	79,000	41,000	36,000	94,00	97,00
7,700	7,700		8,000	79,000	41,000	36,000	94,00	97,00
7,800	7,800		8,000	79,000	41,000	36,000	94,00	97,00
7,900	7,900		8,000	79,000	41,000	36,000	94,00	97,00
7,940	7,940	5/16	8,000	79,000	41,000	36,000	94,00	97,00
8,000	8,000		8,000	79,000	41,000	36,000	87,00	91,00
8,100	8,100		10,000	89,000	47,000	40,000	109,00	114,00
8,200	8,200		10,000	89,000	47,000	40,000	109,00	114,00
8,300	8,300		10,000	89,000	47,000	40,000	109,00	114,00
8,330	8,330	21/64	10,000	89,000	47,000	40,000	109,00	114,00
8,400	8,400		10,000	89,000	47,000	40,000	109,00	114,00
8,500	8,500		10,000	89,000	47,000	40,000	109,00	114,00
8,600	8,600		10,000	89,000	47,000	40,000	109,00	114,00
8,700	8,700		10,000	89,000	47,000	40,000	109,00	114,00
8,730	8,730	11/32	10,000	89,000	47,000	40,000	109,00	114,00
8,800	8,800		10,000	89,000	47,000	40,000	109,00	114,00
8,900	8,900		10,000	89,000	47,000	40,000	109,00	114,00

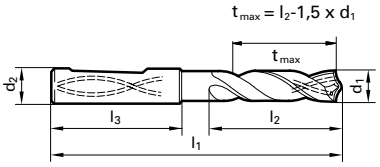
Piktogramme s. S. 14

RT 100 VA

VHM

DIN 6537 K | RT 100 VA | 3xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.



Artikel-Nr.	HA	HE
	8510	8610
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121

Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € HA	Stückpreis in € HE
9,000	9,000		10,000	89,000	47,000	40,000	100,00	104,00
9,100	9,100		10,000	89,000	47,000	40,000	109,00	114,00
9,130	9,130	23/64	10,000	89,000	47,000	40,000	109,00	114,00
9,200	9,200		10,000	89,000	47,000	40,000	109,00	114,00
9,250	9,250		10,000	89,000	47,000	40,000	109,00	114,00
9,300	9,300		10,000	89,000	47,000	40,000	109,00	114,00
9,400	9,400		10,000	89,000	47,000	40,000	109,00	114,00
9,500	9,500		10,000	89,000	47,000	40,000	109,00	114,00
9,520	9,520	3/8	10,000	89,000	47,000	40,000	109,00	114,00
9,600	9,600		10,000	89,000	47,000	40,000	109,00	114,00
9,700	9,700		10,000	89,000	47,000	40,000	109,00	114,00
9,800	9,800		10,000	89,000	47,000	40,000	109,00	114,00
9,900	9,900		10,000	89,000	47,000	40,000	109,00	114,00
9,920	9,920	25/64	10,000	89,000	47,000	40,000	109,00	114,00
10,000	10,000		10,000	89,000	47,000	40,000	109,00	104,00
10,100	10,100		12,000	102,000	55,000	45,000	151,00	155,00
10,200	10,200		12,000	102,000	55,000	45,000	151,00	155,00
10,300	10,300		12,000	102,000	55,000	45,000	151,00	155,00
10,320	10,320	13/32	12,000	102,000	55,000	45,000	151,00	155,00
10,400	10,400		12,000	102,000	55,000	45,000	151,00	155,00
10,500	10,500		12,000	102,000	55,000	45,000	151,00	155,00
10,600	10,600		12,000	102,000	55,000	45,000	151,00	155,00
10,700	10,700		12,000	102,000	55,000	45,000	151,00	155,00
10,800	10,800		12,000	102,000	55,000	45,000	151,00	155,00
10,900	10,900		12,000	102,000	55,000	45,000	151,00	155,00
11,000	11,000		12,000	102,000	55,000	45,000	141,00	145,00
11,100	11,100		12,000	102,000	55,000	45,000	151,00	155,00
11,110	11,110	7/16	12,000	102,000	55,000	45,000	151,00	155,00
11,200	11,200		12,000	102,000	55,000	45,000	151,00	155,00
11,300	11,300		12,000	102,000	55,000	45,000	151,00	155,00
11,400	11,400		12,000	102,000	55,000	45,000	151,00	155,00
11,500	11,500		12,000	102,000	55,000	45,000	151,00	155,00
11,600	11,600		12,000	102,000	55,000	45,000	151,00	155,00
11,700	11,700		12,000	102,000	55,000	45,000	151,00	155,00
11,800	11,800		12,000	102,000	55,000	45,000	151,00	155,00
11,900	11,900		12,000	102,000	55,000	45,000	151,00	155,00
11,910	11,910	15/32	12,000	102,000	55,000	45,000	151,00	155,00
12,000	12,000		12,000	102,000	55,000	45,000	141,00	145,00
12,200	12,200		14,000	107,000	60,000	45,000	192,00	202,00

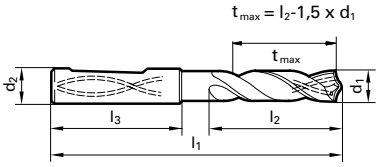
Piktogramme s. S. 14

RT 100 VA

VHM

DIN 6537 K | RT 100 VA | 3xD | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.



Artikel-Nr.	HA	HE
	8510	8610
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121

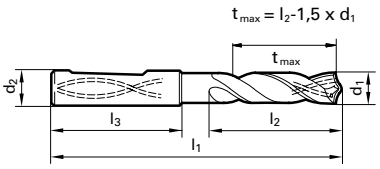
Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € HA	Stückpreis in € HE
12,500	12,500		14,000	107,000	60,000	45,000	**192,00**	**202,00**
12,700	12,700	1/2	14,000	107,000	60,000	45,000	**192,00**	**202,00**
12,800	12,800		14,000	107,000	60,000	45,000	**192,00**	**202,00**
13,000	13,000		14,000	107,000	60,000	45,000	**179,00**	**188,00**
13,300	13,300		14,000	107,000	60,000	45,000	**192,00**	**202,00**
13,500	13,500		14,000	107,000	60,000	45,000	**192,00**	**202,00**
13,700	13,700		14,000	107,000	60,000	45,000	**192,00**	**202,00**
14,000	14,000		14,000	107,000	60,000	45,000	**179,00**	**188,00**
14,200	14,200		16,000	115,000	65,000	48,000	**236,00**	**246,00**
14,290	14,290	9/16	16,000	115,000	65,000	48,000	**236,00**	**246,00**
14,300	14,300		16,000	115,000	65,000	48,000	**236,00**	**246,00**
14,500	14,500		16,000	115,000	65,000	48,000	**236,00**	**246,00**
14,700	14,700		16,000	115,000	65,000	48,000	**236,00**	**246,00**
15,000	15,000		16,000	115,000	65,000	48,000	**236,00**	**246,00**
15,200	15,200		16,000	115,000	65,000	48,000	**236,00**	**246,00**
15,300	15,300		16,000	115,000	65,000	48,000	**236,00**	**246,00**
15,500	15,500		16,000	115,000	65,000	48,000	**236,00**	**246,00**
15,700	15,700		16,000	115,000	65,000	48,000	**236,00**	**246,00**
16,000	16,000		16,000	115,000	65,000	48,000	**222,00**	**232,00**
16,300	16,300		18,000	123,000	73,000	48,000	**342,00**	**352,00**
16,500	16,500		18,000	123,000	73,000	48,000	**342,00**	**352,00**
16,900	16,900		18,000	123,000	73,000	48,000	**342,00**	**352,00**
17,000	17,000		18,000	123,000	73,000	48,000	**308,00**	**328,00**
17,300	17,300		18,000	123,000	73,000	48,000	**342,00**	**352,00**
17,500	17,500		18,000	123,000	73,000	48,000	**342,00**	**352,00**
18,000	18,000		18,000	123,000	73,000	48,000	**308,00**	**328,00**
18,500	18,500		20,000	131,000	79,000	50,000	**426,00**	**442,00**
18,900	18,900		20,000	131,000	79,000	50,000	**426,00**	**442,00**
19,000	19,000		20,000	131,000	79,000	50,000	**404,00**	**420,00**
19,050	19,050	3/4	20,000	131,000	79,000	50,000	**426,00**	**442,00**
19,300	19,300		20,000	131,000	79,000	50,000	**426,00**	**442,00**
19,500	19,500		20,000	131,000	79,000	50,000	**426,00**	**442,00**
20,000	20,000		20,000	131,000	79,000	50,000	**404,00**	**420,00**

Piktogramme s. S. 14

DIN 6537 L | RT 100 VA | 5xD | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.

Artikel-Nr.	8511	8611
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121



Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	HA Stückpreis in €	HE Stückpreis in €
3,000	3,000		6,000	66,000	28,000	36,000	84,00	86,00
3,100	3,100		6,000	66,000	28,000	36,000	89,00	91,00
3,170	3,170	1/8	6,000	66,000	28,000	36,000	89,00	91,00
3,200	3,200		6,000	66,000	28,000	36,000	89,00	91,00
3,250	3,250		6,000	66,000	28,000	36,000	89,00	91,00
3,300	3,300		6,000	66,000	28,000	36,000	89,00	91,00
3,400	3,400		6,000	66,000	28,000	36,000	89,00	91,00
3,500	3,500		6,000	66,000	28,000	36,000	89,00	91,00
3,570	3,570	9/64	6,000	66,000	28,000	36,000	89,00	91,00
3,600	3,600		6,000	66,000	28,000	36,000	89,00	91,00
3,700	3,700		6,000	66,000	28,000	36,000	89,00	91,00
3,800	3,800		6,000	74,000	36,000	36,000	89,00	91,00
3,900	3,900		6,000	74,000	36,000	36,000	89,00	91,00
3,970	3,970	5/32	6,000	74,000	36,000	36,000	89,00	91,00
4,000	4,000		6,000	74,000	36,000	36,000	91,00	94,00
4,100	4,100		6,000	74,000	36,000	36,000	96,00	99,00
4,200	4,200		6,000	74,000	36,000	36,000	96,00	99,00
4,300	4,300		6,000	74,000	36,000	36,000	96,00	99,00
4,370	4,370	11/64	6,000	74,000	36,000	36,000	96,00	99,00
4,400	4,400		6,000	74,000	36,000	36,000	96,00	99,00
4,500	4,500		6,000	74,000	36,000	36,000	96,00	99,00
4,600	4,600		6,000	74,000	36,000	36,000	96,00	99,00
4,650	4,650		6,000	74,000	36,000	36,000	96,00	99,00
4,700	4,700		6,000	74,000	36,000	36,000	96,00	99,00
4,760	4,760	3/16	6,000	82,000	44,000	36,000	96,00	99,00
4,800	4,800		6,000	82,000	44,000	36,000	96,00	99,00
4,900	4,900		6,000	82,000	44,000	36,000	96,00	99,00
5,000	5,000		6,000	82,000	44,000	36,000	91,00	94,00
5,100	5,100		6,000	82,000	44,000	36,000	96,00	99,00
5,160	5,160	13/64	6,000	82,000	44,000	36,000	96,00	99,00
5,200	5,200		6,000	82,000	44,000	36,000	96,00	99,00
5,300	5,300		6,000	82,000	44,000	36,000	96,00	99,00
5,400	5,400		6,000	82,000	44,000	36,000	96,00	99,00
5,500	5,500		6,000	82,000	44,000	36,000	96,00	99,00
5,550	5,550		6,000	82,000	44,000	36,000	96,00	99,00
5,560	5,560	7/32	6,000	82,000	44,000	36,000	96,00	99,00
5,600	5,600		6,000	82,000	44,000	36,000	96,00	99,00
5,700	5,700		6,000	82,000	44,000	36,000	96,00	99,00
5,800	5,800		6,000	82,000	44,000	36,000	96,00	99,00

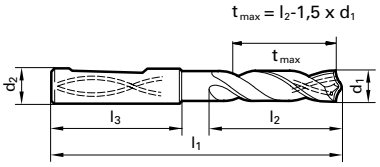
Piktogramme s. S. 14

RT 100 VA

VHM

DIN 6537 L | RT 100 VA | 5xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.



Artikel-Nr.	HA	HE
	8511	8611
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121

Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € HA	Stückpreis in € HE
5,900	5,900		6,000	82,000	44,000	36,000	96,00	99,00
5,950	5,950	15/64	6,000	82,000	44,000	36,000	96,00	99,00
6,000	6,000		6,000	82,000	44,000	36,000	91,00	94,00
6,100	6,100		8,000	91,000	53,000	36,000	114,00	117,00
6,200	6,200		8,000	91,000	53,000	36,000	114,00	117,00
6,300	6,300		8,000	91,000	53,000	36,000	114,00	117,00
6,350	6,350	1/4	8,000	91,000	53,000	36,000	114,00	117,00
6,400	6,400		8,000	91,000	53,000	36,000	114,00	117,00
6,500	6,500		8,000	91,000	53,000	36,000	114,00	117,00
6,600	6,600		8,000	91,000	53,000	36,000	114,00	117,00
6,700	6,700		8,000	91,000	53,000	36,000	114,00	117,00
6,750	6,750	17/64	8,000	91,000	53,000	36,000	114,00	117,00
6,800	6,800		8,000	91,000	53,000	36,000	114,00	117,00
6,900	6,900		8,000	91,000	53,000	36,000	114,00	117,00
7,000	7,000		8,000	91,000	53,000	36,000	106,00	109,00
7,100	7,100		8,000	91,000	53,000	36,000	114,00	117,00
7,140	7,140	9/32	8,000	91,000	53,000	36,000	114,00	117,00
7,200	7,200		8,000	91,000	53,000	36,000	114,00	117,00
7,300	7,300		8,000	91,000	53,000	36,000	114,00	117,00
7,400	7,400		8,000	91,000	53,000	36,000	114,00	117,00
7,500	7,500		8,000	91,000	53,000	36,000	114,00	117,00
7,540	7,540	19/64	8,000	91,000	53,000	36,000	114,00	117,00
7,600	7,600		8,000	91,000	53,000	36,000	114,00	117,00
7,700	7,700		8,000	91,000	53,000	36,000	114,00	117,00
7,800	7,800		8,000	91,000	53,000	36,000	114,00	117,00
7,900	7,900		8,000	91,000	53,000	36,000	114,00	117,00
7,940	7,940	5/16	8,000	91,000	53,000	36,000	114,00	117,00
8,000	8,000		8,000	91,000	53,000	36,000	106,00	109,00
8,100	8,100		10,000	103,000	61,000	40,000	133,00	136,00
8,200	8,200		10,000	103,000	61,000	40,000	133,00	136,00
8,300	8,300		10,000	103,000	61,000	40,000	133,00	136,00
8,330	8,330	21/64	10,000	103,000	61,000	40,000	133,00	136,00
8,400	8,400		10,000	103,000	61,000	40,000	133,00	136,00
8,500	8,500		10,000	103,000	61,000	40,000	133,00	136,00
8,600	8,600		10,000	103,000	61,000	40,000	133,00	136,00
8,700	8,700		10,000	103,000	61,000	40,000	133,00	136,00
8,730	8,730	11/32	10,000	103,000	61,000	40,000	133,00	136,00
8,800	8,800		10,000	103,000	61,000	40,000	133,00	136,00
8,900	8,900		10,000	103,000	61,000	40,000	133,00	136,00

Piktogramme s. S. 14

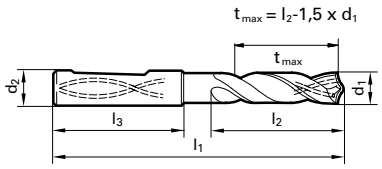
RT 100 VA

VHM

DIN 6537 L | RT 100 VA | 5xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.

Artikel-Nr.	8511	8611
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121



Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € 8511	Stückpreis in € 8611
9,000	9,000		10,000	103,000	61,000	40,000	122,00	125,00
9,100	9,100		10,000	103,000	61,000	40,000	133,00	136,00
9,130	9,130	23/64	10,000	103,000	61,000	40,000	133,00	136,00
9,200	9,200		10,000	103,000	61,000	40,000	133,00	136,00
9,250	9,250		10,000	103,000	61,000	40,000	133,00	136,00
9,300	9,300		10,000	103,000	61,000	40,000	133,00	136,00
9,400	9,400		10,000	103,000	61,000	40,000	133,00	136,00
9,500	9,500		10,000	103,000	61,000	40,000	133,00	136,00
9,520	9,520	3/8	10,000	103,000	61,000	40,000	133,00	136,00
9,600	9,600		10,000	103,000	61,000	40,000	133,00	136,00
9,700	9,700		10,000	103,000	61,000	40,000	133,00	136,00
9,800	9,800		10,000	103,000	61,000	40,000	133,00	136,00
9,900	9,900		10,000	103,000	61,000	40,000	133,00	136,00
9,920	9,920	25/64	10,000	103,000	61,000	40,000	133,00	136,00
10,000	10,000		10,000	103,000	61,000	40,000	122,00	125,00
10,100	10,100		12,000	118,000	71,000	45,000	182,00	186,00
10,200	10,200		12,000	118,000	71,000	45,000	182,00	186,00
10,300	10,300		12,000	118,000	71,000	45,000	182,00	186,00
10,320	10,320	13/32	12,000	118,000	71,000	45,000	182,00	186,00
10,400	10,400		12,000	118,000	71,000	45,000	182,00	186,00
10,500	10,500		12,000	118,000	71,000	45,000	182,00	186,00
10,600	10,600		12,000	118,000	71,000	45,000	182,00	186,00
10,700	10,700		12,000	118,000	71,000	45,000	182,00	186,00
10,800	10,800		12,000	118,000	71,000	45,000	182,00	186,00
10,900	10,900		12,000	118,000	71,000	45,000	182,00	186,00
11,000	11,000		12,000	118,000	71,000	45,000	169,00	174,00
11,100	11,100		12,000	118,000	71,000	45,000	182,00	186,00
11,110	11,110	7/16	12,000	118,000	71,000	45,000	182,00	186,00
11,200	11,200		12,000	118,000	71,000	45,000	182,00	186,00
11,300	11,300		12,000	118,000	71,000	45,000	182,00	186,00
11,400	11,400		12,000	118,000	71,000	45,000	182,00	186,00
11,500	11,500		12,000	118,000	71,000	45,000	182,00	186,00
11,600	11,600		12,000	118,000	71,000	45,000	182,00	186,00
11,700	11,700		12,000	118,000	71,000	45,000	182,00	186,00
11,800	11,800		12,000	118,000	71,000	45,000	182,00	186,00
11,900	11,900		12,000	118,000	71,000	45,000	182,00	186,00
11,910	11,910	15/32	12,000	118,000	71,000	45,000	182,00	186,00
12,000	12,000		12,000	118,000	71,000	45,000	169,00	174,00
12,200	12,200		14,000	124,000	77,000	45,000	232,00	242,00

Piktogramme s. S. 14

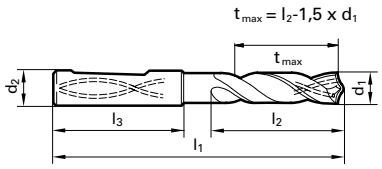
RT 100 VA

VHM

DIN 6537 L | RT 100 VA | 5xD | R | m7

Bestell-Nr. = Artikel-Nr. + Code-Nr.

Artikel-Nr.	8511	8611
P		
M	●	●
K		
N		
S	●	●
H		
Oberfläche	TiAlN nanoA	TiAlN nanoA
Rabattgruppe	121	121



Code-Nr.	d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Stückpreis in € 8511	Stückpreis in € 8611
12,500	12,500		14,000	124,000	77,000	45,000	232,00	242,00
12,700	12,700	1/2	14,000	124,000	77,000	45,000	232,00	242,00
12,800	12,800		14,000	124,000	77,000	45,000	232,00	242,00
13,000	13,000		14,000	124,000	77,000	45,000	220,00	224,00
13,300	13,300		14,000	124,000	77,000	45,000	232,00	242,00
13,500	13,500		14,000	124,000	77,000	45,000	232,00	242,00
13,700	13,700		14,000	124,000	77,000	45,000	232,00	242,00
14,000	14,000		14,000	124,000	77,000	45,000	220,00	224,00
14,200	14,200		16,000	133,000	83,000	48,000	284,00	294,00
14,290	14,290	9/16	16,000	133,000	83,000	48,000	284,00	294,00
14,300	14,300		16,000	133,000	83,000	48,000	284,00	294,00
14,500	14,500		16,000	133,000	83,000	48,000	284,00	294,00
14,700	14,700		16,000	133,000	83,000	48,000	284,00	294,00
15,000	15,000		16,000	133,000	83,000	48,000	266,00	272,00
15,200	15,200		16,000	133,000	83,000	48,000	284,00	294,00
15,300	15,300		16,000	133,000	83,000	48,000	284,00	294,00
15,500	15,500		16,000	133,000	83,000	48,000	284,00	294,00
15,700	15,700		16,000	133,000	83,000	48,000	284,00	294,00
16,000	16,000		16,000	133,000	83,000	48,000	266,00	272,00
16,300	16,300		18,000	143,000	93,000	48,000	412,00	426,00
16,500	16,500		18,000	143,000	93,000	48,000	412,00	426,00
16,900	16,900		18,000	143,000	93,000	48,000	412,00	426,00
17,000	17,000		18,000	143,000	93,000	48,000	380,00	392,00
17,300	17,300		18,000	143,000	93,000	48,000	412,00	426,00
17,500	17,500		18,000	143,000	93,000	48,000	412,00	426,00
18,000	18,000		18,000	143,000	93,000	48,000	380,00	392,00
18,500	18,500		20,000	153,000	101,000	50,000	520,00	540,00
18,900	18,900		20,000	153,000	101,000	50,000	520,00	540,00
19,000	19,000		20,000	153,000	101,000	50,000	482,00	494,00
19,050	19,050	3/4	20,000	153,000	101,000	50,000	520,00	540,00
19,300	19,300		20,000	153,000	101,000	50,000	520,00	540,00
19,500	19,500		20,000	153,000	101,000	50,000	520,00	540,00
20,000	20,000		20,000	153,000	101,000	50,000	482,00	494,00

Piktogramme s. S. 14

Allgemeine Hinweise:
Leistungsstarke Maschinen, spielarme Spindeln, fluchtungsgenaue Werkzeugaufnahmen, Rundlauffehler der Werkzeuge im eingespannten Zustand max. 0,02 mm, hohe Kühlmitteldrücke. Wir empfehlen die Anwendung von Hydraulik-Dehnspannfuttern oder Schrumpffutter.

Hinweise zur Kühlung:
Wir empfehlen Kühlschmierung durch Emulsion oder Öl. Alternativ kann unter bestimmten Voraussetzungen auch mit Luftkühlung gearbeitet werden. Statt Luftkühlung würden wir jedoch immer den Einsatz unter MMS-Bedingungen bevorzugen, für den die Werkzeuge besonders geeignet sind. Bei MMS-Einsatz empfehlen wir die Verwendung des kegeligen MMS-Schaftendes sowie der Gühring MMS-Einbauteile. Unser Außendienst berät Sie gerne.

Bohrer-Ø mm	Vorschubreihen-Code								
	1	2	3	4	5	6	7	8	9
	f (mm/U)								
2,50	0,025	0,032	0,040	0,050	0,063	0,080	0,100	0,125	0,160
3,15	0,032	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,160
4,00	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,200
5,00	0,040	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,250
6,30	0,050	0,063	0,080	0,100	0,125	0,160	0,200	0,250	0,315
8,00	0,063	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,315
10,00	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,400
12,50	0,080	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,500
16,00	0,100	0,125	0,160	0,200	0,250	0,315	0,400	0,500	0,630
20,00	0,125	0,160	0,200	0,250	0,315	0,400	0,500	0,630	0,630
25,00	0,160	0,200	0,250	0,315	0,400	0,500	0,630	0,800	0,800

Werkstoffgruppe	Werkstoffbeispiele, **neue Bezeichnung** (in Klammern alte Bezeichnung) *Fettgedruckte Zahlen = Werkstoff-Nr. nach DIN EN*	Zugfestigkeit MPa (N/mm²) Härte	Kühlmittel
Allgemeine Baustähle	**1.0035** S185(St33),**1.0486** P275N(StE285),**1.0345** P235GH(H1),**1.0425** P265GH(H2) **1.0050** E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤500 >500-850	● ●
Automatenstähle	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36) **1.0727** 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤850 850-1000	● ●
Unlegierte Vergütungsstähle	**1.0402** C22, **1.1178** C30E (Ck30) **1.0503** C45, **1.1191** C45E (Ck45) **1.0601** C60, **1.1221** C60E (Ck60)	≤ 700 700-850 850-1000	● ● ●
Legierte Vergütungsstähle	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4 **1.5710** 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	850-≤1000 1000-1200	● ●
Unlegierte Einsatzstähle	**1.0301** (C10), **1.1121** C10E (Ck10)	≤750	●
Legierte Einsatzstähle	**1.7043** 38Cr4 **1.5752** 15NiCr13 (15NiCr13), **1.7131** 16MnCr5, **1.7264** 20CrMo5	850-≤1000 1000-1200	● ●
Nitrierstähle	**1.8504** 34CrAl6 **1.8519** 31CrMoV9, **1.8550** 34CrAlNi7	≥850-≤1000 >1000-1200	● ●
Werkzeugstähle	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9 **1.2080** X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤850 >850-1000	● ●
Schnellarbeitsstähle	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≥650-1000	●
Federstähle	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)	≤330 HB	●
Rostfreie Stähle, geschwefelt austenitisch martensitisch	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9 **1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A) **1.4057** X20CrNi 17 2 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤850 ≤850 ≤850	● ● ●
Gehärtete Stähle	–	≤40-48 HRC >48-60 HRC	● ●
Sonderlegierungen	Nimonic, Inconel, Monel, Hastelloy	≤1200	●
Gusseisen	**0.6010** EN-GJL-100(GG10), **0.6020** EN-GJL-200(GG20) **0.6025** EN-GJL-250(GG25), **0.6035** EN-GJL-350(GG35)	≤240 HB <300 HB	◐○ ◐○
Neue Gusswerkstoffe GGV	**EN-GJV250 (GGV25)**, **EN-GJV350** (GGV35) **EN-GJV400** (GGV40), **EN-GJV500** (GGV50), SiMo 6	≤220 HB <300 HB	◐○ ◐○
Neue Gusswerkstoffe ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000) **EN-GJS-1200-2** (ADI1200), **EN-GJS-1400-1** (ADI1400)	800-1000 1200-1400	◐○ ◐○
Kugelgraphit- und Temperguss	**0.7050** EN-GJS-500-7(GGG50), **0.8035** EN-GJMW-350-4(GTW35) **0.7070** EN-GJS-700-2(GGG70), **0.8170** EN-GJMB-700-2(GTS70)	≤240 HB <300 HB	● ●
Hartguss	–	≤350 HB	●
Titan und Titan-Legierungen	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2 **3.7154** TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤850 >850-1200	● ●
Aluminium und Al-Legierungen	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400	●
Al-Knetlegierungen	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤450	●
Al-Gusslegierungen ≤ 10 % Si > 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9 **3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600 ≤600	● ●
Magnesium-Legierungen	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤450	○
Kupfer, niedriglegiert	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤400	●
Messing, kurzspanend langspanend	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2 **2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600 ≤600	● ●
Bronzen, kurzspanend	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn **2.0790** CuNi18Zn19Pb	≤600 >600-850	◐● ●
Bronzen, langspanend	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10 **2.0980** CuAl11Ni, **2.1247** CuBe2	≤850 >850-1000	● ●

≤3×D Bohrtiefe

Schneidstoff		VHM	VHM	VHM	VHM	VHM	VHM
HM-Anwend.gr.		K	K	K	K	K	K
Typ		RT 100 VA	RT 100 VA	RT 100 VA	RT 100 VA	RT 100 VA	RT 100 VA
Oberfläche		TiAlN nanoA	TiAlN nanoA	TiAlN nanoA	TiAlN nanoA	TiAlN nanoA	TiAlN nanoA
Kühlung		■	■	■	■	■	■
Art.	DIN HA R	**8510**	**8510**	**8511**	**8511**	**8511**	**8511**
	6537 HE R	**8610**	**8610**	**8611**	**8611**	**8611**	**8611**
für Ø-Bereich		d1 ≤ 10 mm	d1 > 10 mm	d1 ≤ 10 mm	d1 > 10 mm	d1 ≤ 10 mm	d1 > 10 mm

v_c m/min	Vorschubreihen-Code	v_c m/min	Vorschubreihen-Code	v_c m/min	Vorschubreihen-Code	v_c m/min	Vorschubreihen-Code
80	**5**	*80*	**5**	*80*	**5**	*80*	**5**
60	**3**	*90*	**2**	*60*	**3**	*90*	**2**
80	**5**	*80*	**5**	*80*	**5**	*80*	**5**
30	**2**	*30*	**2**	*30*	**2**	*30*	**2**
35	2	*35*	2	*35*	2	*35*	2

Piktogramme

Schneidstoff	VHM
	Vollhartmetall Feinstkorn (HM-UF)
Norm	DIN 6537 K, DIN 6537 L
	nach DIN
Typ	RT 100 VA
Kühlung	
	mit Innenkühlung
Schneidrichtung	R
	rechtsschneidend
Bohrtiefe	3xD, 5xD
	maximale Bohrtiefe, bezogen auf den Nenndurchmesser
Toleranz	m7
	Bohrungstoleranz
Schaftform	HA, HE
	nach DIN 6535

☐ **Bestellung** ☐ **Anfrage**

Ansprechpartner für Rückfragen

Name / falls vorhanden Kunden-Nr. Neukunde

Bestellnummer

Straße / Hausnummer

PLZ / Ort

Telefon

Telefax

Datum

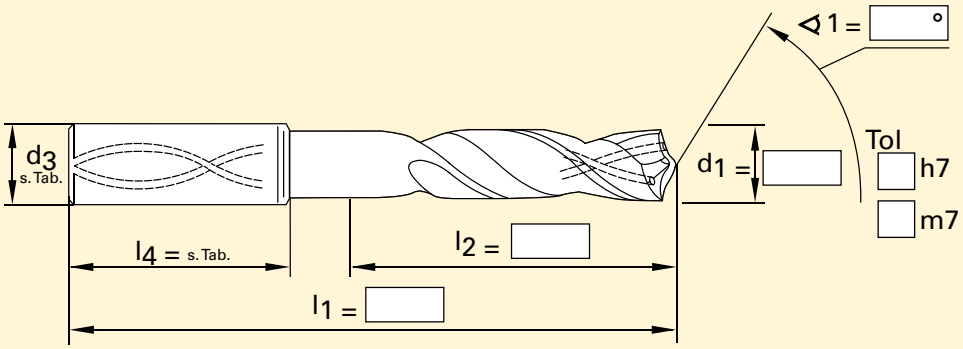
Unterschrift

Stückzahl

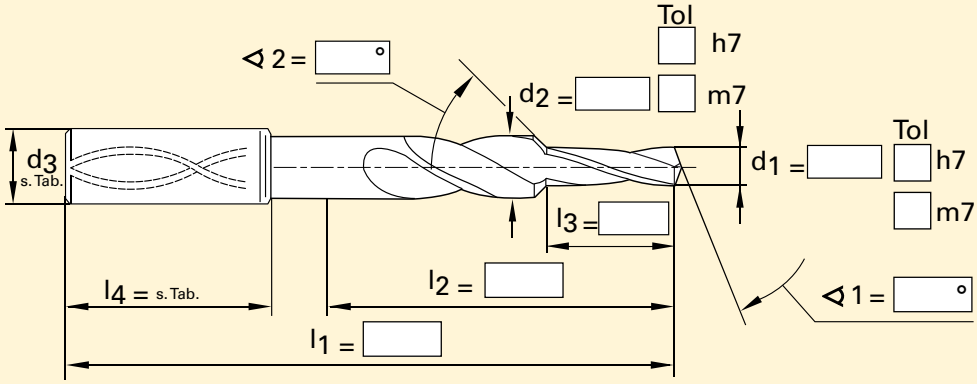
Werkzeugtyp

☐ RT 100 VA (spiralisiert)

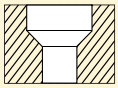
Baumaße

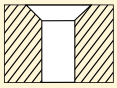


Stufen-ausführung



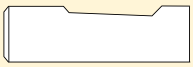
Bearbeitung

☐  Stufenbohrung

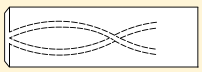
☐  Bohrung und Senkung

Schaftform

☐ HA

☐  HE

Kühlung intern

☐  Ja

☐ Nein

Beschichtung

☐ nanoA ☐ blank

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