DORMER PRAMET™

Force X Generation 2

Vollhartmetall-Multimaterial-Bohrer

Certainty at every turn™

Hochleistungs-Vollhartmetallbohrer für verschiedene Materialien

Höhere Produktivität durch Vielseitigkeit und Langlebigkeit

Wir stellen die Force X Generation 2 vor - die perfekte Lösung für anspruchsvolle Bohranwendungen.
Diese Serie ist sowohl mit und ohne IKZ Ausführung erhältlich und umfasst 3xD, 5xD und 8xD für unterschiedliche Bohrtiefen.
Diese Vollhartmetallbohrer verfügen über eine 140° selbstzentrierende 4-Facetten-Spitze und ein fortschrittliches CTW-Nutendesign, das eine überragende Bohrungsqualität in verschiedenen Materialien liefert (H9 Bohrungstoleranz). Mit einer TiAlN-Beschichtung an der Spitze, die die Härte erhöht und die Standzeit verlängert, gewährleistet Force X Generation 2 eine zuverlässige Leistung auch bei anspruchsvollen Anwendungen in den ISO-Materialgruppen P, M und K.

Ähnliche Produkte

RC408

8xD

3 – 16 mm

TiAlN-Top-Beschichtung
Kühlmittelzufuhr

RS405

5xD

3 – 20 mm

TiAlN-Top-Beschichtung

RC405

5xD

3 – 20 mm

TiAlN-Top-Beschichtung
Kühlmittelzufuhr

RS403

3xD

3 – 20 mm

TiAlN-Top-Beschichtung

RC403

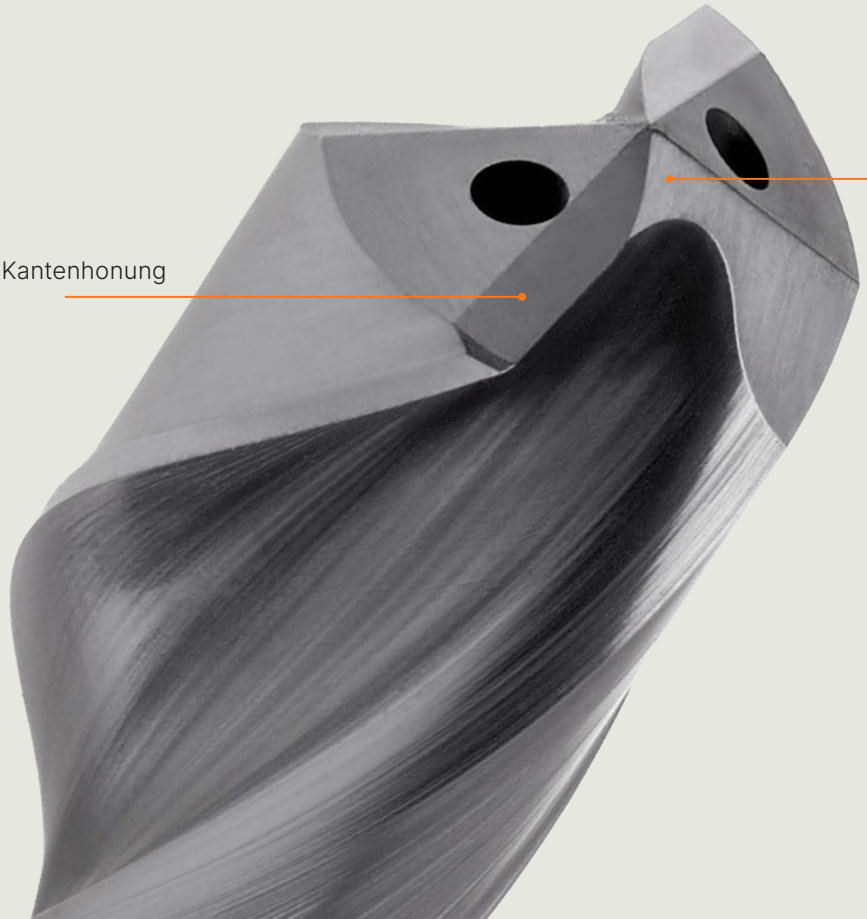
3xD

3 – 20 mm

TiAlN-Top-Beschichtung
Kühlmittelzufuhr

Merkmale und Vorteile

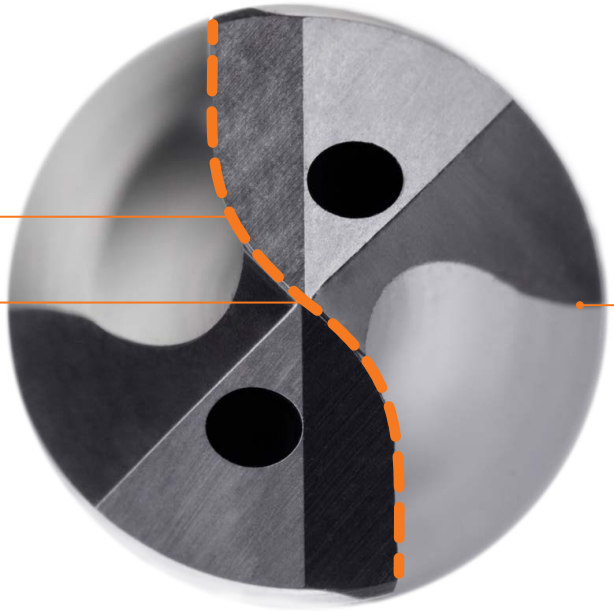
Einzigartige Nutenkonstruktion mit durchgehend dünnem Steg und gerollter Ferse.	**Zuverlässige Spanführung** gewährleistet eine reibungslose Spanabfuhr bei P-, M- und K-Werkstoffen.
Feinkornhartmetallsubstrat.	**Erweiterte Kantenzähigkeit und ausgewogene Härte** sorgen für stabile Leistung und lange Lebensdauer bei unterschiedlichen Materialbedingungen.
TiAlN-Beschichtung als Verschleißschutz.	**Verbesserte Werkzeugstandzeit** der niedrigere Reibungskoeffizient hält die Leistung bei hohen Geschwindigkeiten über längere Laufzeiten aufrecht.
S-förmige 4-Facetten-Spitze mit Feinschliff.	**Genaue Bohrpositionierung** unterstützt einen sauberen Eintritt, Austritt und eine hochwertige Oberflächenbeschaffenheit.
Optimierter Kreuzschliff mit robuster Eckengeometrie.	**Höhere Vorschubgeschwindigkeiten** reduzieren die Zykluszeiten und steigern die Produktivität pro Teil.



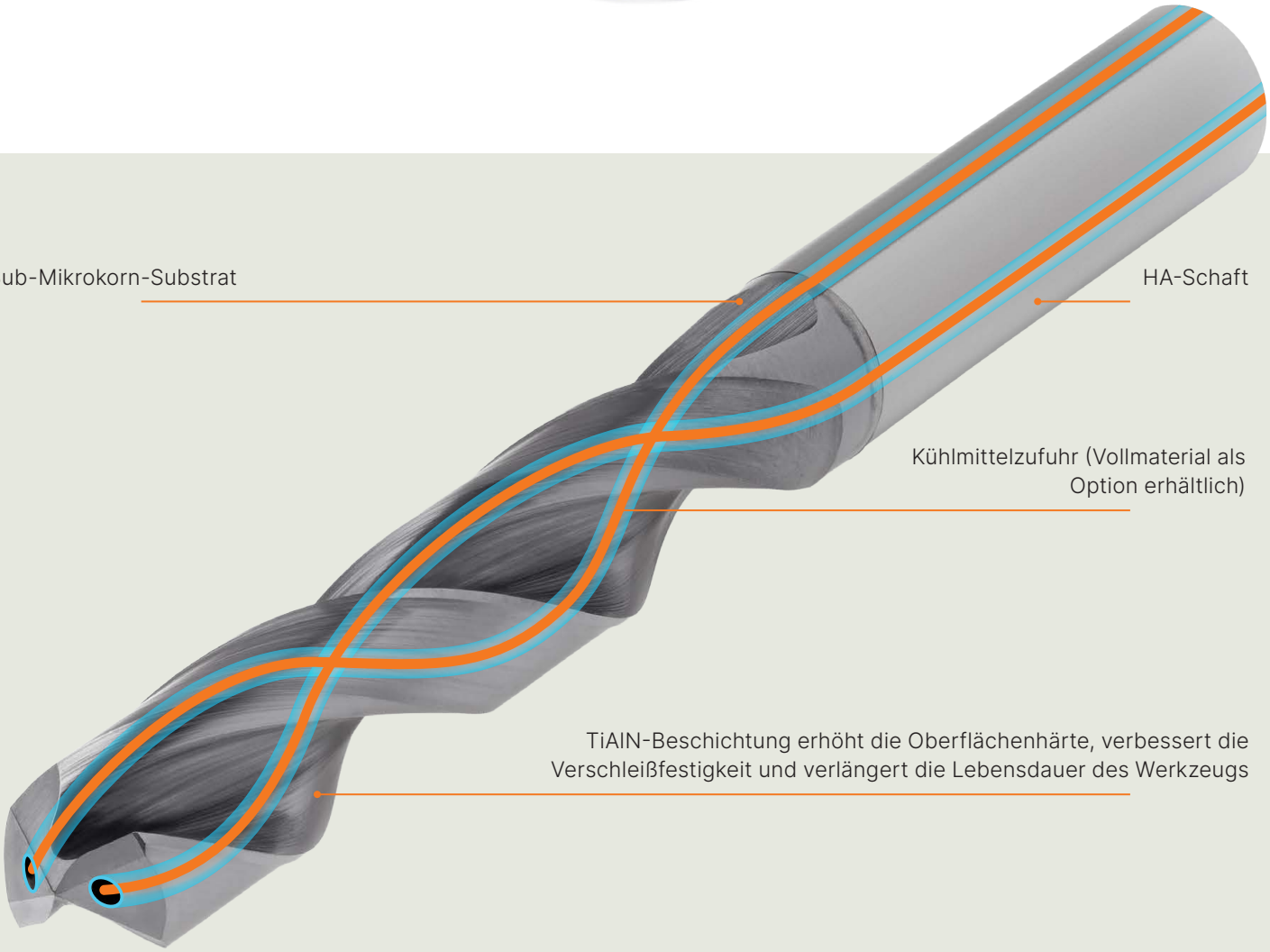
Merkmale und Vorteile

S-förmige Schneide mit verstärkter Eckengeometrie

4-facettige Spitze liefert selbstzentrierende Präzision für genaues Bohren und schnelles Eindringen



Gerollte Fersen-Konstruktion



Sub-Mikrokorn-Substrat

HA-Schaft

Kühlmittelzufuhr (Vollmaterial als Option erhältlich)

TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Lebensdauer des Werkzeugs

Erfolgsgeschichten

Erzielen Sie bei der Stahlbearbeitung eine um **57 %** längere Werkzeugstandzeit bei **35 %** geringeren Kosten

Kundenergebnis: Der Force X Generation 2-Bohrer bietet eine herausragende Leistung bei der Stahlbearbeitung und erreicht eine um 57 % höhere Standzeit (640 gegenüber 408 Bohrungen) im Vergleich zu Premium-Werkzeugen von Wettbewerbern. Trotz eines vergleichbaren Werkzeugpreises senkt der Force X Generation 2 die Werkzeugkosten pro Stück um 35 % und ist damit die klare Wahl für kosteneffizientes Hochleistungsbohren.

Bei gleichen Schnittparametern bleibt die Produktivität erhalten, während die Gesamtwerkzeugkosten deutlich gesenkt werden. Für Fertiger, die ihren Ausstoß und ihre Rentabilität maximieren wollen, setzt Force X Generation 2 neue Maßstäbe bei ISO-P-Anwendungen.

Segment	Anwendung	Material	Kühlmittel	Dormer Pramet Lösung
Werkzeug- & Formenbau	Kernlochbohren	1.2379 / 255 HB	Ja	RC4056.8

Bearbeitungsdaten	Mitbewerber	Force X Generation 2
Bohrtiefe (mm)	20	20
Schnittgeschwindigkeit v_c (m/min)	80	80
Vorschub f_n (mm/U)	0.14	0.15
Vorschub v_f (mm/min)	524	561

P4.1

Standzeit der Werkzeuge (Anzahl der Bohrungen)

Erfolgsgeschichten

Produktivitätssteigerung durch **108 %** höhere Vorschubgeschwindigkeiten beim Bohren von Stahl

Das Ergebnis für den Kunden: Der Force X Generation 2-Bohrer setzt neue Maßstäbe in der Multimaterialbearbeitung, da er im Vergleich zu hochwertigen Wettbewerbswerkzeugen eine um bis zu 108 % höhere Vorschubgeschwindigkeit und eine um 51 % höhere Schnittgeschwindigkeit in 4140-Stahl liefert.

Selbst bei anspruchsvollen Anwendungen in Edelstahl erreicht er eine um 8 % höhere Vorschubgeschwindigkeit und eine um 4 % höhere Schnittgeschwindigkeit, was eine überragende Produktivität bei ISO-P- und ISO-M-Materialien gewährleistet. Ohne sichtbaren Werkzeugverschleiß in ersten Versuchen beweist die Force X Generation 2 ihre Fähigkeit zum kosteneffizienten Hochleistungsbohren in Kleinserienbetrieben.

Segment	Anwendung	Material	Kühlmittel	Dormer Pramet Lösung
Automobilindustrie	Bohren von Stiftlöchern	4140	Ja (extern)	RS4056.0

Bearbeitungsdaten	Mitbewerber	Force X Generation 2
Bohrtiefe (Zoll)	1.2	1.2
Schnittgeschwindigkeit v_c (Fuß/min)	173	262
Spindeldrehzahl n (U/min)	2800	4240
Vorschub f_n (Zoll/U)	0.0043	0.006
Vorschub v_f (Zoll/min)	12	25

P3.2

Segment	Anwendung	Material	Kühlmittel	Dormer Pramet Lösung
Automobilindustrie	Bohren von Stiftlöchern	304	Ja (extern)	RS4056.0

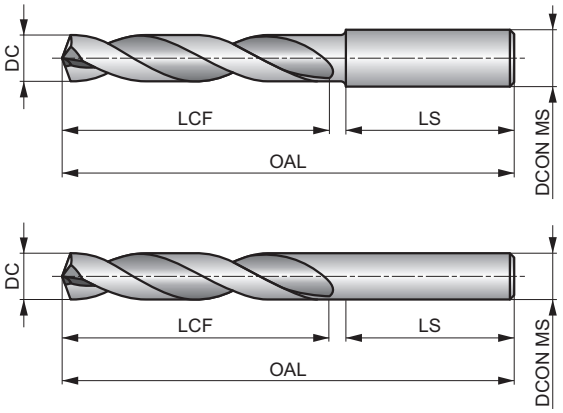
Bearbeitungsdaten	Mitbewerber	Force X Generation 2
Bohrtiefe (Zoll)	1.35	1.35
Schnittgeschwindigkeit v_c (Fuß/min)	173	180
Spindeldrehzahl n (U/min)	2800	2913
Vorschub f_n (Zoll/U)	0.0043	0.0045
Vorschub v_f (Zoll/min)	12	13

M3.2

RS403

FORCE X Vollhartmetall 3XD-Bohrer, TiAlN-Beschichtung

Der Hochleistungsbohrer wurde speziell für eine überragende Bohrungsqualität bei hohen Geschwindigkeiten und Vorschüben entwickelt (H9 Bohrungstoleranz für Multi-Materialien). Eine 140° selbstzentrierende, 4-Flächen Spitzenanschliff und CTW-Nutenkonstruktion. Die TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Standzeit des Werkzeugs.



HM	DIN 6537	3×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Eignung der Werkstoffmaterialgruppe, Startwerte für Schnittgeschwindigkeit und Vorschub. Tabellen mit Vorschub pro Umdrehung können ab Seite 22 gefunden werden.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 112 V	■ 114 V	■ 114 V	■ 98 V	■ 96 V	■ 84 V	■ 88 V	■ 82 V	■ 80 V	■ 79 V	■ 76 V	■ 40 U	◪ 79 V	◪ 76 V
M2.1	**M2.2**	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**M4.2**	**K1.1**	**K1.2**	**K1.3**	**K2.1**	**K2.2**	**K2.3**
◪ 74 U	◪ 60 U	◪ 52 U	◪ 64 U	◪ 52 U	◪ 49 U	◪ 45 U	◪ 38 U	■ 89 W	■ 86 W	■ 84 W	■ 89 W	■ 88 W	■ 79 W
K3.1	**K3.2**	**K3.3**	**K4.1**	**K4.2**	**K4.3**	**K4.4**	**K4.5**	**K5.1**	**K5.2**	**K5.3**	**N1.2**	**N1.3**	**N2.1**
■ 84 W	■ 79 W	■ 76 W	■ 80 W	■ 64 W	■ 62 W	■ 58 W	■ 56 W	■ 84 V	■ 80 V	■ 64 V	◪ 279 W	◪ 270 W	◪ 199 W
N2.2	**N2.3**	**N3.1**	**N3.2**	**N3.3**	**S1.1**	**S1.2**	**S1.3**						
◪ 198 W	◪ 180 W	◪ 166 W	◪ 162 W	◪ 158 W	◪ 40 U	◪ 32 U	◪ 28 U						

DCON MS Toleranz h6.

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4033.0	–	3.00	0.1181	20.0	62.0	36.0	6.00
RS4033.1	–	3.10	0.1220	20.0	62.0	36.0	6.00
RS4031/8	1/8	3.18	0.1250	20.0	62.0	36.0	6.00
RS4033.2	–	3.20	0.1260	20.0	62.0	36.0	6.00
RS403N30	N30	3.26	0.1283	20.0	62.0	36.0	6.00
RS4033.3	–	3.30	0.1299	20.0	62.0	36.0	6.00
RS4033.4	–	3.40	0.1339	20.0	62.0	36.0	6.00
RS403N29	N29	3.45	0.1360	20.0	62.0	36.0	6.00
RS4033.5	–	3.50	0.1378	20.0	62.0	36.0	6.00
RS403N28	N28	3.57	0.1406	20.0	62.0	36.0	6.00
RS4039/64	9/64	3.57	0.1406	20.0	62.0	36.0	6.00
RS4033.6	–	3.60	0.1417	20.0	62.0	36.0	6.00
RS403N27	N27	3.66	0.1441	20.0	62.0	36.0	6.00
RS4033.7	–	3.70	0.1457	20.0	62.0	36.0	6.00
RS4033.73	–	3.73	0.1469	24.0	66.0	36.0	6.00
RS403N26	N26	3.73	0.1469	24.0	66.0	36.0	6.00
RS403N25	N25	3.80	0.1496	24.0	66.0	36.0	6.00
RS4033.8	–	3.80	0.1496	24.0	66.0	36.0	6.00
RS403N24	N24	3.86	0.1520	24.0	66.0	36.0	6.00
RS4033.9	–	3.90	0.1535	24.0	66.0	36.0	6.00
RS403N23	N23	3.91	0.1539	24.0	66.0	36.0	6.00
RS4035/32	5/32	3.97	0.1563	24.0	66.0	36.0	6.00
RS403N22	N22	3.99	0.1571	24.0	66.0	36.0	6.00
RS4034.0	–	4.00	0.1575	24.0	66.0	36.0	6.00
RS403N21	N21	4.04	0.1591	24.0	66.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS403N20	N20	4.09	0.1610	24.0	66.0	36.0	6.00
RS4034.1	–	4.10	0.1614	24.0	66.0	36.0	6.00
RS4034.2	–	4.20	0.1654	24.0	66.0	36.0	6.00
RS403N19	N19	4.22	0.1661	24.0	66.0	36.0	6.00
RS4034.3	–	4.30	0.1693	24.0	66.0	36.0	6.00
RS403N18	N18	4.31	0.1697	24.0	66.0	36.0	6.00
RS40311/64	11/64	4.37	0.1719	24.0	66.0	36.0	6.00
RS403N17	N17	4.39	0.1728	24.0	66.0	36.0	6.00
RS4034.4	–	4.40	0.1732	24.0	66.0	36.0	6.00
RS403N16	N16	4.50	0.1772	24.0	66.0	36.0	6.00
RS4034.5	–	4.50	0.1772	24.0	66.0	36.0	6.00
RS403N15	N15	4.57	0.1799	24.0	66.0	36.0	6.00
RS4034.6	–	4.60	0.1811	24.0	66.0	36.0	6.00
RS403N14	N14	4.62	0.1819	24.0	66.0	36.0	6.00
RS403N13	N13	4.70	0.1850	24.0	66.0	36.0	6.00
RS4034.7	–	4.70	0.1850	24.0	66.0	36.0	6.00
RS4033/16	3/16	4.76	0.1875	28.0	66.0	36.0	6.00
RS403N12	N12	4.80	0.1890	28.0	66.0	36.0	6.00
RS4034.8	–	4.80	0.1890	28.0	66.0	36.0	6.00
RS403N11	N11	4.85	0.1909	28.0	66.0	36.0	6.00
RS4034.9	–	4.90	0.1929	28.0	66.0	36.0	6.00
RS403N10	N10	4.92	0.1937	28.0	66.0	36.0	6.00
RS403N9	N9	4.98	0.1961	28.0	66.0	36.0	6.00
RS4035.0	–	5.00	0.1969	28.0	66.0	36.0	6.00
RS403N8	N8	5.06	0.1992	28.0	66.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4035.1	–	5.10	0.2008	28.0	66.0	36.0	6.00
RS403N7	N7	5.11	0.2010	28.0	66.0	36.0	6.00
RS40313/64	13/64	5.16	0.2031	28.0	66.0	36.0	6.00
RS403N6	N6	5.18	0.2039	28.0	66.0	36.0	6.00
RS4035.2	–	5.20	0.2047	28.0	66.0	36.0	6.00
RS403N5	N5	5.22	0.2055	28.0	66.0	36.0	6.00
RS4035.3	–	5.30	0.2087	28.0	66.0	36.0	6.00
RS403N4	N4	5.31	0.2091	28.0	66.0	36.0	6.00
RS4035.4	–	5.40	0.2126	28.0	66.0	36.0	6.00
RS403N3	N3	5.41	0.2130	28.0	66.0	36.0	6.00
RS4035.5	–	5.50	0.2165	28.0	66.0	36.0	6.00
RS4037/32	7/32	5.56	0.2188	28.0	66.0	36.0	6.00
RS4035.6	–	5.60	0.2205	28.0	66.0	36.0	6.00
RS403N2	N2	5.61	0.2209	28.0	66.0	36.0	6.00
RS4035.7	–	5.70	0.2244	28.0	66.0	36.0	6.00
RS403N1	N1	5.79	0.2280	28.0	66.0	36.0	6.00
RS4035.8	–	5.80	0.2283	28.0	66.0	36.0	6.00
RS4035.9	–	5.90	0.2323	28.0	66.0	36.0	6.00
RS403A	A	5.94	0.2339	28.0	66.0	36.0	6.00
RS40315/64	15/64	5.95	0.2344	28.0	66.0	36.0	6.00
RS4036.0	–	6.00	0.2362	28.0	66.0	36.0	6.00
RS403B	B	6.05	0.2380	34.0	79.0	36.0	8.00
RS4036.1	–	6.10	0.2402	34.0	79.0	36.0	8.00
RS403C	C	6.15	0.2421	34.0	79.0	36.0	8.00
RS4036.2	–	6.20	0.2441	34.0	79.0	36.0	8.00
RS403D	D	6.25	0.2461	34.0	79.0	36.0	8.00
RS4036.3	–	6.30	0.2480	34.0	79.0	36.0	8.00
RS403E	E	6.35	0.2500	34.0	79.0	36.0	8.00
RS4031/4	1/4	6.35	0.2500	34.0	79.0	36.0	8.00
RS4036.4	–	6.40	0.2520	34.0	79.0	36.0	8.00
RS4036.5	–	6.50	0.2559	34.0	79.0	36.0	8.00
RS403F	F	6.53	0.2571	34.0	79.0	36.0	8.00
RS4036.6	–	6.60	0.2598	34.0	79.0	36.0	8.00
RS403G	G	6.63	0.2610	34.0	79.0	36.0	8.00
RS4036.7	–	6.70	0.2638	34.0	79.0	36.0	8.00
RS40317/64	17/64	6.75	0.2656	34.0	79.0	36.0	8.00
RS403H	H	6.76	0.2661	34.0	79.0	36.0	8.00
RS4036.8	–	6.80	0.2677	34.0	79.0	36.0	8.00
RS4036.9	–	6.90	0.2717	34.0	79.0	36.0	8.00
RS403I	I	6.91	0.2720	34.0	79.0	36.0	8.00
RS4037.0	–	7.00	0.2756	34.0	79.0	36.0	8.00
RS403J	J	7.04	0.2772	34.0	79.0	36.0	8.00
RS4037.1	–	7.10	0.2795	41.0	79.0	36.0	8.00
RS403K	K	7.14	0.2811	41.0	79.0	36.0	8.00
RS4039/32	9/32	7.14	0.2813	41.0	79.0	36.0	8.00
RS4037.2	–	7.20	0.2835	41.0	79.0	36.0	8.00
RS4037.3	–	7.30	0.2874	41.0	79.0	36.0	8.00
RS403L	L	7.37	0.2902	41.0	79.0	36.0	8.00
RS4037.4	–	7.40	0.2913	41.0	79.0	36.0	8.00
RS403M	M	7.49	0.2949	41.0	79.0	36.0	8.00
RS4037.5	–	7.50	0.2953	41.0	79.0	36.0	8.00
RS40319/64	19/64	7.54	0.2969	41.0	79.0	36.0	8.00
RS4037.6	–	7.60	0.2992	41.0	79.0	36.0	8.00
RS403N	N	7.67	0.3020	41.0	79.0	36.0	8.00
RS4037.7	–	7.70	0.3031	41.0	79.0	36.0	8.00
RS4037.8	–	7.80	0.3071	41.0	79.0	36.0	8.00
RS4037.9	–	7.90	0.3110	41.0	79.0	36.0	8.00
RS4035/16	5/16	7.94	0.3125	41.0	79.0	36.0	8.00
RS4038.0	–	8.00	0.3150	41.0	79.0	36.0	8.00
RS403O	O	8.03	0.3161	47.0	89.0	40.0	10.00
RS4038.1	–	8.10	0.3189	47.0	89.0	40.0	10.00
RS4038.2	–	8.20	0.3228	47.0	89.0	40.0	10.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS403P	P	8.20	0.3228	47.0	89.0	40.0	10.00
RS4038.3	–	8.30	0.3268	47.0	89.0	40.0	10.00
RS40321/64	21/64	8.33	0.3281	47.0	89.0	40.0	10.00
RS4038.4	–	8.40	0.3307	47.0	89.0	40.0	10.00
RS403Q	Q	8.43	0.3319	47.0	89.0	40.0	10.00
RS4038.5	–	8.50	0.3346	47.0	89.0	40.0	10.00
RS4038.6	–	8.60	0.3386	47.0	89.0	40.0	10.00
RS403R	R	8.61	0.3390	47.0	89.0	40.0	10.00
RS4038.7	–	8.70	0.3425	47.0	89.0	40.0	10.00
RS40311/32	11/32	8.73	0.3438	47.0	89.0	40.0	10.00
RS4038.8	–	8.80	0.3465	47.0	89.0	40.0	10.00
RS403S	S	8.84	0.3480	47.0	89.0	40.0	10.00
RS4038.9	–	8.90	0.3504	47.0	89.0	40.0	10.00
RS4039.0	–	9.00	0.3543	47.0	89.0	40.0	10.00
RS403T	T	9.09	0.3579	47.0	89.0	40.0	10.00
RS4039.1	–	9.10	0.3583	47.0	89.0	40.0	10.00
RS40323/64	23/64	9.13	0.3594	47.0	89.0	40.0	10.00
RS4039.2	–	9.20	0.3622	47.0	89.0	40.0	10.00
RS4039.3	–	9.30	0.3661	47.0	89.0	40.0	10.00
RS403U	U	9.35	0.3681	47.0	89.0	40.0	10.00
RS4039.4	–	9.40	0.3701	47.0	89.0	40.0	10.00
RS4039.5	–	9.50	0.3740	47.0	89.0	40.0	10.00
RS4033/8	3/8	9.53	0.3750	47.0	89.0	40.0	10.00
RS403V	V	9.58	0.3772	47.0	89.0	40.0	10.00
RS4039.6	–	9.60	0.3780	47.0	89.0	40.0	10.00
RS4039.7	–	9.70	0.3819	47.0	89.0	40.0	10.00
RS4039.8	–	9.80	0.3858	47.0	89.0	40.0	10.00
RS403W	W	9.80	0.3858	47.0	89.0	40.0	10.00
RS4039.9	–	9.90	0.3898	47.0	89.0	40.0	10.00
RS40325/64	25/64	9.92	0.3906	47.0	89.0	40.0	10.00
RS40310.0	–	10.00	0.3937	47.0	89.0	40.0	10.00
RS403X	X	10.08	0.3969	55.0	102.0	45.0	12.00
RS40310.1	–	10.10	0.3976	55.0	102.0	45.0	12.00
RS40310.2	–	10.20	0.4016	55.0	102.0	45.0	12.00
RS403Y	Y	10.26	0.4039	55.0	102.0	45.0	12.00
RS40310.3	–	10.30	0.4055	55.0	102.0	45.0	12.00
RS40313/32	13/32	10.32	0.4063	55.0	102.0	45.0	12.00
RS40310.4	–	10.40	0.4094	55.0	102.0	45.0	12.00
RS403Z	Z	10.49	0.4130	55.0	102.0	45.0	12.00
RS40310.5	–	10.50	0.4134	55.0	102.0	45.0	12.00
RS40310.6	–	10.60	0.4173	55.0	102.0	45.0	12.00
RS40310.7	–	10.70	0.4213	55.0	102.0	45.0	12.00
RS40327/64	27/64	10.72	0.4219	55.0	102.0	45.0	12.00
RS40310.8	–	10.80	0.4252	55.0	102.0	45.0	12.00
RS40310.9	–	10.90	0.4291	55.0	102.0	45.0	12.00
RS40311.0	–	11.00	0.4331	55.0	102.0	45.0	12.00
RS40311.1	–	11.10	0.4370	55.0	102.0	45.0	12.00
RS4037/16	7/16	11.11	0.4375	55.0	102.0	45.0	12.00
RS40311.2	–	11.20	0.4409	55.0	102.0	45.0	12.00
RS40311.3	–	11.30	0.4449	55.0	102.0	45.0	12.00
RS40311.4	–	11.40	0.4488	55.0	102.0	45.0	12.00
RS40311.5	–	11.50	0.4528	55.0	102.0	45.0	12.00
RS40329/64	29/64	11.51	0.4531	55.0	102.0	45.0	12.00
RS40311.6	–	11.60	0.4567	55.0	102.0	45.0	12.00
RS40311.7	–	11.70	0.4606	55.0	102.0	45.0	12.00
RS40311.8	–	11.80	0.4646	55.0	102.0	45.0	12.00
RS40311.9	–	11.90	0.4685	55.0	102.0	45.0	12.00
RS40315/32	15/32	11.91	0.4688	55.0	102.0	45.0	12.00
RS40312.0	–	12.00	0.4724	55.0	102.0	45.0	12.00
RS40312.1	–	12.10	0.4764	60.0	107.0	45.0	14.00
RS40312.2	–	12.20	0.4803	60.0	107.0	45.0	14.00
RS40331/64	31/64	12.30	0.4844	60.0	107.0	45.0	14.00

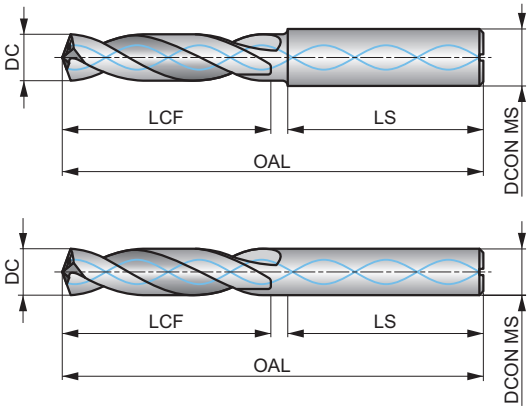
Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40312.5	–	12.50	0.4921	60.0	107.0	45.0	14.00
RS4031/2	1/2	12.70	0.5000	60.0	107.0	45.0	14.00
RS40312.7	–	12.70	0.5000	60.0	107.0	45.0	14.00
RS40312.8	–	12.80	0.5039	60.0	107.0	45.0	14.00
RS40313.0	–	13.00	0.5118	60.0	107.0	45.0	14.00
RS40333/64	33/64	13.10	0.5156	60.0	107.0	45.0	14.00
RS40313.3	–	13.30	0.5236	60.0	107.0	45.0	14.00
RS40317/32	17/32	13.49	0.5313	60.0	107.0	45.0	14.00
RS40313.5	–	13.50	0.5315	60.0	107.0	45.0	14.00
RS40313.8	–	13.80	0.5433	60.0	107.0	45.0	14.00
RS40335/64	35/64	13.89	0.5469	60.0	107.0	45.0	14.00
RS40314.0	–	14.00	0.5512	60.0	107.0	45.0	14.00
RS40314.25	–	14.25	0.5610	65.0	115.0	48.0	16.00
RS4039/16	9/16	14.29	0.5625	65.0	115.0	48.0	16.00
RS40314.5	–	14.50	0.5709	65.0	115.0	48.0	16.00
RS40337/64	37/64	14.68	0.5781	65.0	115.0	48.0	16.00
RS40314.8	–	14.80	0.5827	65.0	115.0	48.0	16.00
RS40315.0	–	15.00	0.5906	65.0	115.0	48.0	16.00
RS40319/32	19/32	15.08	0.5938	65.0	115.0	48.0	16.00
RS40315.1	–	15.10	0.5945	65.0	115.0	48.0	16.00
RS40315.3	–	15.30	0.6024	65.0	115.0	48.0	16.00
RS40339/64	39/64	15.48	0.6094	65.0	115.0	48.0	16.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40315.5	–	15.50	0.6102	65.0	115.0	48.0	16.00
RS40315.8	–	15.80	0.6220	65.0	115.0	48.0	16.00
RS4035/8	5/8	15.88	0.6250	65.0	115.0	48.0	16.00
RS40316.0	–	16.00	0.6299	65.0	115.0	48.0	16.00
RS40341/64	41/64	16.27	0.6406	73.0	123.0	48.0	18.00
RS40316.5	–	16.50	0.6496	73.0	123.0	48.0	18.00
RS40321/32	21/32	16.67	0.6563	73.0	123.0	48.0	18.00
RS40317.0	–	17.00	0.6693	73.0	123.0	48.0	18.00
RS40343/64	43/64	17.07	0.6720	73.0	123.0	48.0	18.00
RS40311/16	11/16	17.46	0.6874	73.0	123.0	48.0	18.00
RS40317.5	–	17.50	0.6890	73.0	123.0	48.0	18.00
RS40317.8	–	17.80	0.7008	73.0	123.0	48.0	18.00
RS40345/64	45/64	17.86	0.7031	73.0	123.0	48.0	18.00
RS40318.0	–	18.00	0.7087	73.0	123.0	48.0	18.00
RS40323/32	23/32	18.26	0.7189	79.0	131.0	50.0	20.00
RS40318.5	–	18.50	0.7283	79.0	131.0	50.0	20.00
RS40347/64	47/64	18.65	0.7343	79.0	131.0	50.0	20.00
RS40319.0	–	19.00	0.7480	79.0	131.0	50.0	20.00
RS4033/4	3/4	19.05	0.7500	79.0	131.0	50.0	20.00
RS40319.5	–	19.50	0.7677	79.0	131.0	50.0	20.00
RS40319.8	–	19.80	0.7795	79.0	131.0	50.0	20.00
RS40320.0	–	20.00	0.7874	79.0	131.0	50.0	20.00

RC403

FORCE X Vollhartmetall 3XD-Bohrer mit Kühlmittelzufuhr, TiAlN-Top beschichtet

Der Hochleistungsbohrer wurde speziell für eine überragende Bohrungsqualität bei hohen Geschwindigkeiten und Vorschüben entwickelt (H9 Bohrungstoleranz für Multi-Materialien). Eine 140°-Selbstzentrierung, 4-Flächen Spitzenanschliff und CTW-Nutenkonstruktion. Kühlmittelbohrungen verbessern die Spanabfuhr. Die TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Werkzeugstandzeit.



HM	DIN 6537	3×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Eignung der Werkstoffmaterialgruppe, Startwerte für Schnittgeschwindigkeit und Vorschub. Tabellen mit Vorschub pro Umdrehung können ab Seite 22 gefunden werden.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 140 W	■ 142 W	■ 142 W	■ 122 W	■ 120 W	■ 105 V	■ 110 V	■ 102 V	■ 100 V	■ 99 V	■ 95 V	■ 50 U	■ 105 G	■ 101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
■ 99 G	■ 80 G	■ 70 E	■ 85 G	■ 70 G	■ 65 F	■ 60 F	■ 50 E	■ 111 W	■ 108 W	■ 105 W	■ 111 W	■ 110 W	■ 99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 105 W	■ 99 W	■ 95 W	■ 100 W	■ 80 W	■ 77 W	■ 72 W	■ 70 W	■ 105 W	■ 100 W	■ 80 W	◪ 305 W	◪ 310 W	◪ 300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
◪ 221 W	◪ 220 W	◪ 200 W	◪ 185 W	◪ 180 W	◪ 175 W	■ 50 V	■ 40 V	■ 35 U	◪ 40 U	◪ 28 U	◪ 32 U	◪ 32 U	◪ 30 U
S4.2													
◪ 25 U													

DCON MS Toleranz h6.

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4033.0	–	3.00	0.1181	20.0	62.0	36.0	6.00
RC4033.1	–	3.10	0.1220	20.0	62.0	36.0	6.00
RC4031/8	1/8	3.18	0.1250	20.0	62.0	36.0	6.00
RC4033.2	–	3.20	0.1260	20.0	62.0	36.0	6.00
RC403N30	N30	3.26	0.1283	20.0	62.0	36.0	6.00
RC4033.3	–	3.30	0.1299	20.0	62.0	36.0	6.00
RC4033.4	–	3.40	0.1339	20.0	62.0	36.0	6.00
RC403N29	N29	3.45	0.1360	20.0	62.0	36.0	6.00
RC4033.5	–	3.50	0.1378	20.0	62.0	36.0	6.00
RC403N28	N28	3.57	0.1406	20.0	62.0	36.0	6.00
RC4039/64	9/64	3.57	0.1406	20.0	62.0	36.0	6.00
RC4033.6	–	3.60	0.1417	20.0	62.0	36.0	6.00
RC403N27	N27	3.66	0.1441	20.0	62.0	36.0	6.00
RC4033.7	–	3.70	0.1457	20.0	62.0	36.0	6.00
RC403N26	N26	3.73	0.1469	24.0	66.0	36.0	6.00
RC403N25	N25	3.80	0.1496	24.0	66.0	36.0	6.00
RC4033.8	–	3.80	0.1496	24.0	66.0	36.0	6.00
RC403N24	N24	3.86	0.1520	24.0	66.0	36.0	6.00
RC4033.9	–	3.90	0.1535	24.0	66.0	36.0	6.00
RC403N23	N23	3.91	0.1539	24.0	66.0	36.0	6.00
RC4035/32	5/32	3.97	0.1563	24.0	66.0	36.0	6.00
RC403N22	N22	3.99	0.1571	24.0	66.0	36.0	6.00
RC4034.0	–	4.00	0.1575	24.0	66.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC403N21	N21	4.04	0.1591	24.0	66.0	36.0	6.00
RC4034.05	–	4.05	0.1594	24.0	66.0	36.0	6.00
RC403N20	N20	4.09	0.1610	24.0	66.0	36.0	6.00
RC4034.1	–	4.10	0.1614	24.0	66.0	36.0	6.00
RC4034.2	–	4.20	0.1654	24.0	66.0	36.0	6.00
RC403N19	N19	4.22	0.1661	24.0	66.0	36.0	6.00
RC4034.3	–	4.30	0.1693	24.0	66.0	36.0	6.00
RC403N18	N18	4.31	0.1697	24.0	66.0	36.0	6.00
RC40311/64	11/64	4.37	0.1719	24.0	66.0	36.0	6.00
RC403N17	N17	4.39	0.1728	24.0	66.0	36.0	6.00
RC4034.4	–	4.40	0.1732	24.0	66.0	36.0	6.00
RC403N16	N16	4.50	0.1772	24.0	66.0	36.0	6.00
RC4034.5	–	4.50	0.1772	24.0	66.0	36.0	6.00
RC403N15	N15	4.57	0.1799	24.0	66.0	36.0	6.00
RC4034.6	–	4.60	0.1811	24.0	66.0	36.0	6.00
RC403N14	N14	4.62	0.1819	24.0	66.0	36.0	6.00
RC403N13	N13	4.70	0.1850	24.0	66.0	36.0	6.00
RC4034.7	–	4.70	0.1850	24.0	66.0	36.0	6.00
RC4033/16	3/16	4.76	0.1875	28.0	66.0	36.0	6.00
RC403N12	N12	4.80	0.1890	28.0	66.0	36.0	6.00
RC4034.8	–	4.80	0.1890	28.0	66.0	36.0	6.00
RC403N11	N11	4.85	0.1909	28.0	66.0	36.0	6.00
RC4034.9	–	4.90	0.1929	28.0	66.0	36.0	6.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC403N10	N10	4.92	0.1937	28.0	66.0	36.0	6.00
RC403N9	N9	4.98	0.1961	28.0	66.0	36.0	6.00
RC4035.0	–	5.00	0.1969	28.0	66.0	36.0	6.00
RC4035.05	–	5.05	0.1988	28.0	66.0	36.0	6.00
RC403N8	N8	5.06	0.1992	28.0	66.0	36.0	6.00
RC4035.1	–	5.10	0.2008	28.0	66.0	36.0	6.00
RC403N7	N7	5.11	0.2010	28.0	66.0	36.0	6.00
RC40313/64	13/64	5.16	0.2031	28.0	66.0	36.0	6.00
RC403N6	N6	5.18	0.2039	28.0	66.0	36.0	6.00
RC4035.2	–	5.20	0.2047	28.0	66.0	36.0	6.00
RC403N5	N5	5.22	0.2055	28.0	66.0	36.0	6.00
RC4035.3	–	5.30	0.2087	28.0	66.0	36.0	6.00
RC403N4	N4	5.31	0.2091	28.0	66.0	36.0	6.00
RC4035.4	–	5.40	0.2126	28.0	66.0	36.0	6.00
RC403N3	N3	5.41	0.2130	28.0	66.0	36.0	6.00
RC4035.5	–	5.50	0.2165	28.0	66.0	36.0	6.00
RC4037/32	7/32	5.56	0.2188	28.0	66.0	36.0	6.00
RC4035.6	–	5.60	0.2205	28.0	66.0	36.0	6.00
RC403N2	N2	5.61	0.2209	28.0	66.0	36.0	6.00
RC4035.7	–	5.70	0.2244	28.0	66.0	36.0	6.00
RC403N1	N1	5.79	0.2280	28.0	66.0	36.0	6.00
RC4035.8	–	5.80	0.2283	28.0	66.0	36.0	6.00
RC4035.9	–	5.90	0.2323	28.0	66.0	36.0	6.00
RC403A	A	5.94	0.2339	28.0	66.0	36.0	6.00
RC40315/64	15/64	5.95	0.2344	28.0	66.0	36.0	6.00
RC4036.0	–	6.00	0.2362	28.0	66.0	36.0	6.00
RC403B	B	6.05	0.2380	34.0	79.0	36.0	8.00
RC4036.05	–	6.05	0.2382	34.0	79.0	36.0	8.00
RC4036.1	–	6.10	0.2402	34.0	79.0	36.0	8.00
RC403C	C	6.15	0.2421	34.0	79.0	36.0	8.00
RC4036.2	–	6.20	0.2441	34.0	79.0	36.0	8.00
RC403D	D	6.25	0.2461	34.0	79.0	36.0	8.00
RC4036.3	–	6.30	0.2480	34.0	79.0	36.0	8.00
RC403E	E	6.35	0.2500	34.0	79.0	36.0	8.00
RC4031/4	1/4	6.35	0.2500	34.0	79.0	36.0	8.00
RC4036.4	–	6.40	0.2520	34.0	79.0	36.0	8.00
RC4036.5	–	6.50	0.2559	34.0	79.0	36.0	8.00
RC403F	F	6.53	0.2571	34.0	79.0	36.0	8.00
RC4036.6	–	6.60	0.2598	34.0	79.0	36.0	8.00
RC403G	G	6.63	0.2610	34.0	79.0	36.0	8.00
RC4036.7	–	6.70	0.2638	34.0	79.0	36.0	8.00
RC40317/64	17/64	6.75	0.2656	34.0	79.0	36.0	8.00
RC403H	H	6.76	0.2661	34.0	79.0	36.0	8.00
RC4036.8	–	6.80	0.2677	34.0	79.0	36.0	8.00
RC4036.9	–	6.90	0.2717	34.0	79.0	36.0	8.00
RC403I	I	6.91	0.2720	34.0	79.0	36.0	8.00
RC4037.0	–	7.00	0.2756	34.0	79.0	36.0	8.00
RC403J	J	7.04	0.2772	41.0	79.0	36.0	8.00
RC4037.1	–	7.10	0.2795	41.0	79.0	36.0	8.00
RC403K	K	7.14	0.2811	41.0	79.0	36.0	8.00
RC4039/32	9/32	7.14	0.2813	41.0	79.0	36.0	8.00
RC4037.2	–	7.20	0.2835	41.0	79.0	36.0	8.00
RC4037.3	–	7.30	0.2874	41.0	79.0	36.0	8.00
RC403L	L	7.37	0.2902	41.0	79.0	36.0	8.00
RC4037.4	–	7.40	0.2913	41.0	79.0	36.0	8.00
RC403M	M	7.49	0.2949	41.0	79.0	36.0	8.00
RC4037.5	–	7.50	0.2953	41.0	79.0	36.0	8.00
RC40319/64	19/64	7.54	0.2969	41.0	79.0	36.0	8.00
RC4037.6	–	7.60	0.2992	41.0	79.0	36.0	8.00
RC403N	N	7.67	0.3020	41.0	79.0	36.0	8.00
RC4037.7	–	7.70	0.3031	41.0	79.0	36.0	8.00
RC4037.8	–	7.80	0.3071	41.0	79.0	36.0	8.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC4037.9	–	7.90	0.3110	41.0	79.0	36.0	8.00
RC4035/16	5/16	7.94	0.3125	41.0	79.0	36.0	8.00
RC4038.0	–	8.00	0.3150	41.0	79.0	36.0	8.00
RC4030	0	8.03	0.3161	47.0	89.0	40.0	10.00
RC4038.05	–	8.05	0.3169	47.0	89.0	40.0	10.00
RC4038.1	–	8.10	0.3189	47.0	89.0	40.0	10.00
RC4038.2	–	8.20	0.3228	47.0	89.0	40.0	10.00
RC403P	P	8.20	0.3228	47.0	89.0	40.0	10.00
RC4038.3	–	8.30	0.3268	47.0	89.0	40.0	10.00
RC40321/64	21/64	8.33	0.3281	47.0	89.0	40.0	10.00
RC4038.4	–	8.40	0.3307	47.0	89.0	40.0	10.00
RC403Q	Q	8.43	0.3319	47.0	89.0	40.0	10.00
RC4038.5	–	8.50	0.3346	47.0	89.0	40.0	10.00
RC4038.6	–	8.60	0.3386	47.0	89.0	40.0	10.00
RC403R	R	8.61	0.3390	47.0	89.0	40.0	10.00
RC4038.7	–	8.70	0.3425	47.0	89.0	40.0	10.00
RC40311/32	11/32	8.73	0.3438	47.0	89.0	40.0	10.00
RC4038.8	–	8.80	0.3465	47.0	89.0	40.0	10.00
RC403S	S	8.84	0.3480	47.0	89.0	40.0	10.00
RC4038.9	–	8.90	0.3504	47.0	89.0	40.0	10.00
RC4039.0	–	9.00	0.3543	47.0	89.0	40.0	10.00
RC403T	T	9.09	0.3579	47.0	89.0	40.0	10.00
RC4039.1	–	9.10	0.3583	47.0	89.0	40.0	10.00
RC40323/64	23/64	9.13	0.3594	47.0	89.0	40.0	10.00
RC4039.2	–	9.20	0.3622	47.0	89.0	40.0	10.00
RC4039.3	–	9.30	0.3661	47.0	89.0	40.0	10.00
RC403U	U	9.35	0.3681	47.0	89.0	40.0	10.00
RC4039.4	–	9.40	0.3701	47.0	89.0	40.0	10.00
RC4039.5	–	9.50	0.3740	47.0	89.0	40.0	10.00
RC4033/8	3/8	9.53	0.3750	47.0	89.0	40.0	10.00
RC403V	V	9.58	0.3772	47.0	89.0	40.0	10.00
RC4039.6	–	9.60	0.3780	47.0	89.0	40.0	10.00
RC4039.7	–	9.70	0.3819	47.0	89.0	40.0	10.00
RC4039.8	–	9.80	0.3858	47.0	89.0	40.0	10.00
RC403W	W	9.80	0.3858	47.0	89.0	40.0	10.00
RC4039.9	–	9.90	0.3898	47.0	89.0	40.0	10.00
RC40325/64	25/64	9.92	0.3906	47.0	89.0	40.0	10.00
RC40310.0	–	10.00	0.3937	47.0	89.0	40.0	10.00
RC40310.05	–	10.05	0.3957	55.0	102.0	45.0	12.00
RC403X	X	10.08	0.3969	55.0	102.0	45.0	12.00
RC40310.1	–	10.10	0.3976	55.0	102.0	45.0	12.00
RC40310.2	–	10.20	0.4016	55.0	102.0	45.0	12.00
RC403Y	Y	10.26	0.4039	55.0	102.0	45.0	12.00
RC40310.3	–	10.30	0.4055	55.0	102.0	45.0	12.00
RC40313/32	13/32	10.32	0.4063	55.0	102.0	45.0	12.00
RC40310.4	–	10.40	0.4094	55.0	102.0	45.0	12.00
RC403Z	Z	10.49	0.4130	55.0	102.0	45.0	12.00
RC40310.5	–	10.50	0.4134	55.0	102.0	45.0	12.00
RC40310.6	–	10.60	0.4173	55.0	102.0	45.0	12.00
RC40327/64	27/64	10.72	0.4219	55.0	102.0	45.0	12.00
RC40310.8	–	10.80	0.4252	55.0	102.0	45.0	12.00
RC40310.9	–	10.90	0.4291	55.0	102.0	45.0	12.00
RC40311.0	–	11.00	0.4331	55.0	102.0	45.0	12.00
RC4037/16	7/16	11.11	0.4375	55.0	102.0	45.0	12.00
RC40311.2	–	11.20	0.4409	55.0	102.0	45.0	12.00
RC40311.3	–	11.30	0.4449	55.0	102.0	45.0	12.00
RC40311.4	–	11.40	0.4488	55.0	102.0	45.0	12.00
RC40311.5	–	11.50	0.4528	55.0	102.0	45.0	12.00
RC40329/64	29/64	11.51	0.4531	55.0	102.0	45.0	12.00
RC40311.6	–	11.60	0.4567	55.0	102.0	45.0	12.00
RC40311.8	–	11.80	0.4646	55.0	102.0	45.0	12.00
RC40315/32	15/32	11.91	0.4688	55.0	102.0	45.0	12.00

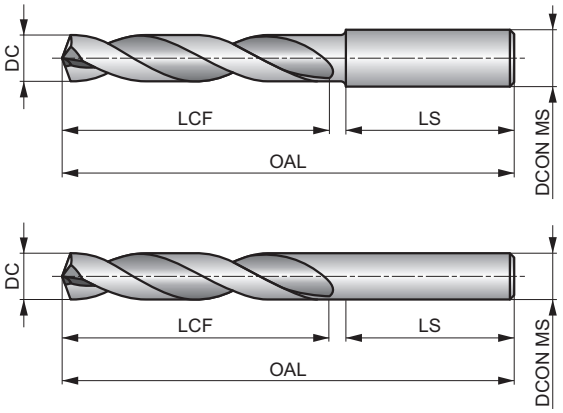
Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40312.0	–	12.00	0.4724	55.0	102.0	45.0	12.00
RC40312.05	–	12.05	0.4744	60.0	107.0	45.0	14.00
RC40312.1	–	12.10	0.4764	60.0	107.0	45.0	14.00
RC40312.2	–	12.20	0.4803	60.0	107.0	45.0	14.00
RC40331/64	31/64	12.30	0.4844	60.0	107.0	45.0	14.00
RC40312.5	–	12.50	0.4921	60.0	107.0	45.0	14.00
RC4031/2	1/2	12.70	0.5000	60.0	107.0	45.0	14.00
RC40312.7	–	12.70	0.5000	60.0	107.0	45.0	14.00
RC40312.8	–	12.80	0.5039	60.0	107.0	45.0	14.00
RC40313.0	–	13.00	0.5118	60.0	107.0	45.0	14.00
RC40333/64	33/64	13.10	0.5156	60.0	107.0	45.0	14.00
RC40313.3	–	13.30	0.5236	60.0	107.0	45.0	14.00
RC40317/32	17/32	13.49	0.5313	60.0	107.0	45.0	14.00
RC40313.5	–	13.50	0.5315	60.0	107.0	45.0	14.00
RC40313.8	–	13.80	0.5433	60.0	107.0	45.0	14.00
RC40335/64	35/64	13.89	0.5469	60.0	107.0	45.0	14.00
RC40314.0	–	14.00	0.5512	60.0	107.0	45.0	14.00
RC40314.25	–	14.25	0.5610	65.0	115.0	48.0	16.00
RC4039/16	9/16	14.29	0.5625	65.0	115.0	48.0	16.00
RC40314.5	–	14.50	0.5709	65.0	115.0	48.0	16.00
RC40337/64	37/64	14.68	0.5781	65.0	115.0	48.0	16.00
RC40314.8	–	14.80	0.5827	65.0	115.0	48.0	16.00
RC40315.0	–	15.00	0.5906	65.0	115.0	48.0	16.00
RC40319/32	19/32	15.08	0.5938	65.0	115.0	48.0	16.00
RC40315.1	–	15.10	0.5945	65.0	115.0	48.0	16.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40315.3	–	15.30	0.6024	65.0	115.0	48.0	16.00
RC40339/64	39/64	15.48	0.6094	65.0	115.0	48.0	16.00
RC40315.5	–	15.50	0.6102	65.0	115.0	48.0	16.00
RC40315.8	–	15.80	0.6220	65.0	115.0	48.0	16.00
RC4035/8	5/8	15.88	0.6250	65.0	115.0	48.0	16.00
RC40316.0	–	16.00	0.6299	65.0	115.0	48.0	16.00
RC40341/64	41/64	16.27	0.6406	73.0	123.0	48.0	18.00
RC40316.5	–	16.50	0.6496	73.0	123.0	48.0	18.00
RC40321/32	21/32	16.67	0.6563	73.0	123.0	48.0	18.00
RC40317.0	–	17.00	0.6693	73.0	123.0	48.0	18.00
RC40343/64	43/64	17.07	0.6720	73.0	123.0	48.0	18.00
RC40311/16	11/16	17.46	0.6874	73.0	123.0	48.0	18.00
RC40317.5	–	17.50	0.6890	73.0	123.0	48.0	18.00
RC40345/64	45/64	17.86	0.7031	73.0	123.0	48.0	18.00
RC40318.0	–	18.00	0.7087	73.0	123.0	48.0	18.00
RC40323/32	23/32	18.26	0.7189	79.0	131.0	50.0	20.00
RC40318.5	–	18.50	0.7283	79.0	131.0	50.0	20.00
RC40347/64	47/64	18.65	0.7343	79.0	131.0	50.0	20.00
RC40318.8	–	18.80	0.7402	79.0	131.0	50.0	20.00
RC40319.0	–	19.00	0.7480	79.0	131.0	50.0	20.00
RC4033/4	3/4	19.05	0.7500	79.0	131.0	50.0	20.00
RC40319.5	–	19.50	0.7677	79.0	131.0	50.0	20.00
RC40319.8	–	19.80	0.7795	79.0	131.0	50.0	20.00
RC40320.0	–	20.00	0.7874	79.0	131.0	50.0	20.00

RS405

FORCE X Vollhartmetall-Bohrer 5XD, TiAlN-Beschichtung

Der Hochleistungsbohrer wurde speziell für eine überragende Bohrungsqualität bei hohen Geschwindigkeiten und Vorschüben entwickelt (H9 Bohrungstoleranz für Multi-Materialien). Eine 140° selbstzentrierende, 4-Flächen Spitzenanschliff und CTW-Nutenkonstruktion. Die TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Standzeit des Werkzeugs.



HM	DIN 6537	5×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Eignung der Werkstoffmaterialgruppe, Startwerte für Schnittgeschwindigkeit und Vorschub. Tabellen mit Vorschub pro Umdrehung können ab Seite 22 gefunden werden.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 112 V	■ 114 V	■ 114 V	■ 98 V	■ 96 V	■ 84 V	■ 88 V	■ 82 V	■ 80 V	■ 79 V	■ 76 V	■ 40 U	◪ 79 V	◪ 76 V
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
◪ 74 U	◪ 60 U	◪ 52 U	◪ 64 U	◪ 52 U	◪ 49 U	◪ 45 U	◪ 38 U	■ 89 W	■ 86 W	■ 84 W	■ 89 W	■ 88 W	■ 79 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.2	N1.3	N2.1
■ 84 W	■ 79 W	■ 76 W	■ 80 W	■ 64 W	■ 62 W	■ 58 W	■ 56 W	■ 84 V	■ 80 V	■ 64 V	◪ 279 W	◪ 270 W	◪ 199 W
N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3						
◪ 198 W	◪ 180 W	◪ 166 W	◪ 162 W	◪ 158 W	◪ 40 U	◪ 32 U	◪ 28 U						

DCON MS Toleranz h6.

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4053.0	–	3.00	0.1181	28.0	66.0	36.0	6.00
RS4053.1	–	3.10	0.1220	28.0	66.0	36.0	6.00
RS4051/8	1/8	3.18	0.1250	28.0	66.0	36.0	6.00
RS4053.2	–	3.20	0.1260	28.0	66.0	36.0	6.00
RS405N30	N30	3.26	0.1283	28.0	66.0	36.0	6.00
RS4053.3	–	3.30	0.1299	28.0	66.0	36.0	6.00
RS4053.4	–	3.40	0.1339	28.0	66.0	36.0	6.00
RS405N29	N29	3.45	0.1360	28.0	66.0	36.0	6.00
RS4053.5	–	3.50	0.1378	28.0	66.0	36.0	6.00
RS405N28	N28	3.57	0.1406	28.0	66.0	36.0	6.00
RS4059/64	9/64	3.57	0.1406	28.0	66.0	36.0	6.00
RS4053.6	–	3.60	0.1417	28.0	66.0	36.0	6.00
RS405N27	N27	3.66	0.1441	28.0	66.0	36.0	6.00
RS4053.7	–	3.70	0.1457	28.0	66.0	36.0	6.00
RS405N26	N26	3.73	0.1469	36.0	74.0	36.0	6.00
RS405N25	N25	3.80	0.1496	36.0	74.0	36.0	6.00
RS4053.8	–	3.80	0.1496	36.0	74.0	36.0	6.00
RS405N24	N24	3.86	0.1520	36.0	74.0	36.0	6.00
RS4053.9	–	3.90	0.1535	36.0	74.0	36.0	6.00
RS405N23	N23	3.91	0.1539	36.0	74.0	36.0	6.00
RS4055/32	5/32	3.97	0.1563	36.0	74.0	36.0	6.00
RS405N22	N22	3.99	0.1571	36.0	74.0	36.0	6.00
RS4054.0	–	4.00	0.1575	36.0	74.0	36.0	6.00
RS405N21	N21	4.04	0.1591	36.0	74.0	36.0	6.00
RS405N20	N20	4.09	0.1610	36.0	74.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4054.1	–	4.10	0.1614	36.0	74.0	36.0	6.00
RS4054.2	–	4.20	0.1654	36.0	74.0	36.0	6.00
RS405N19	N19	4.22	0.1661	36.0	74.0	36.0	6.00
RS4054.3	–	4.30	0.1693	36.0	74.0	36.0	6.00
RS405N18	N18	4.31	0.1697	36.0	74.0	36.0	6.00
RS40511/64	11/64	4.37	0.1719	36.0	74.0	36.0	6.00
RS405N17	N17	4.39	0.1728	36.0	74.0	36.0	6.00
RS4054.4	–	4.40	0.1732	36.0	74.0	36.0	6.00
RS405N16	N16	4.50	0.1772	36.0	74.0	36.0	6.00
RS4054.5	–	4.50	0.1772	36.0	74.0	36.0	6.00
RS405N15	N15	4.57	0.1799	36.0	74.0	36.0	6.00
RS4054.6	–	4.60	0.1811	36.0	74.0	36.0	6.00
RS405N14	N14	4.62	0.1819	36.0	74.0	36.0	6.00
RS405N13	N13	4.70	0.1850	36.0	74.0	36.0	6.00
RS4054.7	–	4.70	0.1850	36.0	74.0	36.0	6.00
RS4053/16	3/16	4.76	0.1875	44.0	82.0	36.0	6.00
RS405N12	N12	4.80	0.1890	44.0	82.0	36.0	6.00
RS4054.8	–	4.80	0.1890	44.0	82.0	36.0	6.00
RS405N11	N11	4.85	0.1909	44.0	82.0	36.0	6.00
RS4054.9	–	4.90	0.1929	44.0	82.0	36.0	6.00
RS405N10	N10	4.92	0.1937	44.0	82.0	36.0	6.00
RS405N9	N9	4.98	0.1961	44.0	82.0	36.0	6.00
RS4055.0	–	5.00	0.1969	44.0	82.0	36.0	6.00
RS405N8	N8	5.06	0.1992	44.0	82.0	36.0	6.00
RS4055.1	–	5.10	0.2008	44.0	82.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS405N7	N7	5.11	0.2010	44.0	82.0	36.0	6.00
RS40513/64	13/64	5.16	0.2031	44.0	82.0	36.0	6.00
RS405N6	N6	5.18	0.2039	44.0	82.0	36.0	6.00
RS4055.2	–	5.20	0.2047	44.0	82.0	36.0	6.00
RS405N5	N5	5.22	0.2055	44.0	82.0	36.0	6.00
RS405N4	N4	5.31	0.2091	44.0	82.0	36.0	6.00
RS405N3	N3	5.41	0.2130	44.0	82.0	36.0	6.00
RS4055.5	–	5.50	0.2165	44.0	82.0	36.0	6.00
RS4057/32	7/32	5.56	0.2188	44.0	82.0	36.0	6.00
RS4055.6	–	5.60	0.2205	44.0	82.0	36.0	6.00
RS405N2	N2	5.61	0.2209	44.0	82.0	36.0	6.00
RS4055.7	–	5.70	0.2244	44.0	82.0	36.0	6.00
RS405N1	N1	5.79	0.2280	44.0	82.0	36.0	6.00
RS4055.8	–	5.80	0.2283	44.0	82.0	36.0	6.00
RS405A	A	5.94	0.2339	44.0	82.0	36.0	6.00
RS40515/64	15/64	5.95	0.2344	44.0	82.0	36.0	6.00
RS4056.0	–	6.00	0.2362	44.0	82.0	36.0	6.00
RS405B	B	6.05	0.2380	53.0	91.0	36.0	8.00
RS4056.1	–	6.10	0.2402	53.0	91.0	36.0	8.00
RS405C	C	6.15	0.2421	53.0	91.0	36.0	8.00
RS4056.2	–	6.20	0.2441	53.0	91.0	36.0	8.00
RS405D	D	6.25	0.2461	53.0	91.0	36.0	8.00
RS4056.3	–	6.30	0.2480	53.0	91.0	36.0	8.00
RS405E	E	6.35	0.2500	53.0	91.0	36.0	8.00
RS4051/4	1/4	6.35	0.2500	53.0	91.0	36.0	8.00
RS4056.4	–	6.40	0.2520	53.0	91.0	36.0	8.00
RS4056.5	–	6.50	0.2559	53.0	91.0	36.0	8.00
RS405F	F	6.53	0.2571	53.0	91.0	36.0	8.00
RS4056.6	–	6.60	0.2598	53.0	91.0	36.0	8.00
RS405G	G	6.63	0.2610	53.0	91.0	36.0	8.00
RS4056.7	–	6.70	0.2638	53.0	91.0	36.0	8.00
RS40517/64	17/64	6.75	0.2656	53.0	91.0	36.0	8.00
RS405H	H	6.76	0.2661	53.0	91.0	36.0	8.00
RS4056.8	–	6.80	0.2677	53.0	91.0	36.0	8.00
RS4056.9	–	6.90	0.2717	53.0	91.0	36.0	8.00
RS405I	I	6.91	0.2720	53.0	91.0	36.0	8.00
RS4057.0	–	7.00	0.2756	53.0	91.0	36.0	8.00
RS405J	J	7.04	0.2772	53.0	91.0	36.0	8.00
RS4057.1	–	7.10	0.2795	53.0	91.0	36.0	8.00
RS405K	K	7.14	0.2811	53.0	91.0	36.0	8.00
RS4059/32	9/32	7.14	0.2813	53.0	91.0	36.0	8.00
RS4057.3	–	7.30	0.2874	53.0	91.0	36.0	8.00
RS405L	L	7.37	0.2902	53.0	91.0	36.0	8.00
RS4057.4	–	7.40	0.2913	53.0	91.0	36.0	8.00
RS405M	M	7.49	0.2949	53.0	91.0	36.0	8.00
RS4057.5	–	7.50	0.2953	53.0	91.0	36.0	8.00
RS40519/64	19/64	7.54	0.2969	53.0	91.0	36.0	8.00
RS4057.6	–	7.60	0.2992	53.0	91.0	36.0	8.00
RS405N	N	7.67	0.3020	53.0	91.0	36.0	8.00
RS4057.7	–	7.70	0.3031	53.0	91.0	36.0	8.00
RS4057.8	–	7.80	0.3071	53.0	91.0	36.0	8.00
RS4057.9	–	7.90	0.3110	53.0	91.0	36.0	8.00
RS4055/16	5/16	7.94	0.3125	53.0	91.0	36.0	8.00
RS4058.0	–	8.00	0.3150	53.0	91.0	36.0	8.00
RS405O	O	8.03	0.3161	61.0	103.0	40.0	10.00
RS4058.1	–	8.10	0.3189	61.0	103.0	40.0	10.00
RS4058.2	–	8.20	0.3228	61.0	103.0	40.0	10.00
RS405P	P	8.20	0.3228	61.0	103.0	40.0	10.00
RS40521/64	21/64	8.33	0.3281	61.0	103.0	40.0	10.00
RS4058.4	–	8.40	0.3307	61.0	103.0	40.0	10.00
RS405Q	Q	8.43	0.3319	61.0	103.0	40.0	10.00
RS4058.5	–	8.50	0.3346	61.0	103.0	40.0	10.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4058.6	–	8.60	0.3386	61.0	103.0	40.0	10.00
RS405R	R	8.61	0.3390	61.0	103.0	40.0	10.00
RS4058.7	–	8.70	0.3425	61.0	103.0	40.0	10.00
RS40511/32	11/32	8.73	0.3438	61.0	103.0	40.0	10.00
RS4058.8	–	8.80	0.3465	61.0	103.0	40.0	10.00
RS405S	S	8.84	0.3480	61.0	103.0	40.0	10.00
RS4058.9	–	8.90	0.3504	61.0	103.0	40.0	10.00
RS4059.0	–	9.00	0.3543	61.0	103.0	40.0	10.00
RS405T	T	9.09	0.3579	61.0	103.0	40.0	10.00
RS4059.1	–	9.10	0.3583	61.0	103.0	40.0	10.00
RS40523/64	23/64	9.13	0.3594	61.0	103.0	40.0	10.00
RS4059.3	–	9.30	0.3661	61.0	103.0	40.0	10.00
RS405U	U	9.35	0.3681	61.0	103.0	40.0	10.00
RS4059.4	–	9.40	0.3701	61.0	103.0	40.0	10.00
RS4059.5	–	9.50	0.3740	61.0	103.0	40.0	10.00
RS4053/8	3/8	9.53	0.3750	61.0	103.0	40.0	10.00
RS405V	V	9.58	0.3772	61.0	103.0	40.0	10.00
RS4059.6	–	9.60	0.3780	61.0	103.0	40.0	10.00
RS4059.7	–	9.70	0.3819	61.0	103.0	40.0	10.00
RS4059.8	–	9.80	0.3858	61.0	103.0	40.0	10.00
RS405W	W	9.80	0.3858	61.0	103.0	40.0	10.00
RS4059.9	–	9.90	0.3898	61.0	103.0	40.0	10.00
RS40525/64	25/64	9.92	0.3906	61.0	103.0	40.0	10.00
RS40510.0	–	10.00	0.3937	61.0	103.0	40.0	10.00
RS405X	X	10.08	0.3969	70.0	118.0	45.0	12.00
RS40510.1	–	10.10	0.3976	70.0	118.0	45.0	12.00
RS40510.2	–	10.20	0.4016	70.0	118.0	45.0	12.00
RS405Y	Y	10.26	0.4039	70.0	118.0	45.0	12.00
RS40510.3	–	10.30	0.4055	70.0	118.0	45.0	12.00
RS40513/32	13/32	10.32	0.4063	70.0	118.0	45.0	12.00
RS40510.4	–	10.40	0.4094	70.0	118.0	45.0	12.00
RS405Z	Z	10.49	0.4130	70.0	118.0	45.0	12.00
RS40510.5	–	10.50	0.4134	70.0	118.0	45.0	12.00
RS40510.6	–	10.60	0.4173	70.0	118.0	45.0	12.00
RS40527/64	27/64	10.72	0.4219	70.0	118.0	45.0	12.00
RS40511.0	–	11.00	0.4331	70.0	118.0	45.0	12.00
RS4057/16	7/16	11.11	0.4375	70.0	118.0	45.0	12.00
RS40511.2	–	11.20	0.4409	70.0	118.0	45.0	12.00
RS40511.4	–	11.40	0.4488	70.0	118.0	45.0	12.00
RS40511.5	–	11.50	0.4528	70.0	118.0	45.0	12.00
RS40529/64	29/64	11.51	0.4531	70.0	118.0	45.0	12.00
RS40511.6	–	11.60	0.4567	70.0	118.0	45.0	12.00
RS40511.8	–	11.80	0.4646	70.0	118.0	45.0	12.00
RS40515/32	15/32	11.91	0.4688	70.0	118.0	45.0	12.00
RS40512.0	–	12.00	0.4724	70.0	118.0	45.0	12.00
RS40512.1	–	12.10	0.4764	76.0	124.0	45.0	14.00
RS40512.2	–	12.20	0.4803	76.0	124.0	45.0	14.00
RS40531/64	31/64	12.30	0.4844	76.0	124.0	45.0	14.00
RS40512.5	–	12.50	0.4921	76.0	124.0	45.0	14.00
RS4051/2	1/2	12.70	0.5000	76.0	124.0	45.0	14.00
RS40512.7	–	12.70	0.5000	76.0	124.0	45.0	14.00
RS40512.8	–	12.80	0.5039	76.0	124.0	45.0	14.00
RS40513.0	–	13.00	0.5118	76.0	124.0	45.0	14.00
RS40533/64	33/64	13.10	0.5156	76.0	124.0	45.0	14.00
RS40517/32	17/32	13.49	0.5313	76.0	124.0	45.0	14.00
RS40513.5	–	13.50	0.5315	76.0	124.0	45.0	14.00
RS40513.8	–	13.80	0.5433	76.0	124.0	45.0	14.00
RS40535/64	35/64	13.89	0.5469	76.0	124.0	45.0	14.00
RS40514.0	–	14.00	0.5512	76.0	124.0	45.0	14.00
RS40514.25	–	14.25	0.5610	82.0	133.0	48.0	16.00
RS4059/16	9/16	14.29	0.5625	82.0	133.0	48.0	16.00
RS40514.5	–	14.50	0.5709	82.0	133.0	48.0	16.00

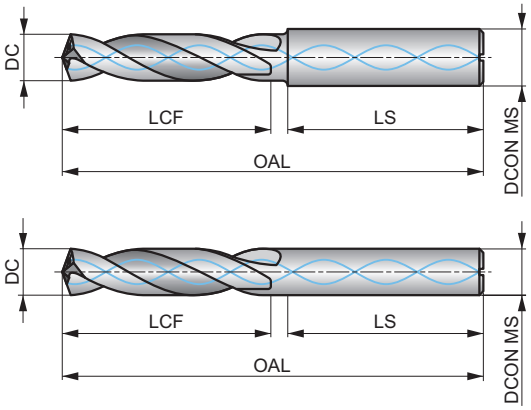
Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40537/64	37/64	14.68	0.5781	82.0	133.0	48.0	16.00
RS40514.8	–	14.80	0.5827	82.0	133.0	48.0	16.00
RS40515.0	–	15.00	0.5906	82.0	133.0	48.0	16.00
RS40519/32	19/32	15.08	0.5938	82.0	133.0	48.0	16.00
RS40515.1	–	15.10	0.5945	82.0	133.0	48.0	16.00
RS40539/64	39/64	15.48	0.6094	82.0	133.0	48.0	16.00
RS40515.5	–	15.50	0.6102	82.0	133.0	48.0	16.00
RS40515.8	–	15.80	0.6220	82.0	133.0	48.0	16.00
RS4055/8	5/8	15.88	0.6250	82.0	133.0	48.0	16.00
RS40516.0	–	16.00	0.6299	82.0	133.0	48.0	16.00
RS40541/64	41/64	16.27	0.6406	91.0	143.0	48.0	18.00
RS40516.5	–	16.50	0.6496	91.0	143.0	48.0	18.00
RS40521/32	21/32	16.67	0.6563	91.0	143.0	48.0	18.00
RS40517.0	–	17.00	0.6693	91.0	143.0	48.0	18.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40543/64	43/64	17.07	0.6720	91.0	143.0	48.0	18.00
RS40511/16	11/16	17.46	0.6874	91.0	143.0	48.0	18.00
RS40517.5	–	17.50	0.6890	91.0	143.0	48.0	18.00
RS40517.8	–	17.80	0.7008	91.0	143.0	48.0	18.00
RS40545/64	45/64	17.86	0.7031	91.0	143.0	48.0	18.00
RS40518.0	–	18.00	0.7087	91.0	143.0	48.0	18.00
RS40523/32	23/32	18.26	0.7189	99.0	153.0	50.0	20.00
RS40518.5	–	18.50	0.7283	99.0	153.0	50.0	20.00
RS40547/64	47/64	18.65	0.7343	99.0	153.0	50.0	20.00
RS40519.0	–	19.00	0.7480	99.0	153.0	50.0	20.00
RS4053/4	3/4	19.05	0.7500	99.0	153.0	50.0	20.00
RS40519.5	–	19.50	0.7677	99.0	153.0	50.0	20.00
RS40519.8	–	19.80	0.7795	99.0	153.0	50.0	20.00
RS40520.0	–	20.00	0.7874	99.0	153.0	50.0	20.00

RC405

FORCE X Vollhartmetall-Bohrer 5XD mit Kühlmittelzufuhr, TiAlN-Top beschichtet

Der Hochleistungsbohrer wurde speziell für eine überragende Bohrungsqualität bei hohen Geschwindigkeiten und Vorschüben entwickelt (H9 Bohrungstoleranz für Multi-Materialien). Eine 140°-Selbstzentrierung, 4-Flächen Spitzenanschliff und CTW-Nutenkonstruktion. Kühlmittelbohrungen verbessern die Spanabfuhr. Die TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Werkzeugstandzeit.



HM	DIN 6537	5×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Eignung der Werkstoffmaterialgruppe, Startwerte für Schnittgeschwindigkeit und Vorschub. Tabellen mit Vorschub pro Umdrehung können ab Seite 22 gefunden werden.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 140 W	■ 142 W	■ 142 W	■ 122 W	■ 120 W	■ 105 V	■ 110 V	■ 102 V	■ 100 V	■ 99 V	■ 95 V	■ 50 U	■ 105 G	■ 101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
■ 99 G	■ 80 G	■ 70 E	■ 85 G	■ 70 G	■ 65 F	■ 60 F	■ 50 E	■ 111 W	■ 108 W	■ 105 W	■ 111 W	■ 110 W	■ 99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 105 W	■ 99 W	■ 95 W	■ 100 W	■ 80 W	■ 77 W	■ 72 W	■ 70 W	■ 105 W	■ 100 W	■ 80 W	◪ 305 W	◪ 310 W	◪ 300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
◪ 221 W	◪ 220 W	◪ 200 W	◪ 185 W	◪ 180 W	◪ 175 W	■ 50 V	■ 40 V	■ 35 U	◪ 40 U	◪ 28 U	◪ 32 U	◪ 32 U	◪ 30 U
S4.2													
◪ 25 U													

DCON MS Toleranz h6.

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC4053.0	–	3.00	0.1181	28.0	66.0	36.0	6.00
RC4053.1	–	3.10	0.1220	28.0	66.0	36.0	6.00
RC4051/8	1/8	3.18	0.1250	28.0	66.0	36.0	6.00
RC4053.2	–	3.20	0.1260	28.0	66.0	36.0	6.00
RC405N30	N30	3.26	0.1283	28.0	66.0	36.0	6.00
RC4053.3	–	3.30	0.1299	28.0	66.0	36.0	6.00
RC4053.4	–	3.40	0.1339	28.0	66.0	36.0	6.00
RC405N29	N29	3.45	0.1360	28.0	66.0	36.0	6.00
RC4053.5	–	3.50	0.1378	28.0	66.0	36.0	6.00
RC405N28	N28	3.57	0.1406	28.0	66.0	36.0	6.00
RC4059/64	9/64	3.57	0.1406	28.0	66.0	36.0	6.00
RC4053.6	–	3.60	0.1417	28.0	66.0	36.0	6.00
RC405N27	N27	3.66	0.1441	28.0	66.0	36.0	6.00
RC4053.7	–	3.70	0.1457	28.0	66.0	36.0	6.00
RC405N26	N26	3.73	0.1469	36.0	74.0	36.0	6.00
RC405N25	N25	3.80	0.1496	36.0	74.0	36.0	6.00
RC4053.8	–	3.80	0.1496	36.0	74.0	36.0	6.00
RC405N24	N24	3.86	0.1520	36.0	74.0	36.0	6.00
RC4053.9	–	3.90	0.1535	36.0	74.0	36.0	6.00
RC405N23	N23	3.91	0.1539	36.0	74.0	36.0	6.00
RC4055/32	5/32	3.97	0.1563	36.0	74.0	36.0	6.00
RC405N22	N22	3.99	0.1571	36.0	74.0	36.0	6.00
RC4054.0	–	4.00	0.1575	36.0	74.0	36.0	6.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC405N21	N21	4.04	0.1591	36.0	74.0	36.0	6.00
RC4054.05	–	4.05	0.1594	36.0	74.0	36.0	6.00
RC405N20	N20	4.09	0.1610	36.0	74.0	36.0	6.00
RC4054.1	–	4.10	0.1614	36.0	74.0	36.0	6.00
RC4054.2	–	4.20	0.1654	36.0	74.0	36.0	6.00
RC405N19	N19	4.22	0.1661	36.0	74.0	36.0	6.00
RC4054.3	–	4.30	0.1693	36.0	74.0	36.0	6.00
RC405N18	N18	4.31	0.1697	36.0	74.0	36.0	6.00
RC40511/64	11/64	4.37	0.1719	36.0	74.0	36.0	6.00
RC405N17	N17	4.39	0.1728	36.0	74.0	36.0	6.00
RC4054.4	–	4.40	0.1732	36.0	74.0	36.0	6.00
RC405N16	N16	4.50	0.1772	36.0	74.0	36.0	6.00
RC4054.5	–	4.50	0.1772	36.0	74.0	36.0	6.00
RC405N15	N15	4.57	0.1799	36.0	74.0	36.0	6.00
RC4054.6	–	4.60	0.1811	36.0	74.0	36.0	6.00
RC405N14	N14	4.62	0.1819	36.0	74.0	36.0	6.00
RC405N13	N13	4.70	0.1850	36.0	74.0	36.0	6.00
RC4054.7	–	4.70	0.1850	36.0	74.0	36.0	6.00
RC4053/16	3/16	4.76	0.1875	44.0	82.0	36.0	6.00
RC405N12	N12	4.80	0.1890	44.0	82.0	36.0	6.00
RC4054.8	–	4.80	0.1890	44.0	82.0	36.0	6.00
RC405N11	N11	4.85	0.1909	44.0	82.0	36.0	6.00
RC4054.9	–	4.90	0.1929	44.0	82.0	36.0	6.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC405N10	N10	4.92	0.1937	44.0	82.0	36.0	6.00
RC405N9	N9	4.98	0.1961	44.0	82.0	36.0	6.00
RC4055.0	–	5.00	0.1969	44.0	82.0	36.0	6.00
RC4055.05	–	5.05	0.1988	44.0	82.0	36.0	6.00
RC405N8	N8	5.06	0.1992	44.0	82.0	36.0	6.00
RC4055.1	–	5.10	0.2008	44.0	82.0	36.0	6.00
RC405N7	N7	5.11	0.2010	44.0	82.0	36.0	6.00
RC40513/64	13/64	5.16	0.2031	44.0	82.0	36.0	6.00
RC405N6	N6	5.18	0.2039	44.0	82.0	36.0	6.00
RC4055.2	–	5.20	0.2047	44.0	82.0	36.0	6.00
RC405N5	N5	5.22	0.2055	44.0	82.0	36.0	6.00
RC4055.3	–	5.30	0.2087	44.0	82.0	36.0	6.00
RC405N4	N4	5.31	0.2091	44.0	82.0	36.0	6.00
RC4055.4	–	5.40	0.2126	44.0	82.0	36.0	6.00
RC405N3	N3	5.41	0.2130	44.0	82.0	36.0	6.00
RC4055.5	–	5.50	0.2165	44.0	82.0	36.0	6.00
RC4057/32	7/32	5.56	0.2188	44.0	82.0	36.0	6.00
RC4055.6	–	5.60	0.2205	44.0	82.0	36.0	6.00
RC405N2	N2	5.61	0.2209	44.0	82.0	36.0	6.00
RC4055.7	–	5.70	0.2244	44.0	82.0	36.0	6.00
RC405N1	N1	5.79	0.2280	44.0	82.0	36.0	6.00
RC4055.8	–	5.80	0.2283	44.0	82.0	36.0	6.00
RC4055.9	–	5.90	0.2323	44.0	82.0	36.0	6.00
RC405A	A	5.94	0.2339	44.0	82.0	36.0	6.00
RC40515/64	15/64	5.95	0.2344	44.0	82.0	36.0	6.00
RC4056.0	–	6.00	0.2362	44.0	82.0	36.0	6.00
RC405B	B	6.05	0.2380	53.0	91.0	36.0	8.00
RC4056.05	–	6.05	0.2382	53.0	91.0	36.0	8.00
RC4056.1	–	6.10	0.2402	53.0	91.0	36.0	8.00
RC405C	C	6.15	0.2421	53.0	91.0	36.0	8.00
RC4056.2	–	6.20	0.2441	53.0	91.0	36.0	8.00
RC405D	D	6.25	0.2461	53.0	91.0	36.0	8.00
RC4056.3	–	6.30	0.2480	53.0	91.0	36.0	8.00
RC405E	E	6.35	0.2500	53.0	91.0	36.0	8.00
RC4051/4	1/4	6.35	0.2500	53.0	91.0	36.0	8.00
RC4056.4	–	6.40	0.2520	53.0	91.0	36.0	8.00
RC4056.5	–	6.50	0.2559	53.0	91.0	36.0	8.00
RC405F	F	6.53	0.2571	53.0	91.0	36.0	8.00
RC4056.6	–	6.60	0.2598	53.0	91.0	36.0	8.00
RC405G	G	6.63	0.2610	53.0	91.0	36.0	8.00
RC4056.7	–	6.70	0.2638	53.0	91.0	36.0	8.00
RC40517/64	17/64	6.75	0.2656	53.0	91.0	36.0	8.00
RC405H	H	6.76	0.2661	53.0	91.0	36.0	8.00
RC4056.8	–	6.80	0.2677	53.0	91.0	36.0	8.00
RC4056.9	–	6.90	0.2717	53.0	91.0	36.0	8.00
RC405I	I	6.91	0.2720	53.0	91.0	36.0	8.00
RC4057.0	–	7.00	0.2756	53.0	91.0	36.0	8.00
RC405J	J	7.04	0.2772	53.0	91.0	36.0	8.00
RC4057.1	–	7.10	0.2795	53.0	91.0	36.0	8.00
RC405K	K	7.14	0.2811	53.0	91.0	36.0	8.00
RC4059/32	9/32	7.14	0.2813	53.0	91.0	36.0	8.00
RC4057.2	–	7.20	0.2835	53.0	91.0	36.0	8.00
RC4057.3	–	7.30	0.2874	53.0	91.0	36.0	8.00
RC405L	L	7.37	0.2902	53.0	91.0	36.0	8.00
RC4057.4	–	7.40	0.2913	53.0	91.0	36.0	8.00
RC405M	M	7.49	0.2949	53.0	91.0	36.0	8.00
RC4057.5	–	7.50	0.2953	53.0	91.0	36.0	8.00
RC40519/64	19/64	7.54	0.2969	53.0	91.0	36.0	8.00
RC4057.6	–	7.60	0.2992	53.0	91.0	36.0	8.00
RC405N	N	7.67	0.3020	53.0	91.0	36.0	8.00
RC4057.7	–	7.70	0.3031	53.0	91.0	36.0	8.00
RC4057.8	–	7.80	0.3071	53.0	91.0	36.0	8.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC4057.9	–	7.90	0.3110	53.0	91.0	36.0	8.00
RC4055/16	5/16	7.94	0.3125	53.0	91.0	36.0	8.00
RC4058.0	–	8.00	0.3150	53.0	91.0	36.0	8.00
RC4050	0	8.03	0.3161	61.0	103.0	40.0	10.00
RC4058.05	–	8.05	0.3169	61.0	103.0	40.0	10.00
RC4058.1	–	8.10	0.3189	61.0	103.0	40.0	10.00
RC4058.2	–	8.20	0.3228	61.0	103.0	40.0	10.00
RC405P	P	8.20	0.3228	61.0	103.0	40.0	10.00
RC4058.3	–	8.30	0.3268	61.0	103.0	40.0	10.00
RC40521/64	21/64	8.33	0.3281	61.0	103.0	40.0	10.00
RC4058.4	–	8.40	0.3307	61.0	103.0	40.0	10.00
RC405Q	Q	8.43	0.3319	61.0	103.0	40.0	10.00
RC4058.5	–	8.50	0.3346	61.0	103.0	40.0	10.00
RC4058.6	–	8.60	0.3386	61.0	103.0	40.0	10.00
RC405R	R	8.61	0.3390	61.0	103.0	40.0	10.00
RC4058.7	–	8.70	0.3425	61.0	103.0	40.0	10.00
RC40511/32	11/32	8.73	0.3438	61.0	103.0	40.0	10.00
RC4058.8	–	8.80	0.3465	61.0	103.0	40.0	10.00
RC405S	S	8.84	0.3480	61.0	103.0	40.0	10.00
RC4058.9	–	8.90	0.3504	61.0	103.0	40.0	10.00
RC4059.0	–	9.00	0.3543	61.0	103.0	40.0	10.00
RC405T	T	9.09	0.3579	61.0	103.0	40.0	10.00
RC4059.1	–	9.10	0.3583	61.0	103.0	40.0	10.00
RC40523/64	23/64	9.13	0.3594	61.0	103.0	40.0	10.00
RC4059.2	–	9.20	0.3622	61.0	103.0	40.0	10.00
RC4059.3	–	9.30	0.3661	61.0	103.0	40.0	10.00
RC405U	U	9.35	0.3681	61.0	103.0	40.0	10.00
RC4059.4	–	9.40	0.3701	61.0	103.0	40.0	10.00
RC4059.5	–	9.50	0.3740	61.0	103.0	40.0	10.00
RC4053/8	3/8	9.53	0.3750	61.0	103.0	40.0	10.00
RC405V	V	9.58	0.3772	61.0	103.0	40.0	10.00
RC4059.6	–	9.60	0.3780	61.0	103.0	40.0	10.00
RC4059.7	–	9.70	0.3819	61.0	103.0	40.0	10.00
RC4059.8	–	9.80	0.3858	61.0	103.0	40.0	10.00
RC405W	W	9.80	0.3858	61.0	103.0	40.0	10.00
RC4059.9	–	9.90	0.3898	61.0	103.0	40.0	10.00
RC40525/64	25/64	9.92	0.3906	61.0	103.0	40.0	10.00
RC40510.0	–	10.00	0.3937	61.0	103.0	40.0	10.00
RC40510.05	–	10.05	0.3957	70.0	118.0	45.0	12.00
RC405X	X	10.08	0.3969	70.0	118.0	45.0	12.00
RC40510.1	–	10.10	0.3976	70.0	118.0	45.0	12.00
RC40510.2	–	10.20	0.4016	70.0	118.0	45.0	12.00
RC405Y	Y	10.26	0.4039	70.0	118.0	45.0	12.00
RC40510.3	–	10.30	0.4055	70.0	118.0	45.0	12.00
RC40513/32	13/32	10.32	0.4063	70.0	118.0	45.0	12.00
RC40510.4	–	10.40	0.4094	70.0	118.0	45.0	12.00
RC405Z	Z	10.49	0.4130	70.0	118.0	45.0	12.00
RC40510.5	–	10.50	0.4134	70.0	118.0	45.0	12.00
RC40510.6	–	10.60	0.4173	70.0	118.0	45.0	12.00
RC40527/64	27/64	10.72	0.4219	70.0	118.0	45.0	12.00
RC40510.8	–	10.80	0.4252	70.0	118.0	45.0	12.00
RC40510.9	–	10.90	0.4291	70.0	118.0	45.0	12.00
RC40511.0	–	11.00	0.4331	70.0	118.0	45.0	12.00
RC4057/16	7/16	11.11	0.4375	70.0	118.0	45.0	12.00
RC40511.2	–	11.20	0.4409	70.0	118.0	45.0	12.00
RC40511.3	–	11.30	0.4449	70.0	118.0	45.0	12.00
RC40511.4	–	11.40	0.4488	70.0	118.0	45.0	12.00
RC40511.5	–	11.50	0.4528	70.0	118.0	45.0	12.00
RC40529/64	29/64	11.51	0.4531	70.0	118.0	45.0	12.00
RC40511.6	–	11.60	0.4567	70.0	118.0	45.0	12.00
RC40511.8	–	11.80	0.4646	70.0	118.0	45.0	12.00
RC40515/32	15/32	11.91	0.4688	70.0	118.0	45.0	12.00

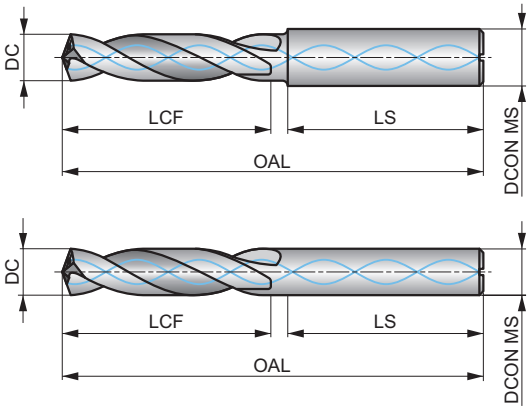
Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC40512.0	–	12.00	0.4724	70.0	118.0	45.0	12.00
RC40512.05	–	12.05	0.4744	76.0	124.0	45.0	14.00
RC40512.2	–	12.20	0.4803	76.0	124.0	45.0	14.00
RC40531/64	31/64	12.30	0.4844	76.0	124.0	45.0	14.00
RC40512.5	–	12.50	0.4921	76.0	124.0	45.0	14.00
RC4051/2	1/2	12.70	0.5000	76.0	124.0	45.0	14.00
RC40512.7	–	12.70	0.5000	76.0	124.0	45.0	14.00
RC40512.8	–	12.80	0.5039	76.0	124.0	45.0	14.00
RC40513.0	–	13.00	0.5118	76.0	124.0	45.0	14.00
RC40533/64	33/64	13.10	0.5156	76.0	124.0	45.0	14.00
RC40513.3	–	13.30	0.5236	76.0	124.0	45.0	14.00
RC40517/32	17/32	13.49	0.5313	76.0	124.0	45.0	14.00
RC40513.5	–	13.50	0.5315	76.0	124.0	45.0	14.00
RC40513.8	–	13.80	0.5433	76.0	124.0	45.0	14.00
RC40535/64	35/64	13.89	0.5469	76.0	124.0	45.0	14.00
RC40514.0	–	14.00	0.5512	76.0	124.0	45.0	14.00
RC40514.25	–	14.25	0.5610	82.0	133.0	48.0	16.00
RC4059/16	9/16	14.29	0.5625	82.0	133.0	48.0	16.00
RC40514.5	–	14.50	0.5709	82.0	133.0	48.0	16.00
RC40537/64	37/64	14.68	0.5781	82.0	133.0	48.0	16.00
RC40514.8	–	14.80	0.5827	82.0	133.0	48.0	16.00
RC40515.0	–	15.00	0.5906	82.0	133.0	48.0	16.00
RC40519/32	19/32	15.08	0.5938	82.0	133.0	48.0	16.00
RC40515.1	–	15.10	0.5945	82.0	133.0	48.0	16.00

Produkt	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC40515.3	–	15.30	0.6024	82.0	133.0	48.0	16.00
RC40539/64	39/64	15.48	0.6094	82.0	133.0	48.0	16.00
RC40515.5	–	15.50	0.6102	82.0	133.0	48.0	16.00
RC40515.8	–	15.80	0.6220	82.0	133.0	48.0	16.00
RC4055/8	5/8	15.88	0.6250	82.0	133.0	48.0	16.00
RC40516.0	–	16.00	0.6299	82.0	133.0	48.0	16.00
RC40541/64	41/64	16.27	0.6406	91.0	143.0	48.0	18.00
RC40516.5	–	16.50	0.6496	91.0	143.0	48.0	18.00
RC40521/32	21/32	16.67	0.6563	91.0	143.0	48.0	18.00
RC40517.0	–	17.00	0.6693	91.0	143.0	48.0	18.00
RC40543/64	43/64	17.07	0.6720	91.0	143.0	48.0	18.00
RC40511/16	11/16	17.46	0.6874	91.0	143.0	48.0	18.00
RC40517.5	–	17.50	0.6890	91.0	143.0	48.0	18.00
RC40517.8	–	17.80	0.7008	91.0	143.0	48.0	18.00
RC40545/64	45/64	17.86	0.7031	91.0	143.0	48.0	18.00
RC40518.0	–	18.00	0.7087	91.0	143.0	48.0	18.00
RC40523/32	23/32	18.26	0.7189	99.0	153.0	50.0	20.00
RC40518.5	–	18.50	0.7283	99.0	153.0	50.0	20.00
RC40547/64	47/64	18.65	0.7343	99.0	153.0	50.0	20.00
RC40519.0	–	19.00	0.7480	99.0	153.0	50.0	20.00
RC4053/4	3/4	19.05	0.7500	99.0	153.0	50.0	20.00
RC40519.5	–	19.50	0.7677	99.0	153.0	50.0	20.00
RC40519.8	–	19.80	0.7795	99.0	153.0	50.0	20.00
RC40520.0	–	20.00	0.7874	99.0	153.0	50.0	20.00

RC408

FORCE X Vollhartmetall-Bohrer 8XD mit Kühlmittelzufuhr, TiAlN-Top beschichtet

Der Hochleistungsbohrer wurde speziell für eine überragende Bohrungsqualität bei hohen Geschwindigkeiten und Vorschüben entwickelt (H9 Bohrungstoleranz für Multi-Materialien). Eine 140°-Selbstzentrierung, 4-Flächen Spitzenanschliff und CTW-Nutenkonstruktion. Kühlmittelbohrungen verbessern die Spanabfuhr. Die TiAlN-Beschichtung erhöht die Oberflächenhärte, verbessert die Verschleißfestigkeit und verlängert die Werkzeugstandzeit.



HM	WORK NORM	8×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Eignung der Werkstoffmaterialgruppe, Startwerte für Schnittgeschwindigkeit und Vorschub. Tabellen mit Vorschub pro Umdrehung können ab Seite 22 gefunden werden.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 140 W	■ 142 W	■ 142 W	■ 122 W	■ 120 W	■ 105 V	■ 110 V	■ 102 V	■ 100 V	■ 99 V	■ 95 V	■ 50 T	■ 105 G	■ 101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
■ 99 G	■ 80 G	■ 70 E	■ 85 G	■ 70 G	■ 65 F	■ 60 F	■ 50 E	■ 111 W	■ 108 W	■ 105 W	■ 111 W	■ 110 W	■ 99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 105 W	■ 99 W	■ 95 W	■ 100 W	■ 80 W	■ 77 W	■ 72 W	■ 70 W	■ 105 W	■ 100 W	■ 80 W	◪ 305 W	◪ 310 W	◪ 300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
◪ 221 W	◪ 220 W	◪ 200 W	◪ 185 W	◪ 180 W	◪ 175 W	■ 50 V	■ 40 V	■ 35 U	◪ 40 U	◪ 28 U	◪ 32 U	◪ 32 U	◪ 30 U
S4.2													
◪ 25 U													

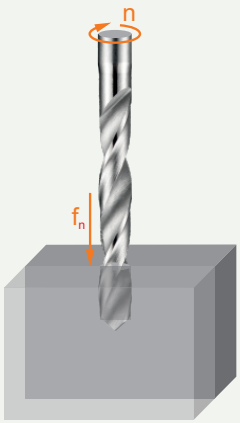
DCON MS Toleranz h6.

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4083.0	–	3.00	0.1181	37.0	79.0	36.0	6.00
RC4083.1	–	3.10	0.1220	37.0	79.0	36.0	6.00
RC4081/8	1/8	3.18	0.1250	37.0	79.0	36.0	6.00
RC4083.2	–	3.20	0.1260	37.0	79.0	36.0	6.00
RC4083.3	–	3.30	0.1299	37.0	79.0	36.0	6.00
RC4083.4	–	3.40	0.1339	37.0	79.0	36.0	6.00
RC4083.5	–	3.50	0.1378	37.0	79.0	36.0	6.00
RC4089/64	9/64	3.57	0.1406	37.0	79.0	36.0	6.00
RC4083.6	–	3.60	0.1417	37.0	79.0	36.0	6.00
RC4083.7	–	3.70	0.1457	37.0	79.0	36.0	6.00
RC4083.8	–	3.80	0.1496	48.0	90.0	36.0	6.00
RC4083.9	–	3.90	0.1535	48.0	90.0	36.0	6.00
RC4085/32	5/32	3.97	0.1563	48.0	90.0	36.0	6.00
RC4084.0	–	4.00	0.1575	48.0	90.0	36.0	6.00
RC4084.1	–	4.10	0.1614	48.0	90.0	36.0	6.00
RC4084.2	–	4.20	0.1654	48.0	90.0	36.0	6.00
RC4084.3	–	4.30	0.1693	48.0	90.0	36.0	6.00
RC40811/64	11/64	4.37	0.1719	48.0	90.0	36.0	6.00
RC4084.4	–	4.40	0.1732	48.0	90.0	36.0	6.00
RC4084.5	–	4.50	0.1772	48.0	90.0	36.0	6.00
RC4084.6	–	4.60	0.1811	48.0	90.0	36.0	6.00
RC4084.7	–	4.70	0.1850	62.0	104.0	36.0	6.00
RC4083/16	3/16	4.76	0.1875	62.0	104.0	36.0	6.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4084.8	–	4.80	0.1890	62.0	104.0	36.0	6.00
RC4084.9	–	4.90	0.1929	62.0	104.0	36.0	6.00
RC4085.0	–	5.00	0.1969	62.0	104.0	36.0	6.00
RC4085.1	–	5.10	0.2008	62.0	104.0	36.0	6.00
RC40813/64	13/64	5.16	0.2031	62.0	104.0	36.0	6.00
RC4085.2	–	5.20	0.2047	62.0	104.0	36.0	6.00
RC4085.3	–	5.30	0.2087	62.0	104.0	36.0	6.00
RC4085.4	–	5.40	0.2126	62.0	104.0	36.0	6.00
RC4085.5	–	5.50	0.2165	62.0	104.0	36.0	6.00
RC4087/32	7/32	5.56	0.2188	62.0	104.0	36.0	6.00
RC4085.6	–	5.60	0.2205	62.0	104.0	36.0	6.00
RC4085.7	–	5.70	0.2244	62.0	104.0	36.0	6.00
RC4085.8	–	5.80	0.2283	62.0	104.0	36.0	6.00
RC4085.9	–	5.90	0.2323	62.0	104.0	36.0	6.00
RC40815/64	15/64	5.95	0.2344	62.0	104.0	36.0	6.00
RC4086.0	–	6.00	0.2362	62.0	104.0	36.0	6.00
RC4086.1	–	6.10	0.2402	84.0	126.0	36.0	8.00
RC4086.2	–	6.20	0.2441	84.0	126.0	36.0	8.00
RC4086.3	–	6.30	0.2480	84.0	126.0	36.0	8.00
RC4081/4	1/4	6.35	0.2500	84.0	126.0	36.0	8.00
RC4086.4	–	6.40	0.2520	84.0	126.0	36.0	8.00
RC4086.5	–	6.50	0.2559	84.0	126.0	36.0	8.00
RC4086.6	–	6.60	0.2598	84.0	126.0	36.0	8.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4086.7	–	6.70	0.2638	84.0	126.0	36.0	8.00
RC40817/64	17/64	6.75	0.2656	84.0	126.0	36.0	8.00
RC4086.8	–	6.80	0.2677	84.0	126.0	36.0	8.00
RC4086.9	–	6.90	0.2717	84.0	126.0	36.0	8.00
RC4087.0	–	7.00	0.2756	84.0	126.0	36.0	8.00
RC4087.1	–	7.10	0.2795	84.0	126.0	36.0	8.00
RC4089/32	9/32	7.14	0.2813	84.0	126.0	36.0	8.00
RC4087.2	–	7.20	0.2835	84.0	126.0	36.0	8.00
RC4087.3	–	7.30	0.2874	84.0	126.0	36.0	8.00
RC4087.4	–	7.40	0.2913	84.0	126.0	36.0	8.00
RC4087.5	–	7.50	0.2953	84.0	126.0	36.0	8.00
RC40819/64	19/64	7.54	0.2969	84.0	126.0	36.0	8.00
RC4087.6	–	7.60	0.2992	84.0	126.0	36.0	8.00
RC4087.7	–	7.70	0.3031	84.0	126.0	36.0	8.00
RC4087.8	–	7.80	0.3071	84.0	126.0	36.0	8.00
RC4087.9	–	7.90	0.3110	84.0	126.0	36.0	8.00
RC4085/16	5/16	7.94	0.3125	84.0	126.0	36.0	8.00
RC4088.0	–	8.00	0.3150	84.0	126.0	36.0	8.00
RC4088.1	–	8.10	0.3189	106.0	152.0	40.0	10.00
RC4088.2	–	8.20	0.3228	106.0	152.0	40.0	10.00
RC4088.3	–	8.30	0.3268	106.0	152.0	40.0	10.00
RC40821/64	21/64	8.33	0.3281	106.0	152.0	40.0	10.00
RC4088.4	–	8.40	0.3307	106.0	152.0	40.0	10.00
RC4088.5	–	8.50	0.3346	106.0	152.0	40.0	10.00
RC4088.6	–	8.60	0.3386	106.0	152.0	40.0	10.00
RC4088.7	–	8.70	0.3425	106.0	152.0	40.0	10.00
RC40811/32	11/32	8.73	0.3438	106.0	152.0	40.0	10.00
RC4088.8	–	8.80	0.3465	106.0	152.0	40.0	10.00
RC4088.9	–	8.90	0.3504	106.0	152.0	40.0	10.00
RC4089.0	–	9.00	0.3543	106.0	152.0	40.0	10.00
RC4089.1	–	9.10	0.3583	106.0	152.0	40.0	10.00
RC40823/64	23/64	9.13	0.3594	106.0	152.0	40.0	10.00
RC4089.2	–	9.20	0.3622	106.0	152.0	40.0	10.00
RC4089.3	–	9.30	0.3661	106.0	152.0	40.0	10.00
RC4089.4	–	9.40	0.3701	106.0	152.0	40.0	10.00
RC4089.5	–	9.50	0.3740	106.0	152.0	40.0	10.00
RC4083/8	3/8	9.53	0.3750	106.0	152.0	40.0	10.00
RC4089.6	–	9.60	0.3780	106.0	152.0	40.0	10.00
RC4089.7	–	9.70	0.3819	106.0	152.0	40.0	10.00
RC4089.8	–	9.80	0.3858	106.0	152.0	40.0	10.00
RC4089.9	–	9.90	0.3898	106.0	152.0	40.0	10.00

Produkt	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40825/64	25/64	9.92	0.3906	106.0	152.0	40.0	10.00
RC40810.0	–	10.00	0.3937	106.0	152.0	40.0	10.00
RC40810.2	–	10.20	0.4016	128.0	180.0	45.0	12.00
RC40810.3	–	10.30	0.4055	128.0	180.0	45.0	12.00
RC40813/32	13/32	10.32	0.4063	128.0	180.0	45.0	12.00
RC40810.4	–	10.40	0.4094	128.0	180.0	45.0	12.00
RC40810.5	–	10.50	0.4134	128.0	180.0	45.0	12.00
RC40827/64	27/64	10.72	0.4219	128.0	180.0	45.0	12.00
RC40810.8	–	10.80	0.4252	128.0	180.0	45.0	12.00
RC40811.0	–	11.00	0.4331	128.0	180.0	45.0	12.00
RC4087/16	7/16	11.11	0.4375	128.0	180.0	45.0	12.00
RC40811.2	–	11.20	0.4409	128.0	180.0	45.0	12.00
RC40811.3	–	11.30	0.4449	128.0	180.0	45.0	12.00
RC40811.5	–	11.50	0.4528	128.0	180.0	45.0	12.00
RC40829/64	29/64	11.51	0.4531	128.0	180.0	45.0	12.00
RC40811.8	–	11.80	0.4646	128.0	180.0	45.0	12.00
RC40815/32	15/32	11.91	0.4688	128.0	180.0	45.0	12.00
RC40812.0	–	12.00	0.4724	128.0	180.0	45.0	12.00
RC40812.2	–	12.20	0.4803	151.0	202.0	48.0	14.00
RC40831/64	31/64	12.30	0.4844	151.0	202.0	48.0	14.00
RC40812.5	–	12.50	0.4921	151.0	202.0	48.0	14.00
RC4081/2	1/2	12.70	0.5000	151.0	202.0	48.0	14.00
RC40812.8	–	12.80	0.5039	151.0	202.0	48.0	14.00
RC40813.0	–	13.00	0.5118	151.0	202.0	48.0	14.00
RC40833/64	33/64	13.10	0.5156	151.0	202.0	48.0	14.00
RC40817/32	17/32	13.49	0.5313	151.0	202.0	48.0	14.00
RC40813.5	–	13.50	0.5315	151.0	202.0	48.0	14.00
RC40835/64	35/64	13.89	0.5469	151.0	202.0	48.0	14.00
RC40814.0	–	14.00	0.5512	151.0	202.0	48.0	14.00
RC40814.25	–	14.25	0.5610	172.0	227.0	48.0	16.00
RC4089/16	9/16	14.29	0.5625	172.0	227.0	48.0	16.00
RC40814.5	–	14.50	0.5709	172.0	227.0	48.0	16.00
RC40837/64	37/64	14.68	0.5781	172.0	227.0	48.0	16.00
RC40815.0	–	15.00	0.5906	172.0	227.0	48.0	16.00
RC40819/32	19/32	15.08	0.5938	172.0	227.0	48.0	16.00
RC40815.1	–	15.10	0.5945	172.0	227.0	48.0	16.00
RC40839/64	39/64	15.48	0.6094	172.0	227.0	48.0	16.00
RC40815.5	–	15.50	0.6102	172.0	227.0	48.0	16.00
RC4085/8	5/8	15.88	0.6250	172.0	227.0	48.0	16.00
RC40816.0	–	16.00	0.6299	172.0	227.0	48.0	16.00



Vorschub pro Umdrehung f_n (mm/U).
Je nach Arbeitsbedingungen kann es erforderlich sein, diese Werte um ±25% anzupassen.

Verwendung dieser Tabelle zur Ermittlung des Vorschubs pro Umdrehung f_n:

1. Alpha-Code auf der Produktseite ermitteln (Beispiel: 46J, „**J**" ist der Alpha-Code).
2. In der obersten Zeile der Tabelle den passendsten Durchmesser für Ihre Schneidanwendung auswählen.
3. Alpha-Code in der linken Spalte der Tabelle suchen.
4. Der Schnittpunkt (Zelle) der Spalte für Durchmesser und Alpha-Code ist der Vorschub pro Umdrehung f_n.

Vorschub (mm/Umdrehung)	ø DC (mm)																		
	0.15	0.5	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	15.0	16.0	20.0	25.0	30.0	40.0	50.0	100
A	0.003	0.006	0.012	0.023	0.029	0.032	0.036	0.042	0.054	0.062	0.069	0.082	0.086	0.110	0.125	0.135	0.155	0.175	0.263
B	0.004	0.007	0.014	0.028	0.037	0.041	0.046	0.053	0.067	0.080	0.090	0.103	0.108	0.135	0.153	0.165	0.188	0.208	0.312
C	0.004	0.008	0.015	0.032	0.044	0.050	0.056	0.064	0.080	0.098	0.110	0.125	0.130	0.160	0.180	0.195	0.220	0.240	0.360
D	0.004	0.008	0.016	0.038	0.053	0.060	0.068	0.078	0.098	0.119	0.130	0.149	0.155	0.188	0.210	0.228	0.253	0.275	0.413
E	0.004	0.009	0.017	0.043	0.062	0.071	0.080	0.092	0.115	0.140	0.150	0.173	0.180	0.215	0.240	0.260	0.285	0.310	0.465
F	0.005	0.009	0.018	0.050	0.073	0.084	0.095	0.109	0.138	0.165	0.178	0.202	0.210	0.248	0.275	0.295	0.320	0.343	0.515
G	0.005	0.010	0.019	0.056	0.084	0.096	0.109	0.126	0.160	0.190	0.205	0.231	0.240	0.280	0.310	0.330	0.355	0.375	0.563
H	0.005	0.010	0.020	0.066	0.102	0.116	0.130	0.150	0.190	0.228	0.243	0.271	0.280	0.320	0.355	0.375	0.398	0.418	0.627
I	0.005	0.011	0.021	0.076	0.119	0.134	0.150	0.173	0.220	0.265	0.280	0.310	0.320	0.360	0.400	0.420	0.440	0.460	0.690
J	0.006	0.012	0.024	0.084	0.135	0.152	0.170	0.197	0.250	0.298	0.315	0.349	0.360	0.405	0.445	0.465	0.485	0.503	0.755
K	0.007	0.013	0.026	0.092	0.150	0.170	0.190	0.220	0.280	0.330	0.350	0.388	0.400	0.450	0.490	0.510	0.530	0.545	0.818
L	0.007	0.014	0.028	0.101	0.165	0.186	0.208	0.240	0.305	0.360	0.385	0.419	0.430	0.485	0.525	0.545	0.568	0.588	0.882
M	0.008	0.015	0.030	0.110	0.180	0.202	0.225	0.260	0.330	0.390	0.420	0.450	0.460	0.520	0.560	0.580	0.605	0.630	0.945
N	0.008	0.016	0.032	0.119	0.195	0.218	0.242	0.280	0.355	0.420	0.455	0.481	0.490	0.555	0.595	0.615	0.642	0.672	1.008
S	0.002	0.004	0.008	0.014	0.020	0.025	0.030	0.037	0.050	0.080	0.100	0.123	0.130	0.150	0.170	0.190	0.220	0.240	–
T	0.004	0.008	0.015	0.028	0.040	0.050	0.060	0.070	0.090	0.110	0.130	0.160	0.170	0.190	0.210	0.230	0.260	0.275	–
U	0.007	0.013	0.026	0.048	0.070	0.080	0.090	0.107	0.140	0.170	0.200	0.223	0.230	0.240	0.270	0.300	0.360	0.375	–
V	0.010	0.019	0.038	0.069	0.100	0.115	0.130	0.153	0.200	0.250	0.280	0.310	0.320	0.340	0.400	0.440	0.510	0.530	–
W	0.012	0.025	0.049	0.089	0.130	0.150	0.170	0.200	0.260	0.330	0.380	0.418	0.430	0.450	0.470	0.490	0.520	0.540	–
X	0.014	0.028	0.056	0.103	0.150	0.180	0.210	0.250	0.330	0.420	0.480	0.533	0.550	0.580	–	–	–	–	–
Y	0.017	0.034	0.068	0.124	0.180	0.220	0.260	0.317	0.430	0.550	0.700	0.700	0.700	0.740	–	–	–	–	–
Z	0.024	0.047	0.094	0.172	0.250	0.325	0.400	0.533	0.800	1.000	1.100	1.175	1.200	1.200	–	–	–	–	–

ISO Gruppe		WMG (Werkstoff-Materialgruppen)			Härte (HB oder HRC)	Zugfestigkeit (MPa)
P	P1	P1.1	Stahl (Automatenstahl) (Kohlenstoffstähle mit erhöhter Bearbeitbarkeit)	Geschwefelt	< 240 HB	≤ 830
		P1.2		Geschwefelt und phosphoriert	< 180 HB	≤ 620
		P1.3		Geschwefelt / phosphoriert und verbleit	< 180 HB	≤ 620
	P2	P2.1	Kohlenstoffstahl (Stähle, die hauptsächlich aus Eisen und Kohlenstoff bestehen)	Enthält <0.25%C	< 180 HB	≤ 620
		P2.2		Enthält <0.55%C	< 240 HB	≤ 830
		P2.3		Enthält >0.55%C	< 300 HB	≤ 1030
	P3	P3.1	Legierter Stahl (Kohlenstoffstähle mit einem Legierungsgehalt ≤ 10%)	Geglüht	< 180 HB	≤ 620
		P3.2		Gehärtet und angelassen	180 – 260 HB	> 620 ≤ 900
		P3.3			260 – 360 HB	> 900 ≤ 1240
	P4	P4.1	Werkzeugstahl (Speziallegierter Stahl für Werkzeuge, Matrizen und Formen)	Geglüht	< 26 HRC	≤ 900
		P4.2		Gehärtet und angelassen	26 – 39 HRC	> 900 ≤ 1240
		P4.3			39 – 45 HRC	> 1240 ≤ 1450
M	M1	M1.1	Ferritischer Edelstahl (nicht härtbare Chromlegierungen)		< 160 HB	≤ 520
		M1.2			160 – 220 HB	> 520 ≤ 700
	M2	M2.1	Martensitischer Edelstahl (härtbare Chromlegierungen)	Geglüht	< 200 HB	≤ 670
		M2.2		Vergütet	200 – 280 HB	> 670 ≤ 950
		M2.3		Ausscheidungsgehärtet	280 – 380 HB	> 950 ≤ 1300
	M3	M3.1	Austenitischer Edelstahl (Chrom-Nickel- und Chrom-Nickel-Mangan-Legierungen)		< 200 HB	≤ 750
		M3.2			200 – 260 HB	> 750 ≤ 870
		M3.3			260 – 300 HB	> 870 ≤ 1040
	M4	M4.1	Austenitisch-ferritischer (DUPLEX) oder superaustenitischer Edelstahl		< 300 HB	≤ 990
		M4.2	Ausscheidungsgehärteter austenitischer Edelstahl		300 – 380 HB	≤ 1320
K	K1	K1.1	Grauguss (ASTM A48) oder Automobiler-Grauguss (ASTM A159) (Eisen-Kohlenstoff-Gussteile mit einer Lamellengraphit-Mikrostruktur)	Ferritisch oder ferritisch-perlitisch	< 180 HB	≤ 190
		K1.2		Ferritisch-perliktisch oder perlitisch	180 – 240 HB	> 190 ≤ 310
		K1.3		Perlitisch	240 – 280 HB	> 310 ≤ 390
	K2	K2.1	Temperguss (ASTM A602) (Eisen-Kohlenstoff-Gussteile mit graphitfreier Mikrostruktur)	Ferritisch	< 160 HB	≤ 400
		K2.2		Ferritisch oder perlitisch	160 – 200 HB	> 400 ≤ 550
		K2.3		Perlitisch	200 – 240 HB	> 550 ≤ 660
	K3	K3.1	Duktiles Gusseisen (ASTM A536) (Eisen-Kohlenstoff-Gussteile mit einer Kugelgraphit-Mikrostruktur)	Ferritisch	< 180 HB	≤ 560
		K3.2		Ferritisch oder perlitisch	180 – 220 HB	> 560 ≤ 680
		K3.3		Perlitisch	220 – 260 HB	> 680 ≤ 800
	K4	K4.1	Austenitisches Grauguss (ASTM A436) (Gussteile aus Eisen-Kohlenstoff-Legierungen mit einer austenitischen Lamellengraphit-Mikrostruktur)		< 180 HB	≤ 190
		K4.2	Austenitisches duktiles Gusseisen (ASTM A439 oder ASTM A571) (Gussteile aus Eisen-Kohlenstoff-Legierungen mit austenitischer Kugelgraphit-Mikrostruktur)		< 240 HB	≤ 740
		K4.3	Austemperiertes duktiles Gusseisen (ASTM A897) (Gussteile aus Eisen-Kohlenstoff-Legierungen mit einer Ausferrit-Mikrostruktur)		< 280 HB	> 840 ≤ 980
		K4.4			280 – 320 HB	> 980 ≤ 1130
		K4.5			320 – 360 HB	> 1130 ≤ 1280
	K5	K5.1	GJV aus verdichtetem Graphiteisen (ASTM A842) (Eisen-Kohlenstoff-Gussteile mit vermikulärer Graphitstruktur)	Ferritisch	< 180 HB	≤ 400
		K5.2		Ferritisch oder perlitisch	180 – 220 HB	> 400 ≤ 450
		K5.3		Perlitisch	220 – 260 HB	> 450 ≤ 500
N	N1	N1.1	Kommerziell reine Aluminiumknetlegierung		< 60 HB	≤ 240
		N1.2	Aluminiumknetlegierungen	Naturhart	60 – 100 HB	> 240 ≤ 400
		N1.3		Aushärtbar	100 – 150 HB	> 400 ≤ 590
	N2	N2.1	Aluminiumgusslegierungen		< 75 HB	≤ 240
		N2.2			75 – 90 HB	> 240 ≤ 270
		N2.3			90 – 140 HB	> 270 ≤ 440
	N3	N3.1	Kupferlegierungen mit hervorragenden Bearbeitungseigenschaften		–	–
		N3.2	Kurzspanige Kupferlegierungen mit guten bis mäßigen Bearbeitungseigenschaften		–	–
		N3.3	Elektrolytisches Kupfer und langspanige Kupferlegierungen mit mäßigen bis schlechten Bearbeitungseigenschafte		–	–
	N4	N4.1	Thermoplastische Polymere		–	–
		N4.2	Duroplaste		–	–
		N4.3	Verstärkte Polymere oder Verbundwerkstoffe		–	–
	N5	N5.1	Graphit		–	–
S	S1	S1.1	Titan oder Titanlegierungen		< 200 HB	≤ 660
		S1.2			200 – 280 HB	> 660 ≤ 950
		S1.3			280 – 360 HB	> 950 ≤ 1200
	S2	S2.1	Eisenbasierte Hochtemperaturlegierungen		< 200 HB	≤ 690
		S2.2			200 – 280 HB	> 690 ≤ 970
	S3	S3.1	Nickelbasierte Hochtemperaturlegierungen		< 280 HB	≤ 940
		S3.2			280 – 360 HB	> 940 ≤ 1200
	S4	S4.1	Kobaltbasierte Hochtemperaturlegierungen		< 240 HB	≤ 800
		S4.2			240 – 320 HB	> 800 ≤ 1070
H	H1	H1.1	Hartguss		< 440 HB	–
	H2	H2.1	Gehärtetes Gusseisen		< 55 HRC	–
		H2.2			> 55 HRC	–
	H3	H3.1	Gehärteter Stahl < 55 HRC		< 51 HRC	–
		H3.2			51 – 55 HRC	–
	H4	H4.1	Gehärteter Stahl > 55 HRC		55 – 59 HRC	–
		H4.2			> 59 HRC	–

DORMER PRAMET™

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Gemeinsam werden wir dafür sorgen, dass sich unsere Welt weiterdreht, jetzt und in Zukunft. Wir wollen unserer Gemeinschaft helfen, sich darauf zu verlassen, dass sie ihre Arbeit erledigen können, indem sie einfachen Zugang zu den richtigen Ratschlägen, Werkzeugen und Schulungen haben, wann und wo immer sie diese benötigen. Wir wollen unseren Kunden Sicherheit geben, damit sie ihre Ziele heute erreichen können – und für morgen gerüstet sind.

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