

MVX + MINI MVX

WSP-BOHRER

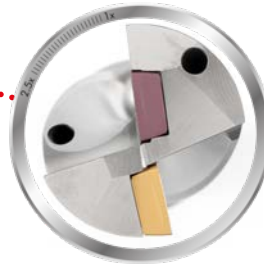
MODERNSTE TECHNOLOGIE MIT HOCHSTABILEM
WERKZEUGKÖRPER



MVX + MINI MVX

WSP-BOHRER

4 SCHNEIDKANTEN



Wirtschaftliche WSP mit 4 Schneiden.

VERSCHIEDENE WSP-TYPEN



Für ein breites Spektrum an Werkstoffen und Anwendungen.

HERVORRAGENDE OBERFLÄCHENGÜTEN



Wiper

Eine Wiper-Geometrie für die periphere Schneidkante erzielt eine ausgezeichnete Oberfläche.

IDEALE KOMBINATION VON WSP MIT CVD- UND PVD-BESCHICHTUNG

Für die periphere Schneidkante wird eine WSP mit extrem verschleißfester CVD-Beschichtung verwendet, während für eine besonders hohe Stabilität an der inneren Position eine WSP mit PVD-Beschichtung eingesetzt wird.

MINI MVX: BOHRTIEFE ~ 5xD

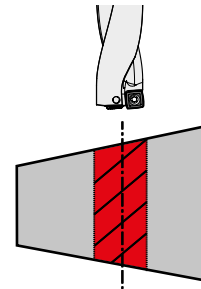
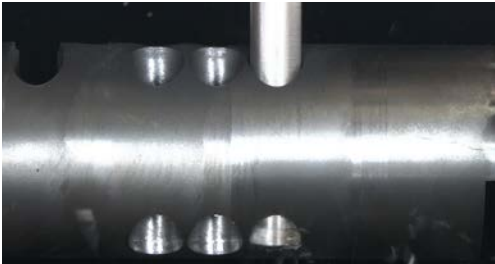
Hohe Steifigkeit und optimierte Plattensitzeigenschaften wirken entgegen eventueller Vibrationen und Plattensitzverformung.

BEISPIELE FÜR SPEZIELLE ANWENDUNGEN

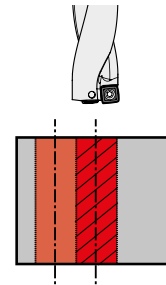
Anwendungsbeispiele

Schnittbedingungen

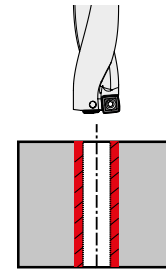
BOHREN AN EINER SCHRÄGE



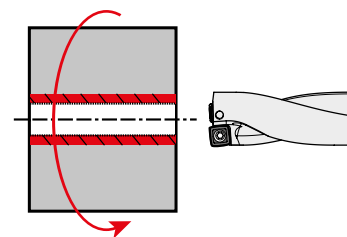
ÜBERLAPPENDE BOHRLÖCHER



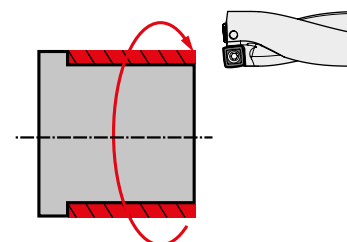
AUFBOHREN



INNENDREHEN



AUSSENDREHEN



1. Verwenden Sie für besondere Anwendungen nur eine Werkzeugkörperlänge bis zu dem Vierfachen des Schneidkantendurchmessers.

WSP-SPANBRECHER

UH-SPANBRECHER FÜR GEHÄRTETE STÄHLE BIS 45 HRC

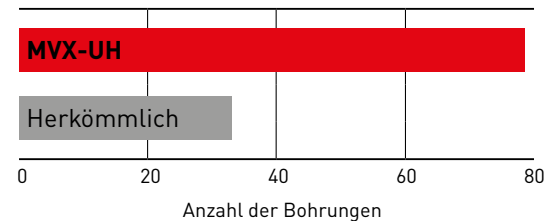
Verstärkte Schneidkante für das Bohren von Stahl bis 45 HRC.

SCHNITTDATEN

Bohrkörper	MVX1700X3F20
WSP	Außen MC1020-UM Innen DP8020-UH
Werkstoff	DIN X40CrMoV51 (45 HRC)
Vc (m/min)	50
f (mm/U)	0.08
ap (mm)	30 (Durchgangsloch)



Vergleich der Anzahl der Bohrungen



UN-SPANBRECHER FÜR ALUMINIUM

Der UN-Spanbrecher bietet dank seiner scharfen, geschliffenen Schneidkante eine hervorragende Spanabfuhr. Die glatten Spanflächen verhindern zudem eine Spanverschweißung.

SCHNITTDATEN

Bohrkörper	MVX1700X5F20
WSP	Außen TF15-UN Innen TF15-UN
Werkstoff	JIS ADC12
Vc (m/min)	400
f (mm/U)	0.05
ap (mm)	40 (Sackloch)



Vergleich der Oberflächenqualität



UN-Spanbrecher (TF15)

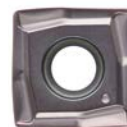
Herkömmlich

US-SPANBRECHER FÜR ROSTFREIEN STAHL

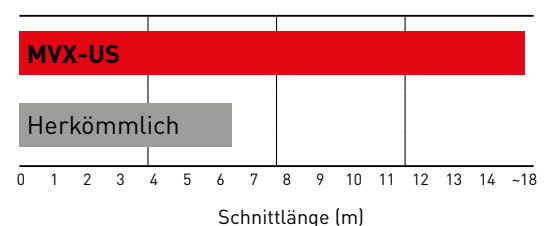
Speziell für die Innenkante. Hervorragender Bruch- und Schweißwiderstand.

SCHNITTDATEN

Bohrkörper	MVX3000X3F32
WSP	Außen MC1020-UM Innen VP15TF-US
Werkstoff	DIN X5CrNi18-10
Vc (m/min)	120
f (mm/U)	0.12
ap (mm)	50 (Durchgangsloch)



Vergleich der Schnittlänge



UM-SPANBRECHER FÜR MITTLEREN UND HOHEN VORSCHUB

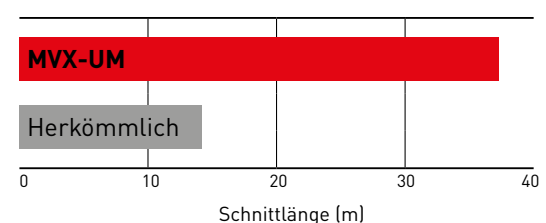
Universal-Spanbrecher für Stahl, rostfreien Stahl, Gusseisen und gehärteten Stahl.

SCHNITTDATEN

Bohrkörper	MVX1900X3F25
WSP	Außen MC1020-UM Innen VP15TF-UM
Werkstoff	DIN C50
Vc (m/min)	220
f (mm/U)	0.1
ap (mm)	50 (Durchgangsloch)



Vergleich der Schnittlänge



KRITERIEN FÜR DIE WSP-AUSWAHL

Die periphere Schnittgeschwindigkeit ist in Richtung des Bohrzentrums naturgemäß langsamer, sodass es leicht zu einer Spanverschweißung kommen kann. Nachstehend sind einige wichtige Aspekte für die Wahl der korrekten WSP aufgeführt.

	1. Empfehlung		Bei Ausbrüchen an der äußeren WSP	
	Außen	Innen	Außen	Innen
P	MC1020	VP15TF	VP15TF	VP15TF
				
	UM	UM	UM	UM
M	MC1020	VP15TF	VP15TF	VP15TF
				
	UM	US	UM	US
K	MC5020	VP15TF	VP15TF	VP15TF
				
	UM	UM	UM	UM
N	TF15	TF15		
				
	UN	UN		
H	MC1020	DP8020	VP15TF	DP8020
				
	UM	UH	UM	UH

MERKMALE DER SORTE

MC1020

MC1020 ist eine CVD-beschichtete Sorte für höhere Schnittgeschwindigkeiten. Zu den wichtigsten Eigenschaften zählen hohe Verschleißfestigkeit sowie hoher Widerstand gegen plastische Verformung und verbesserte Zuverlässigkeit.

DP8020

Mit der Kombination aus einem langlebigen speziellen Hartmetallsubstrat und extrem harter Ti-Al-Si-Beschichtung. DP8020 ist eine PVD-beschichtete Hartmetallsorte, die sich für gehärteten Stahl (bis 45 HRC) und zur Vermeidung von Brüchen bei der Bearbeitung von Stahl und Gusseisen eignet.

MC5020

MC5020 ist eine CVD-beschichtete Sorte für das Bohren in Gusseisen. Sie weist eine ausgezeichnete Abriebfestigkeit und lange Werkzeugstandzeiten auf, indem thermischer Verschleiß und Ausbrüche bei der Bearbeitung von duktilem Gusseisen kontrolliert werden.

VP15TF

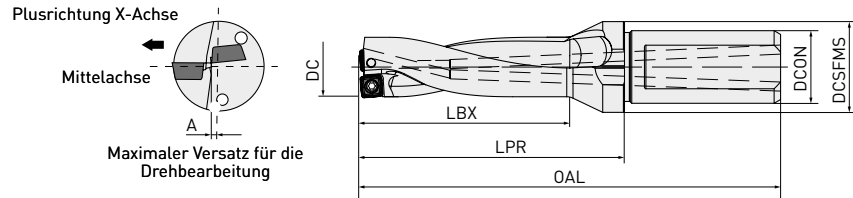
VP15TF ist eine PVD-beschichtete Sorte für einen breiten Anwendungsbereich. Das feinkörnige Substrat und die Miracle-Beschichtung bieten hervorragenden Temperaturwiderstand.

TF15

TF15 ist ein unbeschichtetes Feinstkorn-Hartmetall mit scharfer Schneidkante für das Bohren von Aluminiumlegierungen.

MINI MVX

P M K

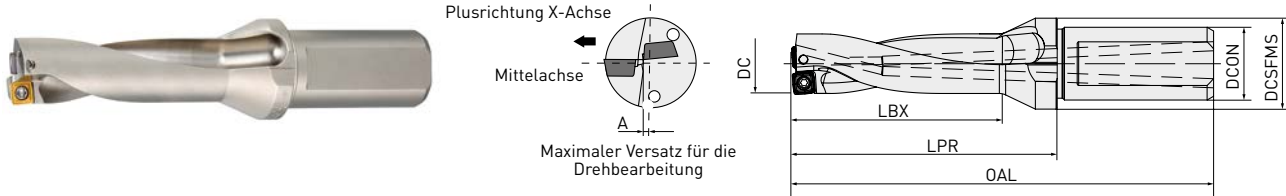


Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX1400X2F20	14.0	2	●	35	50	93	20	25	0.6	SOX05
MVX1400X3F20		3	●	49	64	107	20	25	0.6	
MVX1400X4F20		4	●	63	78	121	20	25	0.6	
MVX1400X5F20		5	●	77	92	135	20	25	0.6	
MVX1450X2F20	14.5	2	●	36	51	94	20	25	0.5	SOX05
MVX1450X3F20		3	●	50.5	65.5	108.5	20	25	0.5	
MVX1450X4F20		4	●	65	80	123	20	25	0.5	
MVX1450X5F20		5	●	79.5	94.5	137.5	20	25	0.5	
MVX1500X2F20	15.0	2	●	37	52	95	20	25	0.35	SOX05
MVX1500X3F20		3	●	52	67	110	20	25	0.35	
MVX1500X4F20		4	●	67	82	125	20	25	0.35	
MVX1500X5F20		5	●	82	97	140	20	25	0.35	
MVX1550X2F20	15.5	2	●	38	53	96	20	25	0.3	SOX05
MVX1550X3F20		3	●	53.5	68.5	111.5	20	25	0.3	
MVX1550X4F20		4	●	69	84	127	20	25	0.3	
MVX1550X5F20		5	●	84.5	99.5	142.5	20	25	0.3	
MVX1600X2F20	16.0	2	●	39	54	97	20	25	0.25	SOX05
MVX1600X3F20		3	●	55	70	113	20	25	0.25	
MVX1600X4F20		4	●	71	86	129	20	25	0.25	
MVX1600X5F20		5	●	87	102	145	20	25	0.25	
MVX1650X2F20	16.5	2	●	40	55	98	20	25	0.25	SOX05
MVX1650X3F20		3	●	56.5	71.5	114.5	20	25	0.25	
MVX1650X4F20		4	●	73	88	131	20	25	0.25	
MVX1650X5F20		5	●	89.5	104.5	147.5	20	25	0.25	

1/1



MVX



Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX1700X2F20	17.0	2	●	41	56	99	20	25	0.5	SOX06
MVX1700X3F20		3	●	58	73	116	20	25	0.5	
MVX1700X4F20		4	●	75	90	133	20	25	0.5	
MVX1700X5F20		5	●	92	107	150	20	25	0.5	
MVX1700X6F20		6	●	109	124	167	20	25	0.5	
MVX1750X2F25	17.5	2	●	42	62	112	25	32	0.45	SOX06
MVX1750X3F25		3	●	59.5	79.5	129.5	25	32	0.45	
MVX1750X4F25		4	●	77	97	147	25	32	0.45	
MVX1750X5F25		5	●	94.5	114.5	164.5	25	32	0.45	
MVX1750X6F25		6	●	112	132	182	25	32	0.45	
MVX1800X2F25	18.0	2	●	43	63	113	25	32	0.4	SOX06
MVX1800X3F25		3	●	61	81	131	25	32	0.4	
MVX1800X4F25		4	●	79	99	149	25	32	0.4	
MVX1800X5F25		5	●	97	117	167	25	32	0.4	
MVX1800X6F25		6	●	115	135	185	25	32	0.4	
MVX1850X2F25	18.5	2	●	44	64	114	25	32	0.35	SOX06
MVX1850X3F25		3	●	62.5	82.5	132.5	25	32	0.35	
MVX1850X4F25		4	●	81	101	151	25	32	0.35	
MVX1850X5F25		5	●	99.5	119.5	169.5	25	32	0.35	
MVX1850X6F25		6	●	118	138	188	25	32	0.35	
MVX1900X2F25	19.0	2	●	45	65	115	25	32	0.3	SOX06
MVX1900X3F25		3	●	64	84	134	25	32	0.3	
MVX1900X4F25		4	●	83	103	153	25	32	0.3	
MVX1900X5F25		5	●	102	122	172	25	32	0.3	
MVX1900X6F25		6	●	121	141	191	25	32	0.3	
MVX1950X2F25	19.5	2	●	46	66	116	25	32	0.25	SOX06
MVX1950X3F25		3	●	65.5	85.5	135.5	25	32	0.25	
MVX1950X4F25		4	●	85	105	155	25	32	0.25	
MVX1950X5F25		5	●	104.5	124.5	174.5	25	32	0.25	
MVX1950X6F25		6	●	124	144	194	25	32	0.25	
MVX2000X2F25	20.0	2	●	47	67	117	25	32	0.6	SOX07
MVX2000X3F25		3	●	67	87	137	25	32	0.6	
MVX2000X4F25		4	●	87	107	157	25	32	0.6	
MVX2000X5F25		5	●	107	127	177	25	32	0.6	
MVX2000X6F25		6	●	127	147	197	25	32	0.6	
MVX2050X2F25	20.5	2	●	48	68	118	25	32	0.55	SOX07
MVX2050X3F25		3	●	68.5	88.5	138.5	25	32	0.55	

1/7

MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX2100X2F25	21.0	2	●	49	69	119	25	32	0.5	SOX07
MVX2100X3F25		3	●	70	90	140	25	32	0.5	
MVX2100X4F25		4	●	91	111	161	25	32	0.5	
MVX2100X5F25		5	●	112	132	182	25	32	0.5	
MVX2100X6F25		6	●	133	153	203	25	32	0.5	
MVX2150X2F25	21.5	2	●	50	70	120	25	32	0.45	SOX07
MVX2150X3F25		3	●	71.5	91.5	141.5	25	32	0.45	
MVX2200X2F25	22.0	2	●	51	71	121	25	32	0.4	SOX07
MVX2200X3F25		3	●	73	93	143	25	32	0.4	
MVX2200X4F25		4	●	95	115	165	25	32	0.4	
MVX2200X5F25		5	●	117	137	187	25	32	0.4	
MVX2200X6F25		6	●	139	159	209	25	32	0.4	
MVX2250X2F25	22.5	2	●	52	72	122	25	32	0.35	SOX07
MVX2250X3F25		3	●	74.5	94.5	144.5	25	32	0.35	
MVX2300X2F25	23.0	2	●	53	73	123	25	32	0.8	SOX08
MVX2300X3F25		3	●	76	96	146	25	32	0.8	
MVX2300X4F25		4	●	99	119	169	25	32	0.8	
MVX2300X5F25		5	●	122	142	192	25	32	0.8	
MVX2300X6F25		6	●	145	165	215	25	32	0.8	
MVX2350X2F25	23.5	2	●	54	74	124	25	32	0.75	SOX08
MVX2350X3F25		3	●	77.5	97.5	147.5	25	32	0.75	
MVX2400X2F25	24.0	2	●	55	75	125	25	32	0.7	SOX08
MVX2400X3F25		3	●	79	99	149	25	32	0.7	
MVX2400X4F25		4	●	103	123	173	25	32	0.7	
MVX2400X5F25		5	●	127	147	197	25	32	0.7	
MVX2400X6F25		6	●	151	171	221	25	32	0.7	
MVX2450X2F25	24.5	2	●	56	76	126	25	32	0.65	
MVX2450X3F25		3	●	80.5	100.5	150.5	25	32	0.65	
MVX2500X2F25	25.0	2	●	57	77	127	25	32	0.6	SOX08
MVX2500X3F25		3	●	82	102	152	25	32	0.6	
MVX2500X4F25		4	●	107	127	177	25	32	0.6	
MVX2500X5F25		5	●	132	152	202	25	32	0.6	
MVX2500X6F25		6	●	157	177	227	25	32	0.6	
MVX2550X2F25	25.5	2	●	58	78	128	25	32	0.6	SOX08
MVX2550X3F25		3	●	83.5	103.5	153.5	25	32	0.6	
MVX2600X2F32	26.0	2	●	59	79	134	32	42	0.5	SOX08
MVX2600X3F32		3	●	85	105	160	32	42	0.5	
MVX2600X4F32		4	●	111	131	186	32	42	0.5	
MVX2600X5F32		5	●	137	157	212	32	42	0.5	
MVX2600X6F32		6	●	163	183	238	32	42	0.5	
MVX2650X2F32	26.5	2	●	60	80	135	32	42	0.5	SOX08
MVX2650X3F32		3	●	86.5	106.5	161.5	32	42	0.5	
MVX2700X2F32	27.0	2	●	61	81	136	32	42	0.45	SOX08
MVX2700X3F32		3	●	88	108	163	32	42	0.45	
MVX2700X4F32		4	●	115	135	190	32	42	0.45	
MVX2700X5F32		5	●	142	162	217	32	42	0.45	
MVX2700X6F32		6	●	169	189	244	32	42	0.45	
MVX2750X2F32	27.5	2	●	62	82	137	32	42	0.4	SOX08
MVX2750X3F32		3	●	89.5	109.5	164.5	32	42	0.4	

2/7

MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX2800X2F32	28.0	2	●	63	83	138	32	42	0.85	SOX09
MVX2800X3F32		3	●	91	111	166	32	42	0.85	
MVX2800X4F32		4	●	119	139	194	32	42	0.85	
MVX2800X5F32		5	●	147	167	222	32	42	0.85	
MVX2800X6F32		6	●	175	195	250	32	42	0.85	
MVX2850X2F32	28.5	2	●	64	84	139	32	42	0.8	SOX09
MVX2850X3F32		3	●	92.5	112.5	167.5	32	42	0.8	
MVX2900X2F32	29.0	2	●	65	85	140	32	42	0.75	SOX09
MVX2900X3F32		3	●	94	114	169	32	42	0.75	
MVX2900X4F32		4	●	123	143	198	32	42	0.75	
MVX2900X5F32		5	●	152	172	227	32	42	0.75	
MVX2900X6F32		6	●	181	201	256	32	42	0.75	
MVX2950X2F32	29.5	2	●	66	86	141	32	42	0.7	SOX09
MVX2950X3F32		3	●	95.5	115.5	170.5	32	42	0.7	
MVX3000X2F32	30.0	2	●	67	87	142	32	42	0.65	SOX09
MVX3000X3F32		3	●	97	117	172	32	42	0.65	
MVX3000X4F32		4	●	127	147	202	32	42	0.65	
MVX3000X5F32		5	●	157	177	232	32	42	0.65	
MVX3000X6F32		6	●	187	207	262	32	42	0.65	
MVX3050X3F32	30.5	3	●	98.5	118.5	173.5	32	42	0.6	SOX09
MVX3100X2F40	31.0	2	●	69	89	154	40	50	0.55	SOX09
MVX3100X3F40		3	●	100	120	185	40	50	0.55	
MVX3100X4F40		4	●	131	151	216	40	50	0.55	
MVX3100X5F40		5	●	162	182	247	40	50	0.55	
MVX3100X6F40		6	●	193	213	278	40	50	0.55	
MVX3150X3F40	31.5	3	●	101.5	121.5	186.5	40	50	0.55	SOX09
MVX3200X2F40	32.0	2	●	71	91	156	40	50	0.45	SOX09
MVX3200X3F40		3	●	103	123	188	40	50	0.45	
MVX3200X4F40		4	●	135	155	220	40	50	0.45	
MVX3200X5F40		5	●	167	187	252	40	50	0.45	
MVX3200X6F40		6	●	199	219	284	40	50	0.45	
MVX3250X3F40	32.5	3	●	104.5	124.5	189.5	40	50	0.45	SOX09
MVX3300X2F40	33.0	2	●	73	93	158	40	50	0.4	SOX09
MVX3300X3F40		3	●	106	126	191	40	50	0.4	
MVX3300X4F40		4	●	139	159	224	40	50	0.4	
MVX3300X5F40		5	●	172	192	257	40	50	0.4	
MVX3300X6F40		6	●	205	225	290	40	50	0.4	
MVX3350X3F40	33.5	3	●	107.5	127.5	192.5	40	50	1.2	SOX11
MVX3400X2F40	34.0	2	●	75	105	170	40	50	1.1	SOX11
MVX3400X3F40		3	●	109	139	204	40	50	1.1	
MVX3400X4F40		4	●	143	173	238	40	50	1.1	
MVX3400X5F40		5	●	177	207	272	40	50	1.1	
MVX3400X6F40		6	●	211	241	306	40	50	1.1	
MVX3450X3F40	34.5	3	●	110.5	140.5	205.5	40	50	1.1	SOX11
MVX3500X2F40	35.0	2	●	77	107	172	40	50	1.0	SOX11
MVX3500X3F40		3	●	112	142	207	40	50	1.0	
MVX3500X4F40		4	●	147	177	242	40	50	1.0	
MVX3500X5F40		5	●	182	212	277	40	50	1.0	
MVX3500X6F40		6	●	217	247	312	40	50	1.0	
MVX3550X3F40	35.5	3	●	113.5	143.5	208.5	40	50	1.0	SOX11

3/7

MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX3600X2F40	36.0	2	●	79	109	174	40	50	1.0	SOX11
MVX3600X3F40		3	●	115	145	210	40	50	1.0	
MVX3600X4F40		4	●	151	181	246	40	50	1.0	
MVX3600X5F40		5	●	187	217	282	40	50	1.0	
MVX3600X6F40		6	●	223	253	318	40	50	0.9	
MVX3700X2F40	37.0	2	●	81	111	176	40	50	0.9	SOX11
MVX3700X3F40		3	●	118	148	213	40	50	0.9	
MVX3700X4F40		4	●	155	185	250	40	50	0.9	
MVX3700X5F40		5	●	192	222	287	40	50	0.9	
MVX3700X6F40		6	●	229	259	324	40	50	0.9	
MVX3800X2F40	38.0	2	●	83	113	178	40	50	0.8	SOX11
MVX3800X3F40		3	●	121	151	216	40	50	0.8	
MVX3800X4F40		4	●	159	189	254	40	50	0.8	
MVX3800X5F40		5	●	197	227	292	40	50	0.8	
MVX3800X6F40		6	●	235	265	330	40	50	0.8	
MVX3900X2F40	39.0	2	●	85	115	180	40	50	0.7	SOX11
MVX3900X3F40		3	●	124	154	219	40	50	0.7	
MVX3900X4F40		4	●	163	193	258	40	50	0.7	
MVX3900X5F40		5	●	202	232	297	40	50	0.7	
MVX3900X6F40		6	●	241	271	336	40	50	0.7	
MVX4000X2F40	40.0	2	●	87	117	182	40	50	1.5	SOX13
MVX4000X3F40		3	●	127	157	222	40	50	1.5	
MVX4000X4F40		4	●	167	197	262	40	50	1.5	
MVX4000X5F40		5	●	207	237	302	40	50	1.5	
MVX4000X6F40		6	●	247	277	342	40	50	1.4	
MVX4100X2F40	41.0	2	●	89	119	184	40	50	1.4	SOX13
MVX4100X3F40		3	●	130	160	225	40	50	1.4	
MVX4100X4F40		4	●	171	201	266	40	50	1.4	
MVX4100X5F40		5	●	212	242	307	40	50	1.4	
MVX4100X6F40		6	●	253	283	348	40	50	1.4	
MVX4200X2F40	42.0	2	●	91	121	186	40	50	1.3	SOX13
MVX4200X3F40		3	●	133	163	228	40	50	1.3	
MVX4200X4F40		4	●	175	205	270	40	63	1.3	
MVX4200X4F50		4	★	175	205	280	50	63	1.3	
MVX4200X5F40		5	●	217	247	312	40	63	1.3	
MVX4200X5F50		5	★	217	247	322	50	63	1.3	
MVX4200X6F40		6	●	259	289	354	40	63	1.3	
MVX4200X6F50		6	★	259	289	364	50	63	1.3	
MVX4300X2F40	43.0	2	●	93	123	188	40	50	1.2	SOX13
MVX4300X3F40		3	●	136	166	231	40	50	1.2	
MVX4300X4F40		4	●	179	209	274	40	63	1.2	
MVX4300X4F50		4	★	179	209	284	50	63	1.2	
MVX4300X5F40		5	●	222	252	317	40	63	1.2	
MVX4300X5F50		5	★	222	252	327	50	63	1.2	
MVX4300X6F40		6	●	265	295	360	40	63	1.2	
MVX4300X6F50		6	★	265	295	370	50	63	1.2	

4/7

MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX4400X2F40	44.0	2	●	95	125	190	40	50	1.1	SO ₀ X13
MVX4400X3F40		3	●	139	169	234	40	50	1.1	
MVX4400X4F40		4	●	183	213	278	40	63	1.1	
MVX4400X4F50		4	★	183	213	288	50	63	1.1	
MVX4400X5F40		5	●	227	257	322	40	63	1.1	
MVX4400X5F50		5	★	227	257	332	50	63	1.1	
MVX4500X2F40	45.0	2	●	97	127	192	40	50	1.0	SO ₀ X13
MVX4500X3F40		3	●	142	172	237	40	50	1.0	
MVX4500X4F40		4	●	187	217	282	40	63	1.0	
MVX4500X4F50		4	★	187	217	292	50	63	1.0	
MVX4500X5F40		5	●	232	262	327	40	63	1.0	
MVX4500X5F50		5	★	232	262	337	50	63	1.0	
MVX4600X2F40	46.0	2	●	99	129	194	40	50	0.9	SO ₀ X13
MVX4600X3F40		3	●	145	175	240	40	50	0.9	
MVX4600X4F40		4	●	191	221	286	40	63	0.9	
MVX4600X4F50		4	★	191	221	296	50	63	0.9	
MVX4600X5F40		5	●	237	267	332	40	63	0.9	
MVX4600X5F50		5	★	237	267	342	50	63	0.9	
MVX4700X2F40	47.0	2	●	101	141	206	40	63	1.9	SO ₀ X16
MVX4700X3F40		3	●	148	188	253	40	63	1.9	
MVX4700X4F40		4	●	195	235	300	40	63	1.9	
MVX4700X4F50		4	★	195	235	310	50	63	1.9	
MVX4700X5F40		5	●	242	282	347	40	63	1.9	
MVX4700X5F50		5	★	242	282	357	50	63	1.9	
MVX4800X2F40	48.0	2	●	103	143	208	40	63	1.8	SO ₀ X16
MVX4800X3F40		3	●	151	191	256	40	63	1.8	
MVX4800X4F40		4	●	199	239	304	40	63	1.8	
MVX4800X4F50		4	★	199	239	314	50	63	1.8	
MVX4800X5F40		5	●	247	287	352	40	63	1.8	
MVX4800X5F50		5	★	247	287	362	50	63	1.8	
MVX4900X2F40	49.0	2	●	105	145	210	40	63	1.7	SO ₀ X16
MVX4900X3F40		3	●	154	194	259	40	63	1.7	
MVX4900X4F40		4	●	203	243	308	40	63	1.7	
MVX4900X4F50		4	★	203	243	318	50	63	1.7	
MVX4900X5F40		5	●	252	292	357	40	63	1.7	
MVX4900X5F50		5	★	252	292	367	50	63	1.7	
MVX5000X2F40	50.0	2	●	107	147	212	40	63	1.6	SO ₀ X16
MVX5000X3F40		3	●	157	197	262	40	63	1.6	
MVX5000X4F40		4	●	207	247	312	40	63	1.6	
MVX5000X4F50		4	★	207	247	322	50	63	1.6	
MVX5000X5F40		5	●	257	297	362	40	63	1.6	
MVX5000X5F50		5	★	257	297	372	50	63	1.6	
MVX5100X2F40	51.0	2	●	109	149	214	40	63	1.5	SO ₀ X16
MVX5100X3F40		3	●	160	200	265	40	63	1.5	
MVX5100X4F40		4	●	211	251	316	40	63	1.5	
MVX5100X4F50		4	★	211	251	326	50	63	1.5	
MVX5100X5F40		5	●	262	302	367	40	63	1.5	
MVX5100X5F50		5	★	262	302	377	50	63	1.5	

5/7



MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX5200X2F40	52.0	2	●	111	151	216	40	63	1.4	S00X16
MVX5200X3F40		3	●	163	203	268	40	63	1.4	
MVX5200X4F40		4	●	215	255	320	40	63	1.4	
MVX5200X4F50		4	★	215	255	330	50	63	1.4	
MVX5200X5F40		5	●	267	307	372	40	63	1.4	
MVX5200X5F50		5	★	267	307	382	50	63	1.4	
MVX5300X2F40	53.0	2	●	113	153	218	40	63	1.3	S00X16
MVX5300X3F40		3	●	166	206	271	40	63	1.3	
MVX5300X4F40		4	●	219	259	324	40	63	1.3	
MVX5300X4F50		4	★	219	259	334	50	63	1.3	
MVX5300X5F40		5	●	272	312	377	40	63	1.3	
MVX5300X5F50		5	★	272	312	387	50	63	1.3	
MVX5400X2F40	54.0	2	●	115	155	220	40	63	1.2	S00X16
MVX5400X3F40		3	●	169	209	274	40	63	1.2	
MVX5400X4F40		4	●	223	263	328	40	63	1.2	
MVX5400X4F50		4	★	223	263	338	50	63	1.2	
MVX5400X5F40		5	●	277	317	382	40	63	1.2	
MVX5400X5F50		5	★	277	317	392	50	63	1.2	
MVX5500X2F40	55.0	2	●	117	157	222	40	63	1.1	S00X16
MVX5500X3F40		3	●	172	212	277	40	63	1.1	
MVX5500X4F40		4	●	227	267	332	40	63	1.1	
MVX5500X4F50		4	★	227	267	342	50	63	1.1	
MVX5500X5F40		5	●	282	322	387	40	63	1.1	
MVX5500X5F50		5	★	282	322	397	50	63	1.1	
MVX5600X2F40	56.0	2	●	119	159	224	40	63	1.0	S00X16
MVX5600X3F40		3	●	175	215	280	40	63	1.0	
MVX5600X4F40		4	●	231	271	336	40	63	1.0	
MVX5600X4F50		4	★	231	271	346	50	63	1.0	
MVX5600X5F40		5	●	287	327	392	40	63	1.0	
MVX5600X5F50		5	★	287	327	402	50	63	1.0	
MVX5700X2F40	57.0	2	●	121	161	226	40	68	1.5	S00X18
MVX5700X3F40		3	●	178	218	283	40	68	1.5	
MVX5700X4F40		4	●	235	275	340	40	68	1.5	
MVX5700X4F50		4	★	235	275	350	50	68	1.5	
MVX5700X5F40		5	●	292	332	397	40	68	1.5	
MVX5700X5F50		5	★	292	332	407	50	68	1.5	
MVX5800X2F40	58.0	2	●	123	163	228	40	68	1.4	S00X18
MVX5800X3F40		3	●	181	221	286	40	68	1.4	
MVX5800X4F40		4	●	239	279	344	40	68	1.4	
MVX5800X4F50		4	★	239	279	354	50	68	1.4	
MVX5800X5F40		5	●	297	337	402	40	68	1.4	
MVX5800X5F50		5	★	297	337	412	50	68	1.4	
MVX5900X2F40	59.0	2	●	125	165	230	40	68	1.3	S00X18
MVX5900X3F40		3	●	184	224	289	40	68	1.3	
MVX5900X4F40		4	●	243	283	348	40	68	1.3	
MVX5900X4F50		4	★	243	283	358	50	68	1.3	
MVX5900X5F40		5	●	302	342	407	40	68	1.3	
MVX5900X5F50		5	★	302	342	417	50	68	1.3	

6/7

MVX

Bestellnummer	DC	L x DC	Lager	LBX	LPR	OAL	DCON	DCSFMS	A	WSP
MVX6000X2F40	60.0	2	●	127	167	232	40	68	1.2	SOX18
MVX6000X3F40		3	●	187	227	292	40	68	1.2	
MVX6000X4F40		4	●	247	287	352	40	68	1.2	
MVX6000X4F50		4	★	247	287	362	50	68	1.2	
MVX6000X5F40		5	●	307	347	412	40	68	1.2	
MVX6000X5F50		5	★	307	347	422	50	68	1.2	
MVX6100X2F40	61.0	2	●	129	169	234	40	68	1.1	SOX18
MVX6100X3F40		3	●	190	230	295	40	68	1.1	
MVX6100X4F40		4	●	251	291	356	40	68	1.1	
MVX6100X4F50		4	★	251	291	366	50	68	1.1	
MVX6100X5F40		5	●	312	352	417	40	68	1.1	
MVX6100X5F50		5	★	312	352	427	50	68	1.1	
MVX6200X2F40	62.0	2	●	131	171	236	40	68	1.0	SOX18
MVX6200X3F40		3	●	193	233	298	40	68	1.0	
MVX6200X4F40		4	●	255	295	360	40	68	1.0	
MVX6200X4F50		4	★	255	295	370	50	68	1.0	
MVX6200X5F40		5	●	317	357	422	40	68	1.0	
MVX6200X5F50		5	★	317	357	432	50	68	1.0	
MVX6300X2F40	63.0	2	●	133	173	238	40	68	0.8	SOX18
MVX6300X3F40		3	●	196	236	301	40	68	0.8	
MVX6300X4F40		4	●	259	299	364	40	68	0.8	
MVX6300X4F50		4	★	259	299	374	50	68	0.8	
MVX6300X5F40		5	●	322	362	427	40	68	0.8	
MVX6300X5F50		5	★	322	362	437	50	68	0.8	

7/7

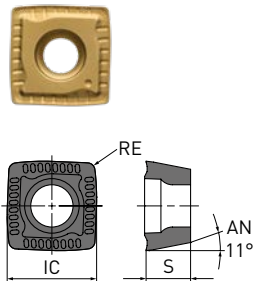
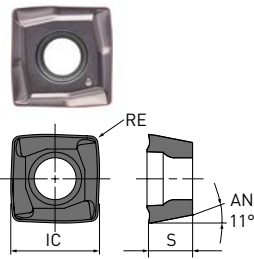
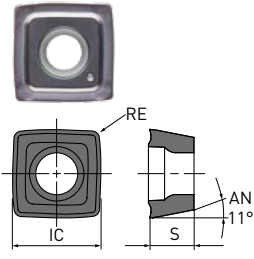
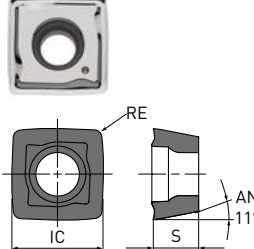
ERSATZTEILE

Bohrer-Durchmesser (mm)		Anzugsmoment (Nm)	Schlüssel
	Spannschraube		
14 – 16.5	TPS20-1	0.6	TIP06F
17 – 19.5	TPS25	1.0	TIP07F
20 – 22.5	TPS3	2.0	TIP10W
23 – 27.5	TPS351	2.5	TIP10W
28 – 33	TPS4	3.5	TIP15W
33.5 – 46	TPS43	3.5	TIP15W
47 – 63	TPS54	7.5	TIP25D

BEARBEITUNGSTOLERANZ

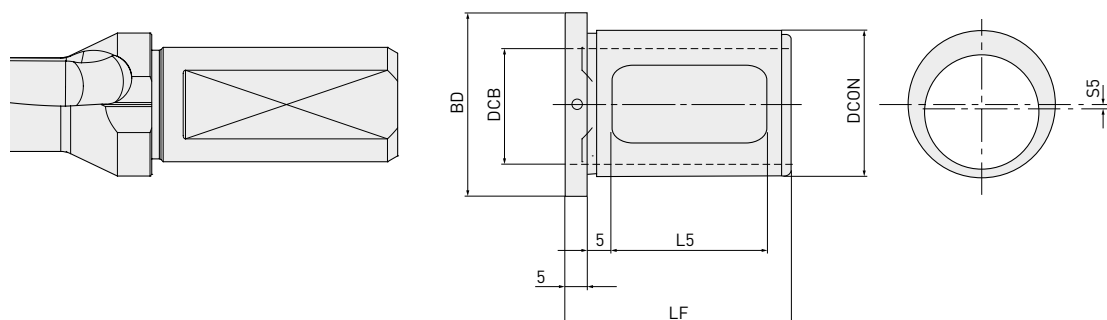
L x DC	Ø 14 – 33	Ø 17 – 33	Ø 33.5 – 47	Ø 48 – 63
2-3	+ 0.25 0	+ 0.25 0	+ 0.3 0	+ 0.3 0
4-5	+ 0.35 0	+ 0.35 0	+ 0.4 0	+ 0.45 0
6	+ 0.45 0	+ 0.45 0	+ 0.6 0	—

WSP

Bestellnummer	MC5020 *	MC1020 *	VP15TF	DP8020	TF15	IC	S	RE	Bohrer- durchmesser	Geometrie
UM										
SOMX052704-UM	●	●	●			5.0	2.7	0.4	Ø14 – 16.5	
SOMX063005-UM	●	●	●			6.0	3.0	0.5	Ø17 – 19.5	
SOMX073505-UM	●	●	●			7.0	3.5	0.5	Ø20 – 22.5	
SOMX084005-UM	●	●	●			8.3	4.0	0.5	Ø23 – 27.5	
SOMX094506-UM	●	●	●			9.7	4.5	0.6	Ø28 – 33	
SOMX115506-UM	●	●	●			11.6	5.5	0.6	Ø33.5 – 39	
SOMX136008-UM	●	●	●			13.8	6.0	0.8	Ø40 – 46	
SOMX166508-UM	●	●	●			16.5	6.5	0.8	Ø47 – 56	
SOMX187008-UM	●	●	●			18.2	7.0	0.8	Ø57 – 63	
US										
SOMX063005-US			●			6.0	3.0	0.5	Ø17 – 19.5	
SOMX073505-US			●			7.0	3.5	0.5	Ø20 – 22.5	
SOMX084005-US			●			8.3	4.0	0.5	Ø23 – 27.5	
SOMX094506-US			●			9.7	4.5	0.6	Ø28 – 33	
SOMX115506-US			●			11.6	5.5	0.6	Ø33.5 – 39	
SOMX136008-US			●			13.8	6.0	0.8	Ø40 – 46	
SOMX166508-US			●			16.5	6.5	0.8	Ø47 – 56	
SOMX187008-US			●			18.2	7.0	0.8	Ø57 – 63	
UH										
SOMX062905-UH				●		6.0	2.9	0.5	Ø17 – 19.5	
SOMX073405-UH				●		7.0	3.4	0.5	Ø20 – 22.5	
SOMX083905-UH				●		8.3	3.9	0.5	Ø23 – 27.5	
SOMX094406-UH				●		9.7	4.4	0.6	Ø28 – 33	
SOMX115406-UH				●		11.6	5.4	0.6	Ø33.5 – 39	
SOMX135908-UH				●		13.8	5.9	0.8	Ø40 – 46	
SOMX166408-UH				●		16.5	6.4	0.8	Ø47 – 56	
SOMX186908-UH				●		18.2	6.9	0.8	Ø57 – 63	
UN										
SOGX063005-UN					●	6.0	3.0	0.5	Ø17 – 19.5	
SOGX073505-UN					●	7.0	3.5	0.5	Ø20 – 22.5	
SOGX084005-UN					●	8.3	4.0	0.5	Ø23 – 27.5	
SOGX094506-UN					●	9.7	4.5	0.6	Ø28 – 33	
SOGX115506-UN					●	11.6	5.5	0.6	Ø33.5 – 39	
SOGX136008-UN					●	13.8	6.0	0.8	Ø40 – 46	
SOGX166508-UN					●	16.5	6.5	0.8	Ø47 – 56	
SOGX187008-UN					●	18.2	7.0	0.8	Ø57 – 63	

* MC1020 und MC5020 sind ausschließlich für den Einsatz als äußere WSP konzipiert.

JUST FIT SLEEVE [JFS] FÜR DIE ERWEITERUNG DES BOHRERDURCHMESSERS



Bestellnummer	Set-Bestellnummer	Lager	DCB	DCON	BD	LF	L5	Steigerung* [S5x2]	MVX-Schafttyp
JFS2520-10	JFS-1	●	20	25	33	43	30	0.1	F20
JFS2520-20		●	20	25	33	43	30	0.2	F20
JFS2520-30		●	20	25	33	43	30	0.3	F20
JFS2520-40		●	20	25	33	43	30	0.4	F20
JFS2520-50		●	20	25	33	43	30	0.5	F20
JFS3225-10	JFS-2	●	25	32	40	50	34	0.1	F25
JFS3225-20		●	25	32	40	50	34	0.2	F25
JFS3225-30		●	25	32	40	50	34	0.3	F25
JFS3225-40		●	25	32	40	50	34	0.4	F25
JFS3225-50		●	25	32	40	50	34	0.5	F25
JFS4032-10	JFS-3	●	32	40	48	55	40	0.1	F32
JFS4032-20		●	32	40	48	55	40	0.2	F32
JFS4032-30		●	32	40	48	55	40	0.3	F32
JFS4032-40		●	32	40	48	55	40	0.4	F32
JFS4032-50		●	32	40	48	55	40	0.5	F32
JFS5040-10	—	★	40	50	68	65	50	0.1	F40
JFS5040-20		★	40	50	68	65	50	0.2	F40
JFS5040-30		★	40	50	68	65	50	0.3	F40
JFS5040-40		★	40	50	68	65	50	0.4	F40
JFS5040-50		★	40	50	68	65	50	0.5	F40

* Steigerung: Größe des gesteigerten Schneidendurchmessers.

1. Nicht geeignet für Schaft Ø 50 mm.

RICHTLINIE FÜR DIE AUSWAHL VON VERSTELLHÜLSEN

Benötigt = Bohrer Ø + Verstellhülsen + 0.1 mm

(z.B.) Benötigter Durchmesser ist 20.3 mm 0.1mm ist Toleranz.

Ø20.3 = (MVX2000 X F25 + JFS3225-20) + 0.1

↓ ↓ ↓

20 mm Bohrer Verwendung einer Hülsen mit 0.2 mm Versatz. Übergröße

<Werkzeugauswahl>
BOHRER: MVX2000 X F25
Verstellhülsen [JFS]:
JFS3225-20

1. Toleranzgröße kann variieren, dies ist nur eine generelle Richtlinie.

BESTELLBEZEICHNUNG DER VERSTELLHÜLSEN

1. Bestellmethode

Abmaße können aufgrund der Schnittbedingungen variieren. Daher empfehlen wir die Set-Bestellung. Bei Bestellungen, benennen Sie bitte die Set Bestellnr. (5 Hülsen/Set).

2. Bestellmethode

Einzelbestellungen sind möglich, bitte nennen Sie die Produktbezeichnung.

MVX + MINI MVX

SCHNITTDATENEMPFEHLUNGEN

Material	Härte	Vc	Innen- Spanbrecher	Ø14 – Ø16.5			Ø17 – Ø19.5			
				f			f			
				LxDC=2 – 3	LxDC=4	LxDC=5	LxDC=2 – 3	LxDC=4	LxDC=5	LxDC=6
P	Baustahl (C15, Ck15)	≤180HB 200 (180 – 235)	UM	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.04 (0.04 – 0.05)
			UH	–	–	–	–	–	–	–
	C-Stahl, legierter Stahl (Ck45, 41CrMo4)	180 – 280HB 140 (115 – 180)	UM	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.05 (0.04 – 0.06)
			UH	–	–	–	–	–	–	–
	C-Stahl, legierter Stahl (100Cr6)	280 – 350HB 100 (75 – 140)	UM	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.05 (0.04 – 0.06)
			UH	–	–	–	–	–	–	–
M	Legierter Werkzeugstahl (X210Cr12)	≤350 HB 135 (100 – 170)	UM	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.14)	0.08 (0.06 – 0.09)	0.08 (0.06 – 0.09)	0.05 (0.04 – 0.06)
			UH	–	–	–	–	–	–	–
	Austenitischer rostfreier Stahl (X5CrNi18-10, X5CrNiMo17-12-2)	≤200 HB 130 (80 – 180)	US	–	–	–	0.08 (0.06 – 0.12)	0.06 (0.04 – 0.08)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)
			UM	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.04 (0.04 – 0.05)
	Austenitischer rostfreier Stahl (X2CrNi18-9, X5CrNiMo17-11-2)	>200HB 130 (80 – 180)	US	–	–	–	0.08 (0.06 – 0.12)	0.06 (0.04 – 0.08)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)
			UM	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.04 (0.04 – 0.05)
	Ferritischer und martensitischer rostfreier Stahl (X12Cr13, X6Cr17)	≤200 HB 120 (80 – 165)	US	–	–	–	0.08 (0.06 – 0.12)	0.06 (0.04 – 0.08)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)
			UM	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.04 (0.04 – 0.05)
	Ferritischer und martensitischer rostfreier Stahl (X17CrNi16-2, X30Cr13)	>200HB 120 (80 – 165)	US	–	–	–	0.08 (0.06 – 0.12)	0.06 (0.04 – 0.08)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)
			UM	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.06 (0.04 – 0.08)	0.05 (0.04 – 0.06)	0.05 (0.04 – 0.06)	0.04 (0.04 – 0.05)
K	Grauguss (GG25, GG30)	Zug- festigkeit ≤350 MPa 160 (130 – 195)	UM	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.11 (0.08 – 0.14)	0.09 (0.08 – 0.10)	0.09 (0.08 – 0.10)	0.05 (0.04 – 0.06)
	Duktiles Gusseisen (GGG40)	Zug- festigkeit ≤450 MPa 100 (80 – 135)	UM	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.11 (0.08 – 0.14)	0.09 (0.08 – 0.10)	0.09 (0.08 – 0.10)	0.05 (0.04 – 0.06)
	Duktiles Gusseisen (GGG70)	Zug- festigkeit ≤800 MPa 100 (70 – 125)	UM	0.08 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.11 (0.08 – 0.14)	0.09 (0.08 – 0.10)	0.09 (0.08 – 0.10)	0.05 (0.04 – 0.06)
N	Aluminiumlegierung (A6061, A7075)	Si<5% 200 (100 – 350)	UN	–	–	–	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
	Aluminiumlegierung (AC4B)	5%≤Si≤10% 150 (100 – 200)	UN	–	–	–	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
	Aluminiumlegierung (ADC12, A390)	Si>10% 150 (100 – 200)	UN	–	–	–	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
H	Gehärteter Stahl (X40CrMoV51, 55NiCrMoV6)	38 – 45HRC 50 (30 – 80)	UH	–	–	–	0.08 (0.04 – 0.12)	0.06 (0.04 – 0.09)	–	–

MVX + MINI MVX SCHNITTDATENEMPFEHLUNGEN

Vc	Innen- Spannbrecher	Ø20 – Ø23.5				Ø24 – Ø29.5				Ø30 – Ø63				
		f				f				f				
		LxDC=2-3	LxDC=4	LxDC=5	LxDC=6	LxDC=2-3	LxDC=4	LxDC=5	LxDC=6	LxDC=2-3	LxDC=4	LxDC=5	LxDC=6	
P	200 (180 – 235)	UM	0.06 (0.04 – 0.08)	0.06 (0.04 – 0.07)	0.06 (0.04 – 0.07)	0.04 (0.04 – 0.05)	0.07 (0.04 – 0.08)	0.06 (0.04 – 0.07)	0.06 (0.04 – 0.07)	0.05 (0.04 – 0.06)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)
		UH												
	140 (115 – 180)	UM	0.10 (0.06 – 0.18)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.12 (0.08 – 0.18)	0.10 (0.08 – 0.12)	0.10 (0.08 – 0.12)	0.09 (0.08 – 0.10)	0.14 (0.08 – 0.20)	0.12 (0.08 – 0.16)	0.12 (0.08 – 0.16)	0.11 (0.10 – 0.12)
		UH												
	100 (75 – 140)	UM	0.10 (0.06 – 0.18)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.12 (0.08 – 0.18)	0.10 (0.08 – 0.12)	0.10 (0.08 – 0.12)	0.09 (0.08 – 0.10)	0.14 (0.08 – 0.20)	0.12 (0.08 – 0.16)	0.12 (0.08 – 0.16)	0.11 (0.10 – 0.12)
		UH												
	135 (100 – 170)	UM	0.10 (0.06 – 0.18)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.12 (0.08 – 0.18)	0.10 (0.08 – 0.12)	0.10 (0.08 – 0.12)	0.09 (0.08 – 0.10)	0.14 (0.08 – 0.20)	0.12 (0.08 – 0.16)	0.12 (0.08 – 0.16)	0.10 (0.08 – 0.12)
		UH												
M	130 (80 – 180)	US	0.10 (0.06 – 0.14)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)	0.10 (0.06 – 0.14)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.10)
		UM	0.08 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.09)	0.07 (0.06 – 0.09)	0.06 (0.06 – 0.08)	0.09 (0.06 – 0.12)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)
	130 (80 – 180)	US	0.10 (0.06 – 0.14)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)	0.10 (0.06 – 0.14)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.10)
		UM	0.08 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.09)	0.07 (0.06 – 0.09)	0.06 (0.06 – 0.08)	0.09 (0.06 – 0.12)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)
	120 (80 – 165)	US	0.10 (0.06 – 0.14)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)	0.10 (0.06 – 0.14)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.10)
		UM	0.08 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.09)	0.07 (0.06 – 0.09)	0.06 (0.06 – 0.08)	0.09 (0.06 – 0.12)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)
	120 (80 – 165)	US	0.10 (0.06 – 0.14)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.10 (0.06 – 0.14)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)	0.10 (0.06 – 0.14)	0.09 (0.06 – 0.12)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.10)
		UM	0.08 (0.06 – 0.12)	0.07 (0.06 – 0.08)	0.07 (0.06 – 0.08)	0.06 (0.06 – 0.07)	0.09 (0.06 – 0.12)	0.07 (0.06 – 0.09)	0.07 (0.06 – 0.09)	0.06 (0.06 – 0.08)	0.09 (0.06 – 0.12)	0.08 (0.06 – 0.10)	0.08 (0.06 – 0.10)	0.07 (0.06 – 0.08)
K	160 (130 – 195)	UM	0.14 (0.10 – 0.18)	0.10 (0.10 – 0.12)	0.10 (0.10 – 0.12)	0.07 (0.06 – 0.08)	0.15 (0.10 – 0.20)	0.11 (0.10 – 0.13)	0.11 (0.10 – 0.13)	0.09 (0.08 – 0.10)	0.15 (0.10 – 0.20)	0.12 (0.10 – 0.13)	0.12 (0.10 – 0.13)	0.11 (0.10 – 0.12)
	100 (80 – 135)	UM	0.13 (0.10 – 0.16)	0.10 (0.10 – 0.11)	0.10 (0.10 – 0.11)	0.07 (0.06 – 0.08)	0.14 (0.10 – 0.18)	0.11 (0.10 – 0.12)	0.11 (0.10 – 0.12)	0.09 (0.08 – 0.10)	0.15 (0.10 – 0.20)	0.12 (0.10 – 0.13)	0.12 (0.10 – 0.13)	0.11 (0.10 – 0.12)
	100 (70 – 125)	UM	0.13 (0.10 – 0.16)	0.10 (0.10 – 0.11)	0.10 (0.10 – 0.11)	0.07 (0.06 – 0.08)	0.14 (0.10 – 0.18)	0.11 (0.10 – 0.12)	0.11 (0.10 – 0.12)	0.09 (0.08 – 0.10)	0.15 (0.10 – 0.20)	0.12 (0.10 – 0.13)	0.12 (0.10 – 0.13)	0.11 (0.10 – 0.12)
N	200 (100 – 350)	UN	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.20)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
	150 (100 – 200)	UN	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.20)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
	150 (100 – 200)	UN	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)	0.12 (0.05 – 0.20)	0.12 (0.05 – 0.18)	0.12 (0.05 – 0.18)	0.08 (0.05 – 0.12)
H	50 (30 – 80)	UH	0.09 (0.06 – 0.14)	0.07 (0.06 – 0.09)	—	—	0.09 (0.06 – 0.14)	0.07 (0.06 – 0.09)	—	—	0.11 (0.06 – 0.16)	0.09 (0.06 – 0.012)	—	—
2/2														

1. Schnittgeschwindigkeit um 30 % reduzieren, wenn VP15TF als äußere WSP verwendet wird.
2. L/D = 3 ist die empfohlene maximale Tiefe, wenn ausschließlich externe Kühlung verwendet wird.
3. Interne Kühlkanäle sind beim Bohren von rostfreien Stählen unerlässlich.

EUROPÄISCHE VERTRIEBSGESELLSCHAFTEN

GERMANY

MMC HARTMETALL GMBH
Comeniusstr. 2 . 40670 Meerbusch
Phone +49 2159 91890 . Fax +49 2159 918966
Email admin@mmchg.de

U.K.

MMC HARDMETAL U.K. LTD.
Mitsubishi House . Galena Close . Tamworth . Staffs. B77 4AS
Phone +44 1827 312312
Email sales@mitsubishicarbide.co.uk

SPAIN

MITSUBISHI MATERIALS ESPAÑA, S.A.
Calle Emperador 2 . 46136 Museros/Valencia
Phone +34 96 1441711 . Fax +34 96 1443786
Email comercial@mmevalencia.es

FRANCE

MMC METAL FRANCE S.A.R.L.
6, Rue Jacques Monod . 91400 Orsay
Phone +33 1 69 35 53 53 . Fax +33 1 69 35 53 50
Email mmfsales@mmc-metal-france.fr

POLAND

MMC HARDMETAL POLAND SP. Z O.O
Al. Armii Krajowej 61 . 50-541 Wrocław
Phone +48 71335 1620 . Fax +48 71335 1621
Email sales@mitsubishicarbide.com.pl

ITALY

MMC ITALIA S.R.L.
Viale Certosa 144 . 20156 Milano
Phone +39 0293 77031 . Fax +39 0293 589093
Email info@mmc-italia.it

TURKEY

MMC HARTMETALL GMBH ALMANYA - İZMİR MERKEZ ŞUBESİ
Adalet Mahallesi Anadolu Caddesi No: 41-1 . 15001 35530 Bayraklı / İzmir
Phone +90 232 5015000 . Fax +90 232 5015007
Email info@mmchg.com.tr

www.mmc-carbide.com

VERTRIEB DURCH:

┌

┐

└

┘

B202D 

Veröffentlicht durch: MMC Hartmetall GmbH – A Sales Company of  MITSUBISHI MATERIALS | 2024.03