

INOX Bohrer

3xD - 5xD - 8xD

Spezielle Schneidengeometrie für die
Bearbeitung von nichtrostenden Stählen

Applied INOX Beschichtung ergibt
eine bessere Oberflächenqualität
und eine längere Lebensdauer.

Hervorragende Spanabfuhr
durch verbesserte
Oberflächenbehandlung

Spezieller Anschlag zur
besseren Zentrierung und
Spanbruch





















Ideal für folgende Materialgruppen



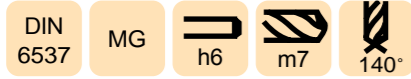
VHM Bohrer



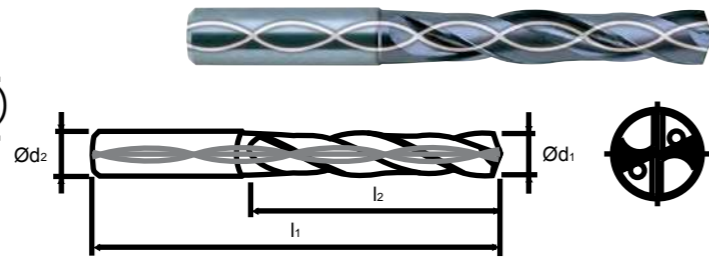
●: sehr gut ○: gut

P				H		M			K				S					N				O											
11	12	13	14	15	16	21	22	23	31	32	33	34	41	42	43	51	52	53	61	62	63	64	71	72	73	74	81	82	83	Code	Artikel	Abmessung	Seite Nr.
○ ○ ○ ○						● ● ●							● ● ● ○ ○ ○									○ ○ ○ ○							823323		3xD ø3.0mm - 20.0mm	3-4	
○ ○ ○ ○						● ● ●							● ● ● ○ ○ ○									○ ○ ○ ○							825323		5xD ø1.5mm - 20.0mm	5-6	
○ ○ ○ ○						● ● ●							● ● ● ○ ○ ○									○ ○ ○ ○							828323		8xD ø3.0mm - 14.0mm	7-8	
																													Hochleistungsbohrer allgemeine Anwendung				
● ● ● ●									● ● ● ●																				803323		3xD ø3.0mm - 20.0mm	9-10	
● ● ● ●									● ● ● ●																				804323		5xD ø1.0mm - 20.0mm	11-12	
● ● ● ●									● ● ● ●																				805323		8xD ø3.0mm - 12.0mm	13-14	
● ● ● ●									● ● ● ●																				810323		10xD ø3.0mm - 14.0mm	15	
● ● ● ●									● ● ● ●																				815323		15xD ø3.0mm - 12.0mm	15	
● ● ● ●									● ● ● ●																				820323		20xD ø3.0mm - 12.0mm	15	
																													Hochgehärtete Stähle bis 70HRC				
						● ●																						821223		5xD ø3.0mm - 14.0mm	16		
																												Aluminium mit Innenkühlung					
																					● ● ● ●							843303		3xD ø3.0mm - 20.0mm	17-18		
																					● ● ● ●							845303		5xD ø3.0mm - 20.0mm	19-20		
																					● ● ● ●							848303		8xD ø3.0mm - 14.0mm	21-22		
																												CFK Bohrer					
																									●			850390		Jobber ø3.0mm - 14.0mm	23		
																												VHM Bohrer					
● ● ● ●									● ● ● ●																				807323		3xD ø3.0mm - 20.0mm	25-26	
● ● ● ●									● ● ● ●																				808323		5xD ø1.0mm - 20.0mm	27-28	
● ● ● ●									● ● ● ●																				802323		Stub TiAlN ø3.0mm - 20.0mm	29-30	
● ● ● ●						○ ○			● ● ● ● ○ ○	○ ○			○ ○									○ ○ ○ ○							800303		Stub ø1.0mm - 13.0mm	31-32	
● ● ● ●						○ ○			● ● ● ● ○ ○	○ ○			○ ○									○ ○ ○ ○							801303		Jobber ø1.0mm - 13.0mm	33-34	
○ ○ ○ ○						○ ○			○ ○ ○ ○ ○ ○	○ ○			○ ○									○ ○ ○ ○							806303 806403		NC-Anbohrer 90° & 120° ø6.0mm - 20.0mm	24	
																														Schnittdaten	37		

VHM INOX 3D DIN6537 mit Innenkühlung TiALN



Artikel Nr.823323 (823.121.)



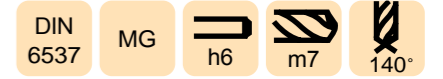
Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen,
Titan. Bisca.35HRC und Aluminium

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8233230300	3.0	6.0	20	62
8233230310	3.1	6.0	20	62
8233230320	3.2	6.0	20	62
8233230330	3.3	6.0	20	62
8233230340	3.4	6.0	20	62
8233230350	3.5	6.0	20	62
8233230360	3.6	6.0	20	62
8233230370	3.7	6.0	20	62
8233230380	3.8	6.0	24	66
8233230390	3.9	6.0	24	66
8233230400	4.0	6.0	24	66
8233230410	4.1	6.0	24	66
8233230420	4.2	6.0	24	66
8233230430	4.3	6.0	24	66
8233230440	4.4	6.0	24	66
8233230450	4.5	6.0	24	66
8233230460	4.6	6.0	24	66
8233230470	4.7	6.0	24	66
8233230480	4.8	6.0	28	66
8233230490	4.9	6.0	28	66
8233230500	5.0	6.0	28	66
8233230510	5.1	6.0	28	66
8233230520	5.2	6.0	28	66
8233230530	5.3	6.0	28	66
8233230540	5.4	6.0	28	66
8233230550	5.5	6.0	28	66
8233230560	5.6	6.0	28	66
8233230570	5.7	6.0	28	66
8233230580	5.8	6.0	28	66
8233230590	5.9	6.0	28	66
8233230600	6.0	6.0	28	66

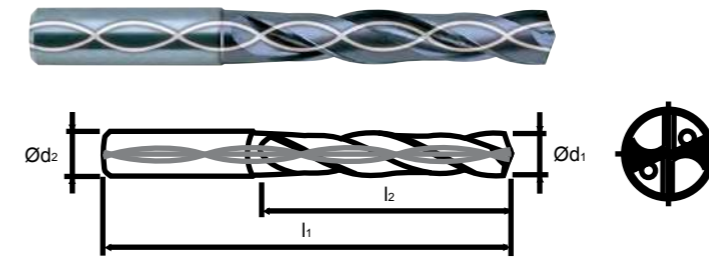
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM INOX 3D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 823323 (823.121.)



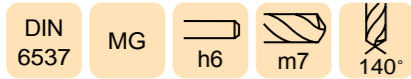
Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen,
Titan. Bis ca.35HRC und Aluminium

EUROPA CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8233230920	9.2	10.0	47	89
8233230930	9.3	10.0	47	89
8233230940	9.4	10.0	47	89
8233230950	9.5	10.0	47	89
8233230960	9.6	10.0	47	89
8233230970	9.7	10.0	47	89
8233230980	9.8	10.0	47	89
8233230990	9.9	10.0	47	89
8233231000	10.0	10.0	47	89
8233231010	10.1	12.0	55	102
8233231020	10.2	12.0	55	102
8233231030	10.3	12.0	55	102
8233231040	10.4	12.0	55	102
8233231050	10.5	12.0	55	102
8233231060	10.6	12.0	55	102
8233231070	10.7	12.0	55	102
8233231080	10.8	12.0	55	102
8233231090	10.9	12.0	55	102
8233231100	11.0	12.0	55	102
8233231110	11.1	12.0	55	102
8233231120	11.2	12.0	55	102
8233231130	11.3	12.0	55	102
8233231140	11.4	12.0	55	102

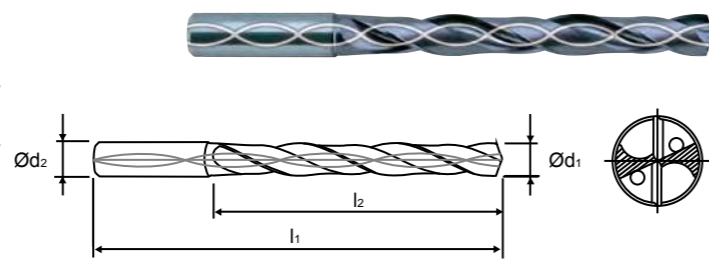
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM INOX 5D DIN6537 mit Innenkühlung TiALN



ArtikelNr.825323 (825.121.)



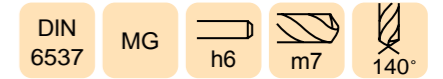
Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen,
Titan. Bis ca.35HRC und Aluminium

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8253230150	1.5	3.0	16	55
8253230160	1.6	3.0	16	55
8253230170	1.7	3.0	16	55
8253230180	1.8	3.0	16	55
8253230190	1.9	3.0	16	55
8253230200	2.0	4.0	21	57
8253230210	2.1	4.0	21	57
8253230220	2.2	4.0	21	57
8253230230	2.3	4.0	21	57
8253230240	2.4	4.0	21	57
8253230250	2.5	4.0	21	57
8253230260	2.6	4.0	21	57
8253230270	2.7	4.0	21	57
8253230280	2.8	4.0	21	57
8253230290	2.9	4.0	21	57
8253230300	3.0	6.0	28	66
8253230310	3.1	6.0	28	66
8253230320	3.2	6.0	28	66
8253230330	3.3	6.0	28	66
8253230340	3.4	6.0	28	66
8253230350	3.5	6.0	28	66
8253230360	3.6	6.0	28	66
8253230370	3.7	6.0	28	66
8253230380	3.8	6.0	36	74
8253230390	3.9	6.0	36	74
8253230400	4.0	6.0	36	74
8253230410	4.1	6.0	36	74
8253230420	4.2	6.0	36	74
8253230430	4.3	6.0	36	74
8253230440	4.4	6.0	36	74
8253230450	4.5	6.0	36	74

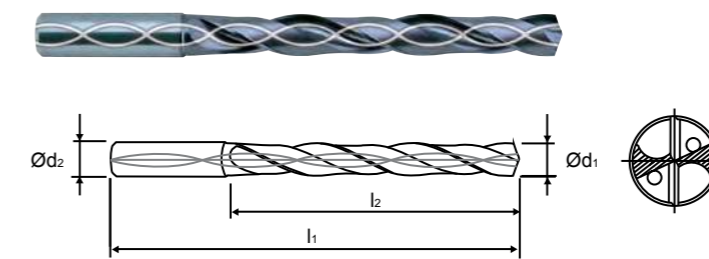
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM INOX 5D DIN6537mit Innenkühlung TiALN



Artikel Nr.825323 (825.121.)



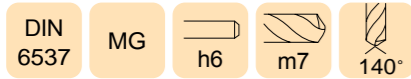
Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen,
Titan. Bis ca.35HRC und Aluminium

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8253230770	7.7	8.0	53	91
8253230780	7.8	8.0	53	91
8253230790	7.9	8.0	53	91
8253230800	8.0	8.0	53	91
8253230810	8.1	10.0	61	103
8253230820	8.2	10.0	61	103
8253230830	8.3	10.0	61	103
8253230840	8.4	10.0	61	103
8253230850	8.5	10.0	61	103
8253230860	8.6	10.0	61	103
8253230870	8.7	10.0	61	103
8253230880	8.8	10.0	61	103
8253230890	8.9	10.0	61	103
8253230900	9.0	10.0	61	103
8253230910	9.1	10.0	61	103
8253230920	9.2	10.0	61	103
8253230930	9.3	10.0	61	103
8253230940	9.4	10.0	61	103
8253230950	9.5	10.0	61	103
8253230960	9.6	10.0	61	103
8253230970	9.7	10.0	61	103
8253230980	9.8	10.0	61	103
8253230990	9.9	10.0	61	103
8253231000	10.0	10.0	61	103
8253231010	10.1	12.0	71	118
8253231020	10.2	12.0	71	118
8253231030	10.3	12.0	71	118
8253231040	10.4	12.0	71	118
8253231050	10.5	12.0	71	118
8253231060	10.6	12.0	71	118

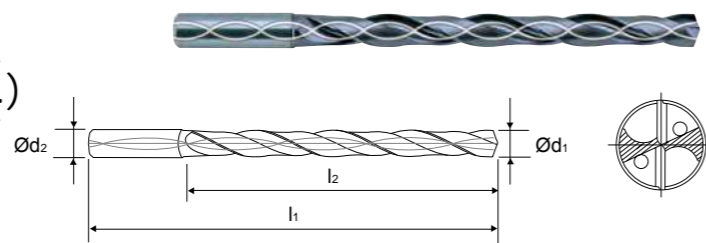
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM INOX 8D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 828323 (828.121.)



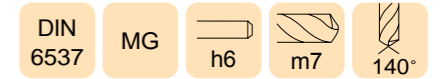
Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen, Titan. Bis ca.35HRC und Aluminium

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8283230300	3.0	6.0	34	72
8283230310	3.1	6.0	34	72
8283230320	3.2	6.0	34	72
8283230330	3.3	6.0	34	72
8283230340	3.4	6.0	34	72
8283230350	3.5	6.0	34	72
8283230360	3.6	6.0	34	72
8283230370	3.7	6.0	34	72
8283230380	3.8	6.0	43	81
8283230390	3.9	6.0	43	81
8283230400	4.0	6.0	43	81
8283230410	4.1	6.0	43	81
8283230420	4.2	6.0	43	81
8283230430	4.3	6.0	43	81
8283230440	4.4	6.0	43	81
8283230450	4.5	6.0	43	81
8283230460	4.6	6.0	43	81
8283230470	4.7	6.0	43	81
8283230480	4.8	6.0	57	95
8283230490	4.9	6.0	57	95
8283230500	5.0	6.0	57	95
8283230510	5.1	6.0	57	95
8283230520	5.2	6.0	57	95
8283230530	5.3	6.0	57	95
8283230540	5.4	6.0	57	95
8283230550	5.5	6.0	57	95
8283230560	5.6	6.0	57	95
8283230570	5.7	6.0	57	95
8283230580	5.8	6.0	57	95
8283230590	5.9	6.0	57	95
8283230600	6.0	6.0	57	95

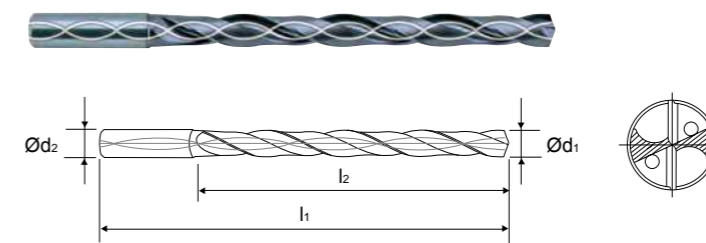
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM INOX 8D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 828323 (828.121.)



Anwendung:
Zähe Werkstoffe wie rostfreier Stahl, Nickellegierungen, Titan. Bis ca.35HRC und Aluminium

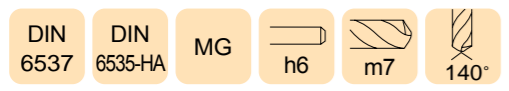
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8283230920	9.2	10.0	95	142
8283230930	9.3	10.0	95	142
8283230940	9.4	10.0	95	142
8283230950	9.5	10.0	95	142
8283230960	9.6	10.0	95	142
8283230970	9.7	10.0	95	142
8283230980	9.8	10.0	95	142
8283230990	9.9	10.0	95	142
8283231000	10.0	10.0	95	142
8283231010	10.1	12.0	114	162
8283231020	10.2	12.0	114	162
8283231030	10.3	12.0	114	162
8283231040	10.4	12.0	114	162
8283231050	10.5	12.0	114	162
8283231060	10.6	12.0	114	162
8283231070	10.7	12.0	114	162
8283231080	10.8	12.0	114	162

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8283231090	10.9	12.0	114	162
8283231100	11.0	12.0	114	162
8283231110	11.1	12.0	114	162
8283231120	11.2	12.0	114	162
8283231130	11.3	12.0	114	162
8283231140	11.4	12.0	114	162
8283231150	11.5	12.0	114	162
8283231160	11.6	12.0	114	162
8283231170	11.7	12.0	114	162
8283231180	11.8	12.0	114	162
8283231190	11.9	12.0	114	162
8283231200	12.0	12.0	114	162
8283231250	12.5	14.0	133	178
8283231300	13.0	14.0	133	178
8283231350	13.5	14.0	133	178
8283231400	14.0	14.0	133	178

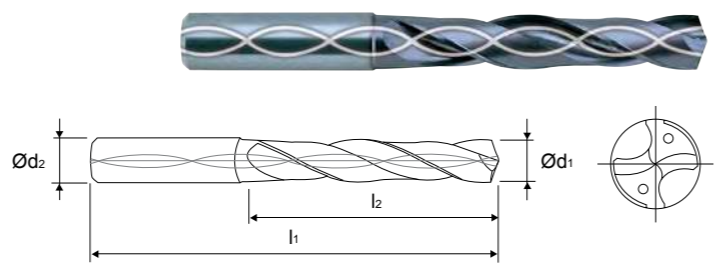
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●			●	●	●						
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●				○	○	○	○	○	○	○		

VHM allgemeine Anwendung 3D DIN6537 mit Innenkühlung TiALN



ArtikelNr.803323(813.121.)



Anwendung:
Stahl, Stahlguss, Hart- und Temperguss,
Ne-Metalle, abrasiver Kunststoff

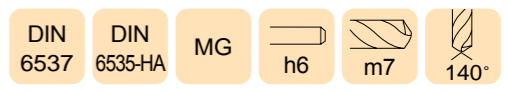
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
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8033230310	3.1			
8033230320	3.2			
8033230330	3.3			
8033230340	3.4			
8033230350	3.5			
8033230360	3.6			
8033230370	3.7			
8033230380	3.8	6.0	24	66
8033230390	3.9			
8033230400	4.0			
8033230410	4.1			
8033230420	4.2			
8033230430	4.3			
8033230440	4.4			
8033230450	4.5			
8033230460	4.6			
8033230470	4.7	6.0	28	66
8033230480	4.8			
8033230490	4.9			
8033230500	5.0			
8033230510	5.1			
8033230520	5.2			
8033230530	5.3			
8033230540	5.4			
8033230550	5.5			
8033230560	5.6			

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8033230570	5.7	6.0	28	66
8033230580	5.8			
8033230590	5.9			
8033230600	6.0			
8033230610	6.1			
8033230620	6.2			
8033230630	6.3	8.0	34	79
8033230640	6.4			
8033230650	6.5			
8033230660	6.6			
8033230670	6.7			
8033230680	6.8			
8033230690	6.9			
8033230700	7.0			
8033230710	7.1	8.0	41	79
8033230720	7.2			
8033230730	7.3			
8033230740	7.4			
8033230750	7.5			
8033230760	7.6			
8033230770	7.7			
8033230780	7.8			
8033230790	7.9	10.0	47	89
8033230800	8.0			
8033230810	8.1			
8033230820	8.2			
8033230830	8.3			

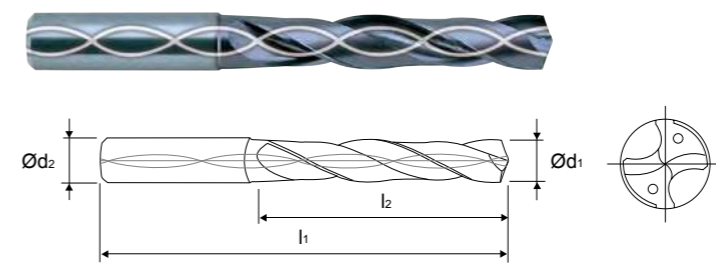
● :sehr gut ○ :gut

P	H	M	K	S	N	O									
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●											
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM allgemeine Anwendung 3D DIN6537 mit Innenkühlung TiALN



Artikel Nr.803323 (813.121.)



Anwendung:
Stahl, Stahlguss, Hart- und Temperguss,
Ne-Metalle, abrasiver Kunststoff

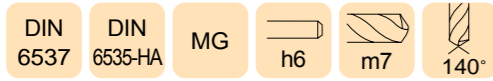
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8033230840	8.4	10.0	47	89
8033230850	8.5			
8033230860	8.6			
8033230870	8.7			
8033230880	8.8			
8033230890	8.9			
8033230900	9.0			
8033230910	9.1			
8033230920	9.2			
8033230930	9.3			
8033230940	9.4	12.0	55	102
8033230950	9.5			
8033230960	9.6			
8033230970	9.7			
8033230980	9.8			
8033230990	9.9			
8033231000	10.0			
8033231010	10.1			
8033231020	10.2			
8033231030	10.3			
8033231040	10.4			
8033231050	10.5			
8033231060	10.6			
8033231070	10.7			
8033231080	10.8			
8033231090	10.9			
8033231100	11.0			

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8033231110	11.1	12.0	55	102
8033231120	11.2			
8033231130	11.3			
8033231140	11.4			
8033231150	11.5			
8033231160	11.6			
8033231170	11.7			
8033231180	11.8			
8033231190	11.9	14.0	60	107
8033231200	12.0			
8033231250	12.5			
8033231300	13.0			
8033231350	13.5			
8033231400	14.0			
8033231450	14.5			
8033231500	15.0			
8033231550	15.5	16.0	65	115
8033231600	16.0			
8033231650	16.5			
8033231700	17.0			
8033231750	17.5			
8033231800	18.0			
8033231850	18.5			
8033231900	19.0			
8033231950	19.5	20.0	79	131
8033232000	20.0			

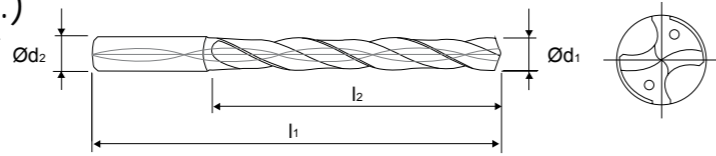
● :sehr gut ○ :gut

P	H	M	K	S	N	O									
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●											
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM allgemeine Anwendung 5D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 804323 (815.121.)



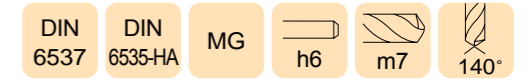
Anwendung:
Stahl, Stahlguss, Hart-und Temperguss,
Ne-Metalle, abrasiver Kunststoff

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8043230100	1.0	3.0	8	55
8043230110	1.1	3.0	12	55
8043230120	1.2			
8043230130	1.3			
8043230140	1.4			
8043230150	1.5	3.0	16	55
8043230160	1.6			
8043230170	1.7			
8043230180	1.8			
8043230190	1.9	4.0	21	57
8043230200	2.0			
8043230210	2.1			
8043230220	2.2			
8043230230	2.3			
8043230240	2.4			
8043230250	2.5			
8043230260	2.6			
8043230270	2.7	6.0	28	66
8043230280	2.8			
8043230290	2.9			
8043230300	3.0			
8043230310	3.1			
8043230320	3.2			
8043230330	3.3			
8043230340	3.4			
8043230350	3.5	6.0	36	74
8043230360	3.6			
8043230370	3.7			
8043230380	3.8			
8043230390	3.9			
8043230400	4.0			
8043230410	4.1			

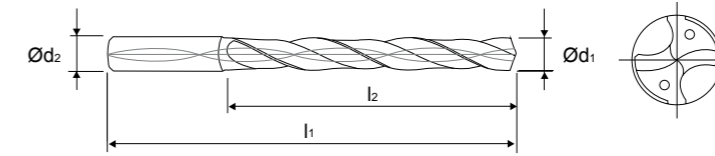
●:sehr gut ○:gut

P	H	M	K	S	N	O									
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●											
13	14	16	23	33	34	51	52	53	71	72	73	74	83		
●	●		●	●											

VHM allgemeine Anwendung 5D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 804323 (815.121.)



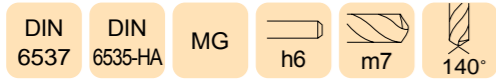
Anwendung:
Stahl, Stahlguss, Hart-und Temperguss,
Ne-Metalle, abrasiver Kunststoff

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8043230740	7.4	8.0	53	91
8043230750	7.5			
8043230760	7.6			
8043230770	7.7			
8043230780	7.8	10.0	61	103
8043230790	7.9			
8043230800	8.0			
8043230810	8.1			
8043230820	8.2			
8043230830	8.3			
8043230840	8.4			
8043230850	8.5			
8043230860	8.6	12.0	71	118
8043230870	8.7			
8043230880	8.8			
8043230890	8.9			
8043230900	9.0			
8043230910	9.1			
8043230920	9.2			
8043230930	9.3			
8043230940	9.4	12.0	71	118
8043230950	9.5			
8043230960	9.6			
8043230970	9.7			
8043230980	9.8			
8043230990	9.9			
8043231000	10.0			
8043231010	10.1			
8043231020	10.2	12.0	71	118
8043231030	10.3			
8043231040	10.4			
8043231050	10.5			

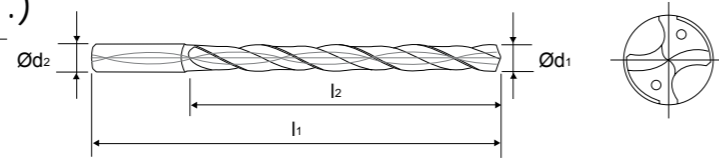
●:sehr gut ○:gut

P	H	M	K	S	N	O									
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●											
13	14	16	23	33	34	51	52	53	71	72	73	74	83		
●	●		●	●											

VHM allgemeine Anwendung 8D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 805323 (818.121.)



Anwendung:
Stahl, Stahlguss, Hart-undTemperguss
Ne-Metalle, abrasiver Kunststoff

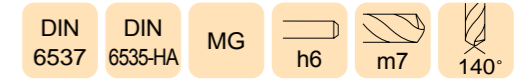
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8053230300	3.0	6.0	34	72
8053230310	3.1			
8053230320	3.2			
8053230330	3.3			
8053230340	3.4			
8053230350	3.5			
8053230360	3.6			
8053230370	3.7			
8053230380	3.8	6.0	43	81
8053230390	3.9			
8053230400	4.0			
8053230410	4.1			
8053230420	4.2			
8053230430	4.3			
8053230440	4.4			
8053230450	4.5			
8053230460	4.6	6.0	57	95
8053230470	4.7			
8053230480	4.8			
8053230490	4.9			
8053230500	5.0			
8053230510	5.1			
8053230520	5.2			

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8053230530	5.3	6.0	57	95
8053230540	5.4			
8053230550	5.5			
8053230560	5.6			
8053230570	5.7			
8053230580	5.8			
8053230590	5.9			
8053230600	6.0			
8053230610	6.1	8.0	76	114
8053230620	6.2			
8053230630	6.3			
8053230640	6.4			
8053230650	6.5			
8053230660	6.6			
8053230670	6.7			
8053230680	6.8			
8053230690	6.9	7.0	76	114
8053230700	7.0			
8053230710	7.1			
8053230720	7.2			
8053230730	7.3			
8053230740	7.4			
8053230750	7.5			

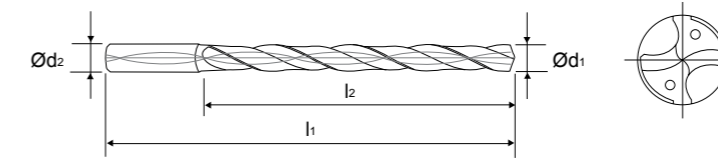
●: sehr gut ○: gut

P		H		M		K		S		N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●				●	●									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM allgemeine Anwendung 8D DIN6537 mit Innenkühlung TiALN



Artikel Nr. 805323 (818.121.)



Anwendung:
Stahl, Stahlguss, Hart-undTemperguss
Ne-Metalle, abrasiver Kunststoff

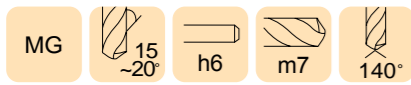
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8053230760	7.6	8.0	76	114
8053230770	7.7			
8053230780	7.8			
8053230790	7.9			
8053230800	8.0			
8053230810	8.1			
8053230820	8.2			
8053230830	8.3			
8053230840	8.4	10.0	95	142
8053230850	8.5			
8053230860	8.6			
8053230870	8.7			
8053230880	8.8			
8053230890	8.9			
8053230900	9.0			
8053230910	9.1			
8053230920	9.2			
8053230930	9.3			
8053230940	9.4			
8053230950	9.5			
8053230960	9.6			
8053230970	9.7			
8053230980	9.8			

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8053230990	9.9	10.0	95	142
8053231000	10.0			
8053231010	10.1			
8053231020	10.2			
8053231030	10.3			
8053231040	10.4			
8053231050	10.5			
8053231060	10.6			
8053231070	10.7	12.0	114	162
8053231080	10.8			
8053231090	10.9			
8053231100	11.0			
8053231110	11.1			
8053231120	11.2			
8053231130	11.3			
8053231140	11.4			
8053231150	11.5			
8053231160	11.6			
8053231170	11.7			
8053231180	11.8			
8053231190	11.9			
8053231200	12.0			

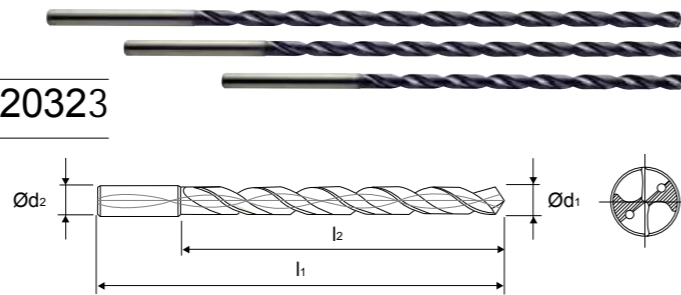
●: sehr gut ○: gut

P		H		M		K		S		N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●				●	●									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM Tieflochbohrer TiALN 10D 15D 20D



Artikel Nr.: 810323, 815323, 820323



Anwendung:
Stahl, Stahlguss, Hart-undTemperguss
Ne-Metalle, abrasiver Kunststoff

Hinweise :
Bohren ohne abzusetzen
selbstzentrierend
für minimale Schwierung (MQL) geeignet

10 X D

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8103230300	3.0	3.0	39	90
8103230330	3.3	4.0	46	97
8103230350	3.5	4.0	46	97
8103230400	4.0	4.0	52	103
8103230420	4.2	5.0	59	112
8103230450	4.5	5.0	59	112
8103230500	5.0	5.0	65	118
8103230550	5.5	6.0	72	127
8103230600	6.0	6.0	78	133
8103230650	6.5	7.0	85	141
8103230680	6.8	7.0	91	147
8103230700	7.0	7.0	91	147
8103230750	7.5	8.0	98	155
8103230800	8.0	8.0	104	161
8103230850	8.5	9.0	111	169
8103230900	9.0	9.0	117	175
8103230950	9.5	10.0	124	182
8103231000	10.0	10.0	130	188
8103231050	10.5	11.0	137	201
8103231100	11.0	11.0	143	207
8103231150	11.5	12.0	150	215
8103231200	12.0	12.0	156	221
8103231250	12.5	13.0	163	229
8103231300	13.0	13.0	169	235
8103231350	13.5	14.0	176	243
8103231400	14.0	14.0	182	249

15 X D

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8153230300	3.0	3.0	54	105
8153230350	3.5	4.0	63	114
8153230400	4.0	4.0	72	123
8153230450	4.5	5.0	81	134
8153230500	5.0	5.0	90	143
8153230550	5.5	6.0	99	154
8153230600	6.0	6.0	108	163
8153230700	7.0	7.0	126	182
8153230800	8.0	8.0	144	201
8153230900	9.0	9.0	162	220
8153231000	10.0	10.0	180	238
8153231100	11.0	11.0	198	262
8153231200	12.0	12.0	216	281

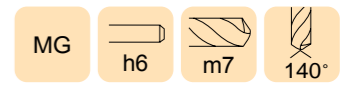
20 X D

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8203230300	3.0	3.0	69	120
8203230350	3.5	4.0	81	132
8203230400	4.0	4.0	92	143
8203230450	4.5	5.0	104	157
8203230500	5.0	5.0	115	168
8203230550	5.5	6.0	127	182
8203230600	6.0	6.0	138	193
8203230700	7.0	7.0	161	217
8203230800	8.0	8.0	184	241
8203230900	9.0	9.0	207	265
8203231000	10.0	10.0	230	288
8203231200	12.0	12.0	276	341

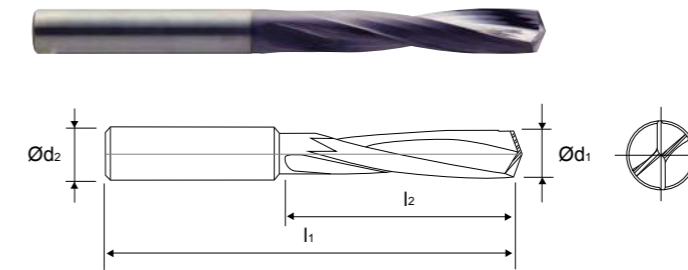
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●				●	●									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM Bohrer TiALN bis 70 HRC



Artikel Nr.: 821223



Anwendung:
Für hochfeste Stähle von 50 bis 70HRC geeignet

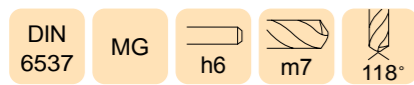
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8212230300	3.0	3	16	46
8212230330	3.3	4	18	48
8212230340	3.4	4	20	50
8212230350	3.5	4	20	50
8212230400	4.0	4	22	52
8212230420	4.2	6	25	65
8212230430	4.3	6	28	68
8212230440	4.4	6	28	68
8212230450	4.5	6	28	68
8212230500	5.0	6	32	72
8212230510	5.1	6	32	72
8212230520	5.2	6	32	72
8212230550	5.5	6	35	75
8212230600	6.0	6	35	75
8212230650	6.5	8	40	80
8212230680	6.8	8	45	85
8212230690	6.9	8	45	85

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8212230700	7.0	8	45	85
8212230750	7.5	8	45	85
8212230800	8.0	8	50	98
8212230850	8.5	10	50	98
8212230860	8.6	10	57	105
8212230880	8.8	10	57	105
8212230900	9.0	10	57	105
8212230950	9.5	10	57	105
8212231000	10.0	10	63	111
8212231020	10.2	12	63	111
8212231030	10.3	12	63	111
8212231050	10.5	12	63	111
8212231080	10.8	12	71	119
8212231100	11.0	12	71	119
8212231150	11.5	12	71	119
8212231200	12.0	12	71	119
8212231400	14.0	14	77	125

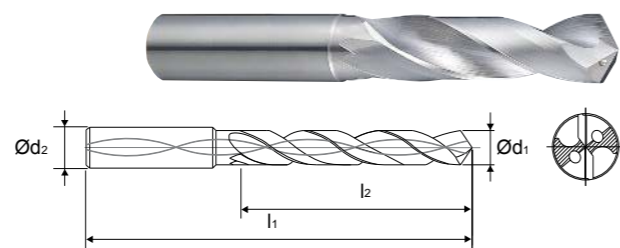
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
		●													
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
		●													

VHM Aluminium 3D DIN6537 mit Innenkühlung



Artikel Nr. 843303 (833.121.)



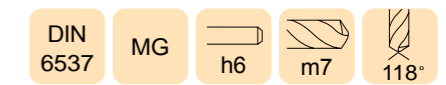
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8433030300	3.0	6.0	20	62
8433030310	3.1	6.0	20	62
8433030320	3.2	6.0	20	62
8433030330	3.3	6.0	20	62
8433030340	3.4	6.0	20	62
8433030350	3.5	6.0	20	62
8433030360	3.6	6.0	20	62
8433030370	3.7	6.0	20	62
8433030380	3.8	6.0	24	66
8433030390	3.9	6.0	24	66
8433030400	4.0	6.0	24	66
8433030410	4.1	6.0	24	66
8433030420	4.2	6.0	24	66
8433030430	4.3	6.0	24	66
8433030440	4.4	6.0	24	66
8433030450	4.5	6.0	24	66
8433030460	4.6	6.0	24	66
8433030470	4.7	6.0	24	66
8433030480	4.8	6.0	28	66
8433030490	4.9	6.0	28	66
8433030500	5.0	6.0	28	66
8433030510	5.1	6.0	28	66
8433030520	5.2	6.0	28	66
8433030530	5.3	6.0	28	66
8433030540	5.4	6.0	28	66
8433030550	5.5	6.0	28	66
8433030560	5.6	6.0	28	66
8433030570	5.7	6.0	28	66
8433030580	5.8	6.0	28	66
8433030590	5.9	6.0	28	66
8433030600	6.0	6.0	28	66

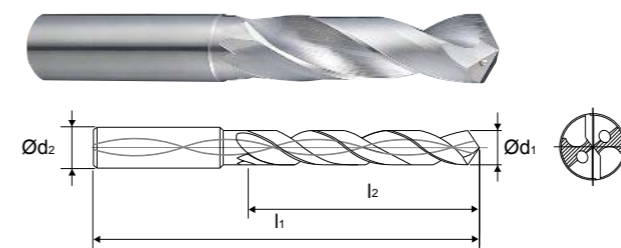
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM Aluminium 3D DIN6537 mit Innenkühlung



Artikel Nr. 843303 (833.121.)



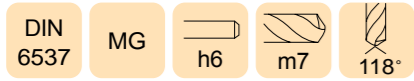
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8433030920	9.2	10.0	47	89
8433030930	9.3	10.0	47	89
8433030940	9.4	10.0	47	89
8433030950	9.5	10.0	47	89
8433030960	9.6	10.0	47	89
8433030970	9.7	10.0	47	89
8433030980	9.8	10.0	47	89
8433030990	9.9	10.0	47	89
8433031000	10.0	10.0	47	89
8433031010	10.1	12.0	55	102
8433031020	10.2	12.0	55	102
8433031030	10.3	12.0	55	102
8433031040	10.4	12.0	55	102
8433031050	10.5	12.0	55	102
8433031060	10.6	12.0	55	102
8433031070	10.7	12.0	55	102
8433031080	10.8	12.0	55	102
8433031090	10.9	12.0	55	102
8433031100	11.0	12.0	55	102
8433031110	11.1	12.0	55	102
8433031120	11.2	12.0	55	102
8433031130	11.3	12.0	55	102
8433031140	11.4	12.0	55	102

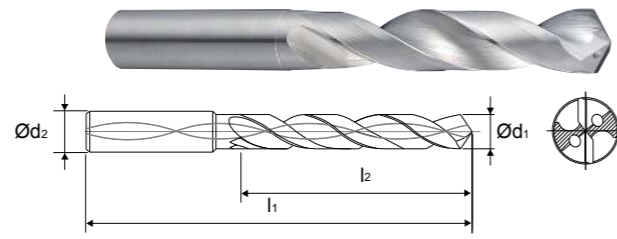
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM Aluminium 5D DIN6537 mit Innenkühlung



Artikel Nr. 845303 (835.121.)



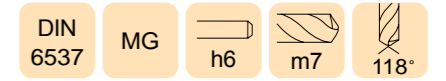
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8453030300	3.0	6.0	28	66
8453030310	3.1	6.0	28	66
8453030320	3.2	6.0	28	66
8453030330	3.3	6.0	28	66
8453030340	3.4	6.0	28	66
8453030350	3.5	6.0	28	66
8453030360	3.6	6.0	28	66
8453030370	3.7	6.0	28	66
8453030380	3.8	6.0	36	74
8453030390	3.9	6.0	36	74
8453030400	4.0	6.0	36	74
8453030410	4.1	6.0	36	74
8453030420	4.2	6.0	36	74
8453030430	4.3	6.0	36	74
8453030440	4.4	6.0	36	74
8453030450	4.5	6.0	36	74
8453030460	4.6	6.0	36	74
8453030470	4.7	6.0	36	74
8453030480	4.8	6.0	44	82
8453030490	4.9	6.0	44	82
8453030500	5.0	6.0	44	82
8453030510	5.1	6.0	44	82
8453030520	5.2	6.0	44	82
8453030530	5.3	6.0	44	82
8453030540	5.4	6.0	44	82
8453030550	5.5	6.0	44	82
8453030560	5.6	6.0	44	82
8453030570	5.7	6.0	44	82
8453030580	5.8	6.0	44	82
8453030590	5.9	6.0	44	82
8453030600	6.0	6.0	44	82

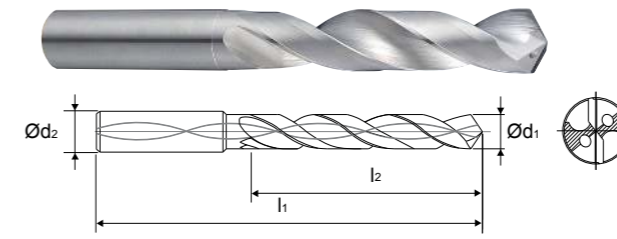
●:sehr gut ○:gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM Aluminium 5D DIN6537 mit Innenkühlung



Artikel Nr. 845303 (835.121.)



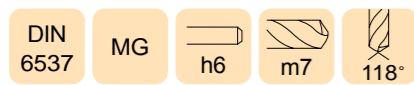
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8453030920	9.2	10.0	61	103
8453030930	9.3	10.0	61	103
8453030940	9.4	10.0	61	103
8453030950	9.5	10.0	61	103
8453030960	9.6	10.0	61	103
8453030970	9.7	10.0	61	103
8453030980	9.8	10.0	61	103
8453030990	9.9	10.0	61	103
8453031000	10.0	10.0	61	103
8453031010	10.1	12.0	71	118
8453031020	10.2	12.0	71	118
8453031030	10.3	12.0	71	118
8453031040	10.4	12.0	71	118
8453031050	10.5	12.0	71	118
8453031060	10.6	12.0	71	118
8453031070	10.7	12.0	71	118
8453031080	10.8	12.0	71	118
8453031090	10.9	12.0	71	118
8453031100	11.0	12.0	71	118
8453031110	11.1	12.0	71	118
8453031120	11.2	12.0	71	118
8453031130	11.3	12.0	71	118
8453031140	11.4	12.0	71	118

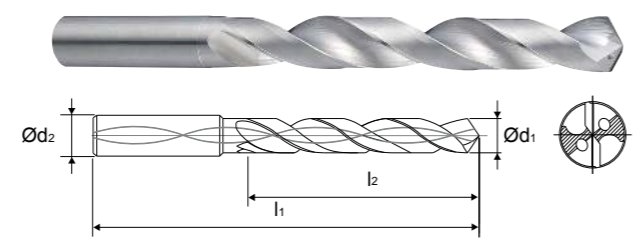
●:sehr gut ○:gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM Aluminium 8D DIN6537 mit Innenkühlung



Artikel Nr. 848303 (838.121.)



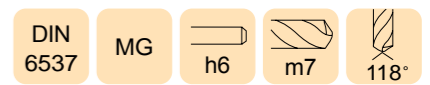
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8483030300	3.0	6.0	34	72
8483030310	3.1	6.0	34	72
8483030320	3.2	6.0	34	72
8483030330	3.3	6.0	34	72
8483030340	3.4	6.0	34	72
8483030350	3.5	6.0	34	72
8483030360	3.6	6.0	34	72
8483030370	3.7	6.0	34	72
8483030380	3.8	6.0	43	81
8483030390	3.9	6.0	43	81
8483030400	4.0	6.0	43	81
8483030410	4.1	6.0	43	81
8483030420	4.2	6.0	43	81
8483030430	4.3	6.0	43	81
8483030440	4.4	6.0	43	81
8483030450	4.5	6.0	43	81
8483030460	4.6	6.0	43	81
8483030470	4.7	6.0	43	81
8483030480	4.8	6.0	57	95
8483030490	4.9	6.0	57	95
8483030500	5.0	6.0	57	95
8483030510	5.1	6.0	57	95
8483030520	5.2	6.0	57	95
8483030530	5.3	6.0	57	95
8483030540	5.4	6.0	57	95
8483030550	5.5	6.0	57	95
8483030560	5.6	6.0	57	95
8483030570	5.7	6.0	57	95
8483030580	5.8	6.0	57	95
8483030590	5.9	6.0	57	95
8483030600	6.0	6.0	57	95

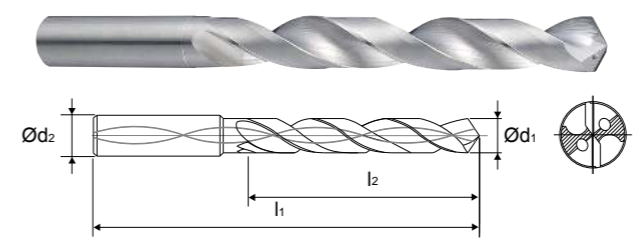
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM Aluminium 8D DIN6537 mit Innenkühlung



Artikel Nr. 848303 (838.121.)



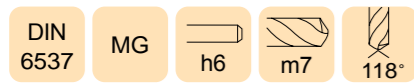
Anwendung:
Für Aluminium und Aluminium Legierungen

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8483030920	9.2	10.0	95	142
8483030930	9.3	10.0	95	142
8483030940	9.4	10.0	95	142
8483030950	9.5	10.0	95	142
8483030960	9.6	10.0	95	142
8483030970	9.7	10.0	95	142
8483030980	9.8	10.0	95	142
8483030990	9.9	10.0	95	142
8483031000	10.0	10.0	95	142
8483031010	10.1	12.0	114	162
8483031020	10.2	12.0	114	162
8483031030	10.3	12.0	114	162
8483031040	10.4	12.0	114	162
8483031050	10.5	12.0	114	162
8483031060	10.6	12.0	114	162
8483031070	10.7	12.0	114	162
8483031080	10.8	12.0	114	162

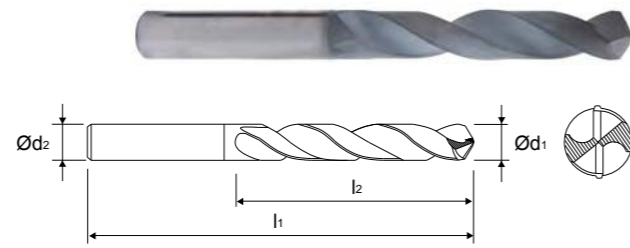
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
										●	●	●	●		

VHM CFK Bohrer DIN6537 Diamantbeschichtet



Artikel Nr. 850390



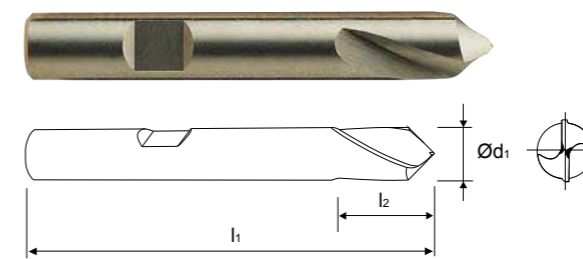
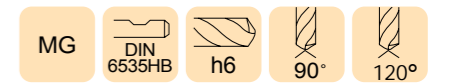
Anwendung:
Composit Materialien

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8503900250	2.5	6.0	24	66
8503900300	3.0	6.0	28	66
8503900400	4.0	6.0	36	74
8503900500	5.0	6.0	44	82
8503900600	6.0	6.0	44	82
8503900800	8.0	8.0	53	91
8503900900	9.0	10.0	61	103
8503901000	10.0	10.0	61	103
8503901100	11.0	12.0	71	118
8503901200	12.0	12.0	71	118

●:sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
13	14	16	23		33	34	51	52	53	71	72	73	74	83	●

VHM NC-Anbohrer 90° und 120°



Anwendung:
hochfeste Stähle, Stahlguss, Grauguss, Hartguss,
CrNi Stähle, Buntmetalle

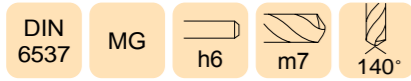
Artikel Nr. 90° = 806303 (C180VHM)
120° = 806403 (C181VHM)

CODE 90°	CODE 120°	O.D d ₁	FL l ₂	OAL l ₁
8063030600	8064030600	6.0	13	50
8063030800	8064030800	8.0	23	60
8063031000	8064031000	10.0	24	70
8063031200	8064031200	12.0		
8063031600	8064031600	16.0	29	75
8063032000	8064032000	20.0	35	100

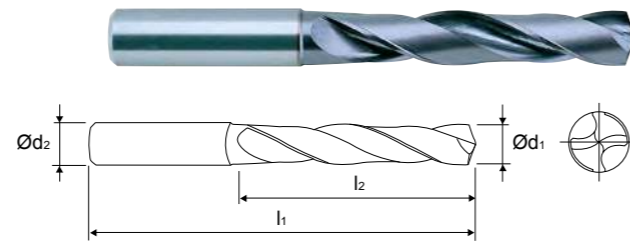
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
○	○		○	○	○	○	○	○							
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
○	○				○	○	○	○		○	○	○	○		

VHM Bohrer 3D TiALN



Artikel Nr. 807323 (813.021.)

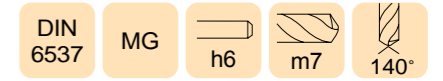


Anwendung:
Stahl, Stahlguss, Hart- und Temperguss
Ne-Metalle, abrasiver Kunststoff

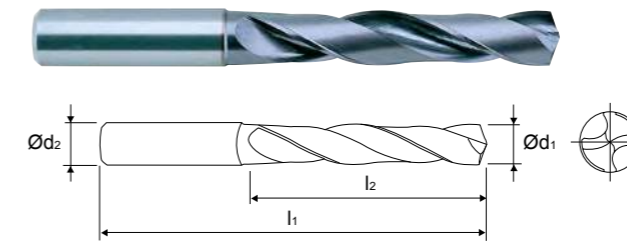
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8073230300	3.0	6.0	20	62
8073230310	3.1	6.0	20	62
8073230320	3.2	6.0	20	62
8073230330	3.3	6.0	20	62
8073230340	3.4	6.0	20	62
8073230350	3.5	6.0	20	62
8073230360	3.6	6.0	20	62
8073230370	3.7	6.0	20	62
8073230380	3.8	6.0	24	66
8073230390	3.9	6.0	24	66
8073230400	4.0	6.0	24	66
8073230410	4.1	6.0	24	66
8073230420	4.2	6.0	24	66
8073230430	4.3	6.0	24	66
8073230440	4.4	6.0	24	66
8073230450	4.5	6.0	24	66
8073230460	4.6	6.0	24	66
8073230470	4.7	6.0	24	66
8073230480	4.8	6.0	28	66
8073230490	4.9	6.0	28	66
8073230500	5.0	6.0	28	66
8073230510	5.1	6.0	28	66
8073230520	5.2	6.0	28	66
8073230530	5.3	6.0	28	66
8073230540	5.4	6.0	28	66
8073230550	5.5	6.0	28	66
8073230560	5.6	6.0	28	66
8073230570	5.7	6.0	28	66
8073230580	5.8	6.0	28	66
8073230590	5.9	6.0	28	66
8073230600	6.0	6.0	28	66

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8073230610	6.1	8.0	34	79
8073230620	6.2	8.0	34	79
8073230630	6.3	8.0	34	79
8073230640	6.4	8.0	34	79
8073230650	6.5	8.0	34	79
8073230660	6.6	8.0	34	79
8073230670	6.7	8.0	34	79
8073230680	6.8	8.0	34	79
8073230690	6.9	8.0	34	79
8073230700	7.0	8.0	34	79
8073230710	7.1	8.0	41	79
8073230720	7.2	8.0	41	79
8073230730	7.3	8.0	41	79
8073230740	7.4	8.0	41	79
8073230750	7.5	8.0	41	79
8073230760	7.6	8.0	41	79
8073230770	7.7	8.0	41	79
8073230780	7.8	8.0	41	79
8073230790	7.9	8.0	41	79
8073230800	8.0	8.0	41	79
8073230810	8.1	10.0	47	89
8073230820	8.2	10.0	47	89
8073230830	8.3	10.0	47	89
8073230840	8.4	10.0	47	89
8073230850	8.5	10.0	47	89
8073230860	8.6	10.0	47	89
8073230870	8.7	10.0	47	89
8073230880	8.8	10.0	47	89
8073230890	8.9	10.0	47	89
8073230900	9.0	10.0	47	89
8073230910	9.1	10.0	47	89

VHM Bohrer 3D TiALN



Artikel Nr. 807323 (813.021.)



Anwendung:
Stahl, Stahlguss, Hart- und Temperguss
Ne-Metalle, abrasiver Kunststoff

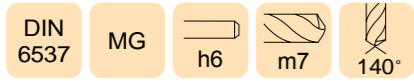
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8073230920	9.2	10.0	47	89
8073230930	9.3	10.0	47	89
8073230940	9.4	10.0	47	89
8073230950	9.5	10.0	47	89
8073230960	9.6	10.0	47	89
8073230970	9.7	10.0	47	89
8073230980	9.8	10.0	47	89
8073230990	9.9	10.0	47	89
8073231000	10.0	10.0	47	89
8073231010	10.1	12.0	55	102
8073231020	10.2	12.0	55	102
8073231030	10.3	12.0	55	102
8073231040	10.4	12.0	55	102
8073231050	10.5	12.0	55	102
8073231060	10.6	12.0	55	102
8073231070	10.7	12.0	55	102
8073231080	10.8	12.0	55	102
8073231090	10.9	12.0	55	102
8073231100	11.0	12.0	55	102
8073231110	11.1	12.0	55	102
8073231120	11.2	12.0	55	102
8073231130	11.3	12.0	55	102
8073231140	11.4	12.0	55	102
8073231150	11.5	12.0	55	102
8073231160	11.6	12.0	55	102
8073231170	11.7	12.0	55	102
8073231180	11.8	12.0	55	102

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8073231190	11.9	12.0	55	102
8073231200	12.0	12.0	55	102
8073231230	12.3	14.0	60	107
8073231250	12.5	14.0	60	107
8073231280	12.8	14.0	60	107
8073231300	13.0	14.0	60	107
8073231350	13.5	14.0	60	107
8073231380	13.8	14.0	60	107
8073231400	14.0	14.0	60	107
8073231450	14.5	16.0	65	115
8073231480	14.8	16.0	65	115
8073231500	15.0	16.0	65	115
8073231550	15.5	16.0	65	115
8073231580	15.8	16.0	65	115
8073231600	16.0	16.0	65	115
8073231650	16.5	18.0	73	123
8073231680	16.8	18.0	73	123
8073231700	17.0	18.0	73	123
8073231750	17.5	18.0	73	123
8073231780	17.8	18.0	73	123
8073231800	18.0	18.0	73	123
8073231850	18.5	20.0	79	131
8073231900	19.0	20.0	79	131
8073231950	19.5	20.0	79	131
8073231980	19.8	20.0	79	131
8073232000	20.0	20.0	79	131

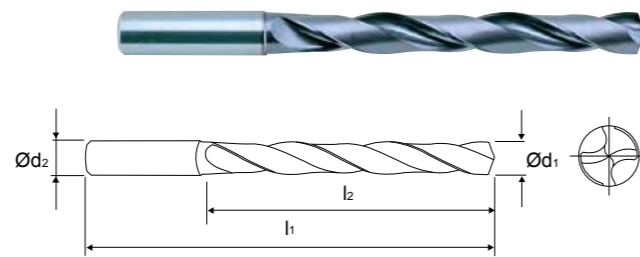
●: sehr gut ○: gut

P		H		M		K		S			N				O	
11	12	15		21	22	31	32	41	42	43	61	62	63	64	81	82
●	●					●	●									
13	14	16		23		33	34	51	52	53	71	72	73	74	83	
●	●					●	●									

VHM Bohrer 5D TiALN



Artikel Nr. 808323 (815.021.)

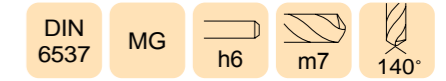


Anwendung:
Stahl, Stahlguss, Hart-und Temperguss
Ne-Metalle, abrasiver Kunststoff

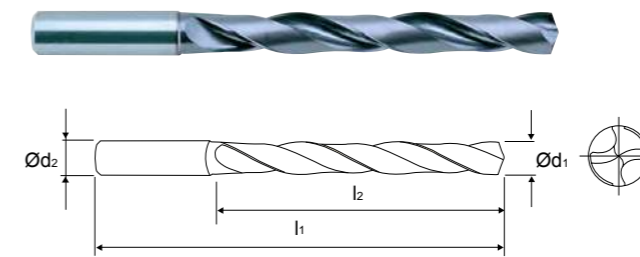
CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8083230100	1.0	3.0	8	55
8083230110	1.1	3.0	12	55
8083230120	1.2	3.0	12	55
8083230130	1.3	3.0	12	55
8083230140	1.4	3.0	12	55
8083230150	1.5	3.0	16	55
8083230160	1.6	3.0	16	55
8083230170	1.7	3.0	16	55
8083230180	1.8	3.0	16	55
8083230190	1.9	3.0	16	55
8083230200	2.0	4.0	21	57
8083230210	2.1	4.0	21	57
8083230220	2.2	4.0	21	57
8083230230	2.3	4.0	21	57
8083230240	2.4	4.0	21	57
8083230250	2.5	4.0	21	57
8083230260	2.6	4.0	21	57
8083230270	2.7	4.0	21	57
8083230280	2.8	4.0	21	57
8083230290	2.9	4.0	21	57
8083230300	3.0	6.0	28	66
8083230310	3.1	6.0	28	66
8083230320	3.2	6.0	28	66
8083230330	3.3	6.0	28	66
8083230340	3.4	6.0	28	66
8083230350	3.5	6.0	28	66
8083230360	3.6	6.0	28	66
8083230370	3.7	6.0	28	66
8083230380	3.8	6.0	36	74
8083230390	3.9	6.0	36	74
8083230400	4.0	6.0	36	74
8083230410	4.1	6.0	36	74
8083230420	4.2	6.0	36	74
8083230430	4.3	6.0	36	74
8083230440	4.4	6.0	36	74
8083230450	4.5	6.0	36	74

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8083230460	4.6	6.0	36	74
8083230470	4.7	6.0	36	74
8083230480	4.8	6.0	44	82
8083230490	4.9	6.0	44	82
8083230500	5.0	6.0	44	82
8083230510	5.1	6.0	44	82
8083230520	5.2	6.0	44	82
8083230530	5.3	6.0	44	82
8083230540	5.4	6.0	44	82
8083230550	5.5	6.0	44	82
8083230560	5.6	6.0	44	82
8083230570	5.7	6.0	44	82
8083230580	5.8	6.0	44	82
8083230590	5.9	6.0	44	82
8083230600	6.0	6.0	44	82
8083230610	6.1	8.0	53	91
8083230620	6.2	8.0	53	91
8083230630	6.3	8.0	53	91
8083230640	6.4	8.0	53	91
8083230650	6.5	8.0	53	91
8083230660	6.6	8.0	53	91
8083230670	6.7	8.0	53	91
8083230680	6.8	8.0	53	91
8083230690	6.9	8.0	53	91
8083230700	7.0	8.0	53	91
8083230710	7.1	8.0	53	91
8083230720	7.2	8.0	53	91
8083230730	7.3	8.0	53	91
8083230740	7.4	8.0	53	91
8083230750	7.5	8.0	53	91
8083230760	7.6	8.0	53	91
8083230770	7.7	8.0	53	91
8083230780	7.8	8.0	53	91
8083230790	7.9	8.0	53	91
8083230800	8.0	8.0	53	91
8083230810	8.1	10.0	61	103

VHM Bohrer 5D TiALN



Artikel Nr. 808323 (815.021.)



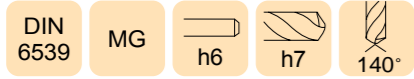
Anwendung:
Stahl, Stahlguss, Hart-und Temperguss
Ne-Metalle, abrasiver Kunststoff

CODE	O.D d ₁	S.D d ₂	FL l ₂	OAL l ₁
8083230820	8.2	10.0	61	103
8083230830	8.3	10.0	61	103
8083230840	8.4	10.0	61	103
8083230850	8.5	10.0	61	103
8083230860	8.6	10.0	61	103
8083230870	8.7	10.0	61	103
8083230880	8.8	10.0	61	103
8083230890	8.9	10.0	61	103
8083230900	9.0	10.0	61	103
8083230910	9.1	10.0	61	103
8083230920	9.2	10.0	61	103
8083230930	9.3	10.0	61	103
8083230940	9.4	10.0	61	103
8083230950	9.5	10.0	61	103
8083230960	9.6	10.0	61	103
8083230970	9.7	10.0	61	103
8083230980	9.8	10.0	61	103
8083230990	9.9	10.0	61	103
8083231000	10.0	10.0	61	103
8083231010	10.1	12.0	71	118
8083231020	10.2	12.0	71	118
8083231030	10.3	12.0	71	118
8083231040	10.4	12.0	71	118
8083231050	10.5	12.0	71	118
8083231060	10.6	12.0	71	118
8083231070	10.7	12.0	71	118
8083231080	10.8	12.0	71	118
8083231090	10.9	12.0	71	118
8083231100	11.0	12.0	71	118
8083231110	11.1	12.0	71	118
8083231120	11.2	12.0	71	118
8083231130	11.3	12.0	71	118

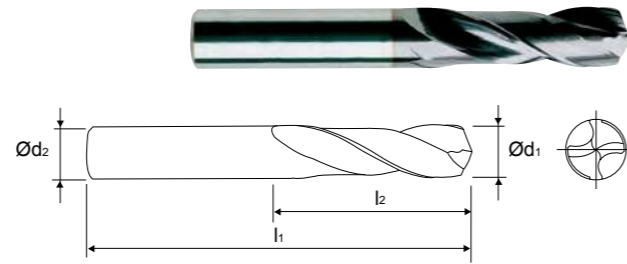
●: sehr gut ○: gut

P		H		M		K		S			N				O	
11	12	15		21	22	31	32	41	42	43	61	62	63	64	81	82
●	●					●	●									
13	14	16		23		33	34	51	52	53	71	72	73	74	83	
●	●					●	●									

VHM Bohrer TiALN DIN6539



Artikel Nr. 802323



Anwendung:
Stahl, Stahlguss, Hart-und Temperguss
Ne-Metalle, abrasiver Kunststoff

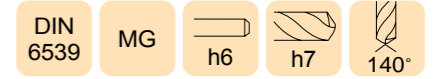
Hinweis:
Selbstzentrierend

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8023230300	3.0	16	46
8023230310	3.1	18	49
8023230320	3.2		
8023230330	3.3		
8023230340	3.4	20	52
8023230350	3.5		
8023230360	3.6		
8023230370	3.7		
8023230380	3.8	22	55
8023230390	3.9		
8023230400	4.0		
8023230410	4.1		
8023230420	4.2		
8023230430	4.3	24	58
8023230440	4.4		
8023230450	4.5		
8023230460	4.6		
8023230470	4.7		
8023230480	4.8	26	62
8023230490	4.9		
8023230500	5.0		
8023230510	5.1		
8023230520	5.2		
8023230530	5.3	26	62
8023230540	5.4	28	66
8023230550	5.5		
8023230560	5.6		
8023230570	5.7		
8023230580	5.8	31	70
8023230590	5.9		
8023230600	6.0		
8023230610	6.1		
8023230620	6.2		
8023230630	6.3	34	74
8023230640	6.4		
8023230650	6.5		
8023230660	6.6		
8023230670	6.7		
8023230680	6.8	31	70
8023230690	6.9		
8023230700	7.0		
8023230710	7.1		
8023230720	7.2		
8023230730	7.3	34	74
8023230740	7.4		
8023230750	7.5		

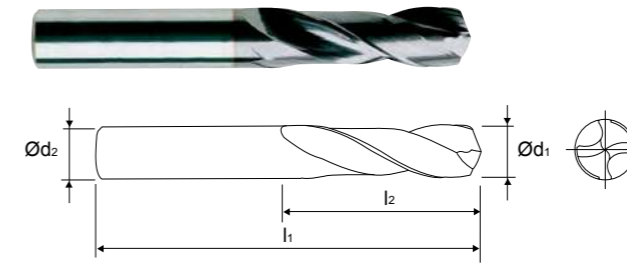
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●				●	●									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM Bohrer TiALN DIN6539



Artikel Nr. 802323



Anwendung:
Stahl, Stahlguss, Hart-und Temperguss
Ne-Metalle, abrasiver Kunststoff

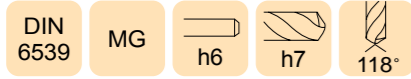
Hinweis:
Selbstzentrierend

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8023230760	7.6	37	79
8023230770	7.7		
8023230780	7.8		
8023230790	7.9		
8023230800	8.0		
8023230810	8.1		
8023230820	8.2		
8023230830	8.3		
8023230840	8.4		
8023230850	8.5		
8023230860	8.6	40	84
8023230870	8.7		
8023230880	8.8		
8023230890	8.9		
8023230900	9.0		
8023230910	9.1		
8023230920	9.2		
8023230930	9.3		
8023230940	9.4		
8023230950	9.5		
8023230960	9.6	43	89
8023230970	9.7		
8023230980	9.8		
8023230990	9.9		
8023231000	10.0		
8023231020	10.2		
8023231050	10.5		
8023231100	11.0	47	95
8023231150	11.5	51	102
8023231200	12.0		
8023231300	13.0		
8023231350	13.5	54	107
8023231400	14.0		
8023231450	14.5	56	111
8023231500	15.0		
8023231550	15.5	58	115
8023231600	16.0		
8023231650	16.5	60	119
8023231700	17.0		
8023231750	17.5	62	123
8023231800	18.0		
8023231850	18.5	64	127
8023231900	19.0		
8023231950	19.5	66	131
8023232000	20.0		

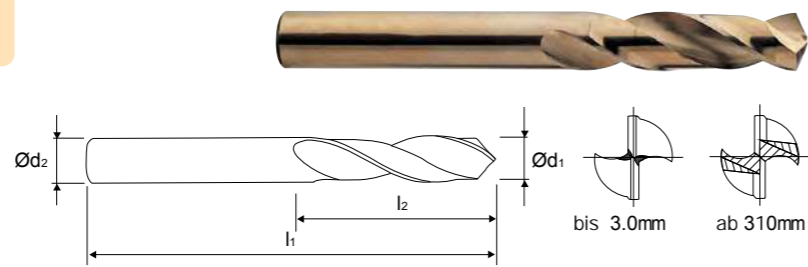
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●				●	●									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●									

VHM Bohrer extra kurz DIN6539



Artikel Nr. 800303



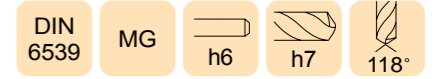
Anwendung:
Stahl, Stahlguss, Hart- und Temperguss
Ne-Metalle, abrasiver Kunststoff

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8003030100	1.0	6	26
8003030110	1.1	7	28
8003030120	1.2	8	30
8003030130	1.3		
8003030140	1.4	9	32
8003030150	1.5		
8003030160	1.6	10	34
8003030170	1.7		
8003030180	1.8	11	36
8003030190	1.9		
8003030200	2.0	12	38
8003030210	2.1		
8003030220	2.2	13	40
8003030230	2.3		
8003030240	2.4	14	43
8003030250	2.5		
8003030260	2.6	16	46
8003030270	2.7		
8003030280	2.8	18	49
8003030290	2.9		
8003030300	3.0	20	52
8003030310	3.1		
8003030320	3.2	22	55
8003030330	3.3		
8003030340	3.4	24	58
8003030350	3.5		
8003030360	3.6	26	62
8003030370	3.7		
8003030380	3.8	28	66
8003030390	3.9		
8003030400	4.0	31	70
		34	74
		37	79
		40	84
		43	89
		47	95
		51	102

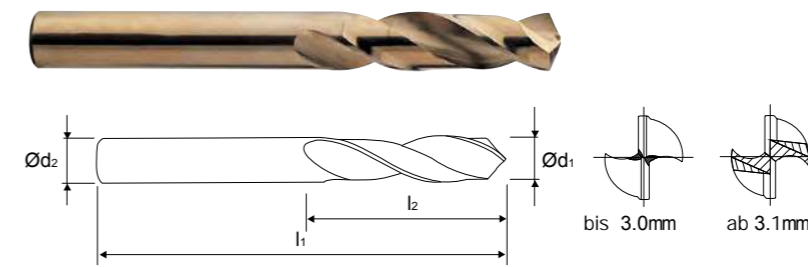
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		○	○	●	●	○	○							
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●	○	○		○	○	○	○		

VHM Bohrer extra kurz DIN6539



Artikel Nr. 800303



Anwendung:
Stahl, Stahlguss, Hart- und Temperguss
Ne-Metalle, abrasiver Kunststoff

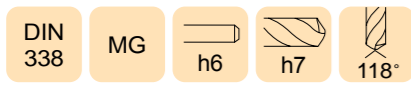
CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8003030680	6.8	34	74
8003030690	6.9		
8003030700	7.0		
8003030710	7.1		
8003030720	7.2		
8003030730	7.3		
8003030740	7.4		
8003030750	7.5		
8003030760	7.6		
8003030770	7.7		
8003030780	7.8	37	79
8003030790	7.9		
8003030800	8.0		
8003030810	8.1		
8003030820	8.2		
8003030830	8.3		
8003030840	8.4		
8003030850	8.5		
8003030860	8.6		
8003030870	8.7		

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8003030880	8.8	40	84
8003030890	8.9		
8003030900	9.0		
8003030910	9.1		
8003030920	9.2		
8003030930	9.3		
8003030940	9.4		
8003030950	9.5		
8003030960	9.6		
8003030970	9.7		
8003030980	9.8	43	89
8003030990	9.9		
8003031000	10.0		
8003031020	10.2		
8003031050	10.5		
8003031100	11.0		
8003031150	11.5		
8003031200	12.0		
8003031300	13.0		

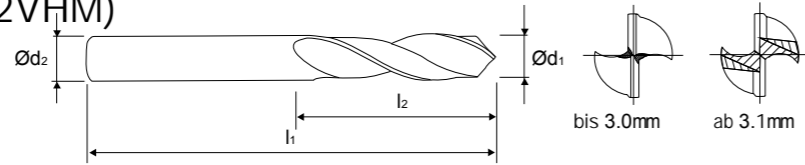
●: sehr gut ○: gut

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		○	○	●	●	○	○							
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●				●	●	○	○		○	○	○	○		

VHM Bohrer DIN338



Artikel Nr. 801303 (C112VHM)



Anwendung:
Stahl, Stahlguss, Hart-undTemperguss
Ne-Metalle, abrasiver Kunststoff

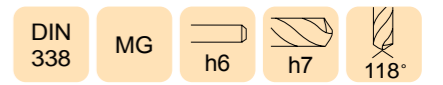
CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8013030100	1.0	12	34
8013030110	1.1	14	36
8013030120	1.2	16	38
8013030130	1.3		
8013030140	1.4	18	40
8013030150	1.5		
8013030160	1.6	20	43
8013030170	1.7		
8013030180	1.8	22	46
8013030190	1.9		
8013030200	2.0	24	49
8013030210	2.1		
8013030220	2.2	27	53
8013030230	2.3		
8013030240	2.4	30	57
8013030250	2.5		
8013030260	2.6		

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8013030270	2.7	33	61
8013030280	2.8		
8013030290	2.9		
8013030300	3.0		
8013030310	3.1	36	65
8013030320	3.2		
8013030330	3.3		
8013030340	3.4	39	70
8013030350	3.5		
8013030360	3.6		
8013030370	3.7		
8013030380	3.8	43	75
8013030390	3.9		
8013030400	4.0		
8013030410	4.1		
8013030420	4.2	47	80
8013030430	4.3		

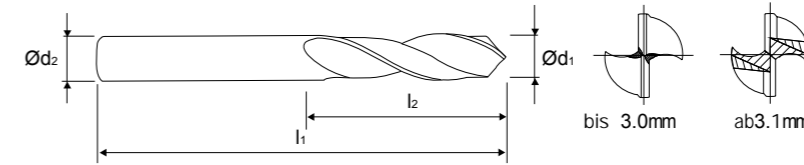
●: sehr gut ○: gut

P		H	M		K		S				N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82	
●	●		○	○	●	●	○	○								
13	14	16	23		33	34	51	52	53	71	72	73	74	83		
●	●				●	●	○	○		○	○	○	○			

VHM Bohrer DIN338



Artikel Nr. 801303(C112VHM)



Anwendung:
Stahl, Stahlguss, Hart-undTemperguss
Ne-Metalle, abrasiver Kunststoff

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8013030440	4.4	47	80
8013030450	4.5		
8013030460	4.6		
8013030470	4.7		
8013030480	4.8	52	86
8013030490	4.9		
8013030500	5.0		
8013030510	5.1		
8013030520	5.2		
8013030530	5.3		
8013030540	5.4		
8013030550	5.5	57	93
8013030560	5.6		
8013030570	5.7		
8013030580	5.8		
8013030590	5.9		
8013030600	6.0		

CODE	O.D = S.D d ₁ = d ₂	FL l ₂	OAL l ₁
8013030610	6.1	63	101
8013030620	6.2		
8013030630	6.3		
8013030640	6.4		
8013030650	6.5	69	109
8013030680	6.8		
8013030700	7.0		
8013030800	8.0	75	117
8013030850	8.5		
8013031000	10.0	87	113
8013031020	10.2		
8013031050	10.5		
8013031100	11.0	94	142
8013031150	11.5		
8013031200	12.0	101	151
8013031300	13.0		

●: sehr gut ○: gut

P		H	M		K		S				N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82	
●	●		○	○	●	●	○	○								
13	14	16	23		33	34	51	52	53	71	72	73	74	83		
●	●				●	●	○	○		○	○	○	○			



VHM Bohrer Schnittdaten

VHM Bohrer 3D 5D 8D Inox Schnittdaten

823323, 825323, 828323 (Inox)



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
P	11 12	115 (105-125)	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15	0.20	0.22	0.24
	13 14	105 (95-115)	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15	0.20	0.22	0.24
M	21 22	65 (60-70)	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.16	0.20	0.22	0.24
	23	40 (35-45)	0.02	0.03	0.03	0.03	0.03	0.04	0.05	0.06	0.08	0.10	0.12	0.15	0.17	0.19
S	41 42	45 (40-50)	0.01	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.10	0.12	0.14	0.16	0.18
	43	40 (35-45)	0.01	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.10	0.12	0.14	0.16	0.18
	51 52	30 (25-35)	0.05	0.05	0.06	0.08	0.08	0.10	0.10	0.11	0.12	0.14	0.14	0.15	0.15	0.15
	53	25 (20-30)	0.03	0.03	0.04	0.06	0.06	0.08	0.08	0.09	0.10	0.12	0.12	0.13	0.13	0.13
N	71 72	210 (200-220)	0.04	0.08	0.12	0.18	0.20	0.25	0.28	0.30	0.40	0.50	0.60	0.80	1.00	1.20
	73 74	165 (155-175)	0.03	0.06	0.10	0.15	0.18	0.25	0.28	0.30	0.35	0.40	0.50	0.60	0.70	0.80

► 8xD Bohrer Vorschub um 15% reduzieren

803323, 804323, 805323 (T/Coolant)



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
P	11 12	140 (130-150)	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.25	0.30	0.33	0.36	0.39	0.42	0.45
	13 14	125 (115-135)	0.05	0.07	0.16	0.17	0.18	0.20	0.22	0.25	0.30	0.33	0.36	0.39	0.42	0.45
K	31 32	240 (230-250)	0.15	0.07	0.16	0.17	0.18	0.20	0.22	0.25	0.30	0.33	0.36	0.39	0.42	0.45
	33 34	150 (140-160)	0.15	0.07	0.16	0.17	0.18	0.20	0.22	0.25	0.30	0.33	0.36	0.39	0.42	0.45

► 8xD Bohrer Vorschub um 15% reduzieren
 ► Bohrer unter 3mm Schnittgeschwindigkeit auf 40% reduzieren

vc - Schnittgeschwindigkeit (m/min) To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$
 n - RPM (U/min)
 fn - Vorschub (mm/U)
 ø - Bohrer Durchmesser (mm) To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \phi}{1000}$

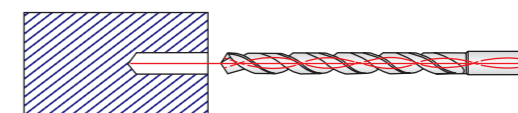
All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

VHM Bohrer 10D 15D 20D Schnittdaten

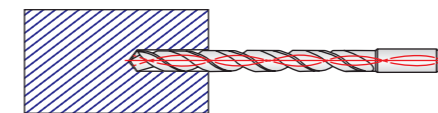
810323, 815323, 820323 (MQL)



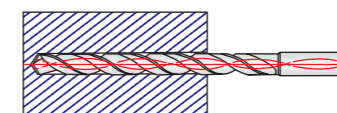
Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
P	11 12	95 (65-125)	-	-	0.09	0.12	0.15	0.18	-	0.22	0.28	0.33	0.37	-	-	-
	13 14	85 (60-115)	-	-	0.09	0.12	0.15	0.18	-	0.22	0.28	0.33	0.37	-	-	-
K	31 32	95 (65-125)	-	-	0.09	0.12	0.15	0.18	-	0.22	0.28	0.33	0.37	-	-	-
	33 34	70 (60-80)	-	-	0.09	0.12	0.15	0.18	-	0.22	0.28	0.33	0.37	-	-	-



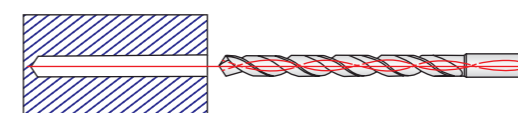
1. Durchmesser des Vorbohrers +0,1mm
 Vorbohrtiefe ca. 3xD bis 5xD



2. Im Bereich der Vorbohrung mit niedriger Drehzahl starten.
 (Drehzahl 300 U/min; Vorschub 400mm/min.)



3. Kurz vor Ende der Vorbohrung den Vorschub stoppen.
 Drehzahl entsprechend der Tabelle erhöhen.



4. Vorschub entsprechen der Tabelle erhöhen.
 Nicht entspannen.



5. Drehzahl bei Austritt aus dem Werkstück auf 300 U/min und Vorschub auf 1000 mm/min reduzieren.

6. Schnittgeschwindigkeit bei Rückzug auf 50% reduzieren..

vc - Schnittgeschwindigkeit (m/min) To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$
 n - RPM (U/min)
 fn - Vorschub (mm/U)
 ø - Bohrer Durchmesser (mm) To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \phi}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

VHM Bohrer Schnittdaten

821223 (70 HRC)



Material Gruppe	Hardness HRc	vc (m/min)	fn (mm/U)												
			ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
H	15 16	50-55 18 (14-22)	0.04	0.04	0.04	0.04	-	0.04	0.04	0.04	0.04	0.04	-	-	-
		55-60 13 (10-16)	0.04	0.04	0.04	0.04	-	0.04	0.04	0.04	0.04	0.04	-	-	-
		60-70 10 (8-13)	0.04	0.04	0.04	0.04	-	0.04	0.04	0.04	0.04	0.04	-	-	-

843303, 845303, 848303 (ALU)



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
N	71 72 73 74	140 (80-200)	-	-	0.20	0.30	0.40	0.50	0.50	0.60	0.60	0.70	0.70	0.80	0.90	1.00
		140 (80-200)	-	-	0.15	0.20	0.25	0.30	0.30	0.35	0.35	0.40	0.40	0.40	0.40	0.40

► 8xD Bohrer Vorschub um 15% reduzieren

850390 (CFK)



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
O	83	125 (100-150)	-	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	-	-	-	-

vc - Schnittgeschwindigkeit (m/min)
n - RPM (U/min)
fn - Vorschub (mm/U)
ø - Bohrer Durchmesser (mm)

To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \varnothing}$

To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \varnothing}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

VHM Bohrer Schnittdaten

802323, 807323, 808323 (TiAlN)



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
P	11 12	100 (100-120)	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35
		95 (85-105)	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35
	31 32	240 (180-200)	0.04	0.06	0.13	0.14	0.15	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35
		120 (110-130)	0.04	0.16	0.13	0.14	0.15	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35

► 8xD Bohrer Vorschub um 15% reduzieren
Bohrer unter 3mm Schnittgeschwindigkeit auf 40% reduzieren

800303, 801303, 806303, 806403



Material Gruppe	vc (m/min)	fn (mm/U)														
		ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0	
P	11 12 13 14	70 (65-75)	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.15	-	-	-	-
		50 (45-55)	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.15	-	-	-	-
		35 (30-40)	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.10	0.12	0.13	-	-	-	-
K	31 32 33 34	90 (80-100)	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.13	0.17	0.20	-	-	-	-
		60 (50-70)	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.13	0.17	0.20	-	-	-	-
		35 (33-40)	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.12	0.13	-	-	-	-
S	41 42 51 52	18 (15-20)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.11	0.12	-	-	-	-
		160 (150-170)	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.16	0.20	0.24	-	-	-	-
N	71 72 73 74	120 (110-130)	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.16	0.20	0.24	-	-	-	-

vc - Schnittgeschwindigkeit (m/min)
n - RPM (U/min)
fn - Vorschub (mm/U)
ø - Bohrer Durchmesser (mm)

To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \varnothing}$

To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \varnothing}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

Materialgruppen Beispiele

Stahl	11 Magnet. weicher Stahl	12 Bau.- Einsatzstahl	13 Kohlenstoffstahl	14 Legierter Stahl
P	EN1 EN2 OSOA12 230Mo7	EN3A, 4, 5, 6, 7, 8 060A35 040A10 EN32 210M15	EN9, 10 EN43 070M20 060A62 080M46	EN16, 17, 19 BO1 BO2 D2 D3
Gehärteter Stahl	15 Gehärteter Stahl	16 Gehärteter Stahl		
H	S95 S98, S99 BH11 BH13 830M31	>38 HRc Hardox400 Hardox500 P20		
Rostfreier Stahl	21 Free machining	22 Austenitisch	23 Martensitisch/Ferritisch	
M	EN56, 58 303S21 304S15 316S 321S17	EN58J 420S37 431S29	Duplex Super Duplex 17-4 PH S130	
Guss	31 Grauguss	32 Grauguss	33 Spähguss	34 Spähguss
K	GG10 GG20 GG30 GG40	GG25 GG35 GF150	GGG40 GGG50 SG Iron	GGG70 GGG80 Meehanite
Titan	41 Titan unlegiert	42 Titan Legierungen	43 Titan Legierungen	
S	Pure Titanium TA1 - 9 Ti99.0	Ti6Al4V Ti6Al2Sn4Zr2Mo Ti4Al4Mo2Sn0.5Si	Ti10Al2Fe3Al Ti5Al5V5Mo3Cr Ti7Al4Mo Ti3Al8V6Cr4Zr4Mo Ti6Al6V6Sn Ti15V3 Cr3Sn3Al	
Nickel	51 Nickel unlegiert	52 Hitzebeständige Legierung	53 Hitzebeständige Legierung	
S	NA11 NA12 Nickel 200	Nimonic 75 Hastelloy C Inconel 601, 617, 625 Incoloy 800, 825 Monel 400	Nimonic 80 Rene 41 Inconel 718, 750-X Incoloy 925 Monel K-500	
Kupfer	61 Kupfer unlegiert	62 kurzspanend legiert	63 langspanend legiert	64 Cu - Al - Fe Legierung
N	Commercially pure C101	CZ120 PB104 G-CuSn5ZnPb	CZ106 CZ108 CuZn37	Ampco18 Ampco20 Ampco26
Aluminium	71 Aluminium unlegiert	72 Aluminium, Si <0.5%	73 Aluminium, Si 0.5-10%	74 Aluminium, Si >10%
N	Al99.5H Al99.9 Al99.9Mg0.5	AlMn1 AlMn1Mg0.5 LM5, 10, 12 6061	HE9, 30 LM2, 4, 16, 18, 21-27 6082 6063	G-AISi10Mg G-AISi12 G-MgAl6 LM6,12, 13, 20, 28-30
Synthetics	81 Thermoplastics	82 Thermosetting plastics	83 Reinforced plastics	
O	Nylon Acetal	Tufnol	CFRP, GFRP Circuit Board Kevlar	

Empfohlener Kühlmitteldruck

Typ	Abmessung					
Inox Standard Alu	<ø3.0	ø3.0 -5.0	ø5.0 -8.0	ø8.0 -12.0	ø12.0 -16.0	ø16.0 -20.0
3xD to 5xD	60 bar	50 bar	30 bar	25 bar	20 bar	15 bar
8xD	80 bar	60 bar	40 bar	30 bar	25 bar	20 bar

Empfohlener Kühlmitteldruck für MQL Schmierung

Type	Abmessung					
MQL	<ø3.0	ø3.0 -5.0	ø5.0 -8.0	ø8.0 -12.0	ø12.0 -16.0	ø16.0 -20.0
10xD to 30xD	14 bar	12 bar	10 bar	9 bar	9 bar	8 bar