

CARBIDE



Being the best through innovation



GENERAL CARBIDE DRILLS



UNIVERSELLE VHM - BOHRER

- JOBBER & STUB LENGTH
General Purpose, DIN338 & DIN6539
- Kurz & Extra Kurz
Für allgemeinen Einsatz, DIN 338 und DIN 6539

SELECTION GUIDE

GENERAL SOLID CARBIDE DRILLS

For General materials, Cast steels, Cast iron, Non-ferrous materials

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
D5405		CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER <i>STUB EXTRA KURZ</i>	D1.0	D13.0	88
D5407		CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER <i>JOBBER KURZ</i>	D1.0	D13.0	90
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN					92

GENERAL SOLID CARBIDE DRILLS

◎ : Excellent
○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
			HRc45~55	HRc55~							
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎				○	○	○	○	◎		
◎	◎				○	○	○	○	◎		

YG GENERAL CARBIDE DRILLS

D5405 SERIES

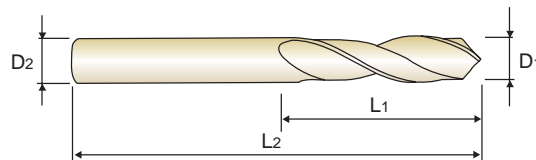
CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER

STUB

EXTRA KURZ

► **Application** : Drilling steels in general, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics.

► **Verwendung** : Zum wirtschaftlichen Bohren von Stahl allgemein, Stahlguß, Hart-und Temperguß, Nichteisen Leichtmetallen, abrasiven Kunststoffen.



DIN 6539
MG
N 30°
h6
h7
118°
P.92

D1=D2

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D5405010	1.0	6	26	D5405035	3.5	20	52
D5405011	1.1	7	28	D5405036	3.6	20	52
D5405012	1.2	8	30	D5405037	3.7	20	52
D5405013	1.3	8	30	D5405038	3.8	20	52
D5405014	1.4	9	32	D5405039	3.9	22	55
D5405015	1.5	9	32	D5405040	4.0	22	55
D5405016	1.6	10	34	D5405041	4.1	22	55
D5405017	1.7	10	34	D5405042	4.2	22	55
D5405018	1.8	11	36	D5405043	4.3	24	58
D5405019	1.9	11	36	D5405044	4.4	24	58
D5405020	2.0	12	38	D5405045	4.5	24	58
D5405021	2.1	12	38	D5405046	4.6	24	58
D5405022	2.2	13	40	D5405047	4.7	24	58
D5405023	2.3	13	40	D5405048	4.8	26	62
D5405024	2.4	14	43	D5405049	4.9	26	62
D5405025	2.5	14	43	D5405050	5.0	26	62
D5405026	2.6	14	43	D5405051	5.1	26	62
D5405027	2.7	16	46	D5405052	5.2	26	62
D5405028	2.8	16	46	D5405053	5.3	26	62
D5405029	2.9	16	46	D5405054	5.4	28	66
D5405030	3.0	16	46	D5405055	5.5	28	66
D5405031	3.1	18	49	D5405056	5.6	28	66
D5405032	3.2	18	49	D5405057	5.7	28	66
D5405033	3.3	18	49	D5405058	5.8	28	66
D5405034	3.4	20	52	D5405059	5.9	28	66

► TiN(D6405), TiCN(DG405) and TiAlN(DH405) are available on your request.

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎				○	○	○	○	◎		

CARBIDE DRILLS

VOLLHARTMETALL-SPIRALBOHRER

STUB
EXTRA KURZ

► **Application** : Drilling steels in general, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics.

► **Verwendung** : Zum wirtschaftlichen Bohren von Stahl allgemein, Stahlguß, Hart-und Temperguß, Nichteisen Leichtmetallen, abrasiven Kunststoffen.



D₁=D₂

Unit : mm

EDP No.	Drill Diameter D ₁	Flute Length L ₁	Overall Length L ₂	EDP No.	Drill Diameter D ₁	Flute Length L ₁	Overall Length L ₂
D5405060	6.0	28	66	D5405084	8.4	37	79
D5405061	6.1	31	70	D5405085	8.5	37	79
D5405062	6.2	31	70	D5405086	8.6	40	84
D5405063	6.3	31	70	D5405087	8.7	40	84
D5405064	6.4	31	70	D5405088	8.8	40	84
D5405065	6.5	31	70	D5405089	8.9	40	84
D5405066	6.6	31	70	D5405090	9.0	40	84
D5405067	6.7	31	70	D5405091	9.1	40	84
D5405068	6.8	34	74	D5405092	9.2	40	84
D5405069	6.9	34	74	D5405093	9.3	40	84
D5405070	7.0	34	74	D5405094	9.4	40	84
D5405071	7.1	34	74	D5405095	9.5	40	84
D5405072	7.2	34	74	D5405096	9.6	43	89
D5405073	7.3	34	74	D5405097	9.7	43	89
D5405074	7.4	34	74	D5405098	9.8	43	89
D5405075	7.5	34	74	D5405099	9.9	43	89
D5405076	7.6	37	79	D5405100	10.0	43	89
D5405077	7.7	37	79	D5405102	10.2	43	89
D5405078	7.8	37	79	D5405105	10.5	43	89
D5405079	7.9	37	79	D5405110	11.0	47	95
D5405080	8.0	37	79	D5405115	11.5	47	95
D5405081	8.1	37	79	D5405120	12.0	51	102
D5405082	8.2	37	79	D5405130	13.0	51	102
D5405083	8.3	37	79				

► TiN(D6405), TiCN(DG405) and TiAlN(DH405) are available on your request.

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
~HB225	HB225~325	HRC30~45	HRC45~55	HRC55~							
◎	◎				○	○	○	○	◎		

- CARBIDE
- HSS
- i-DREAM DRILLS
- DREAM DRILLS -GENERAL
- DREAM DRILLS -INOX
- DREAM DRILLS -MQL TYPE
- DREAM DRILLS for HARDENED STEELS
- GENERAL CARBIDE DRILLS
- NC-SPOTTING DRILLS
- MULTI-1 DRILLS
- HPD DRILLS
- GOLD-P DRILLS
- WORM PATTERN DRILLS
- STRAIGHT SHANK DRILLS
- TAPER SHANK DRILLS
- NC-SPOTTING DRILLS
- CENTER DRILLS
- SPADE DRILLS
- TECHNICAL DATA

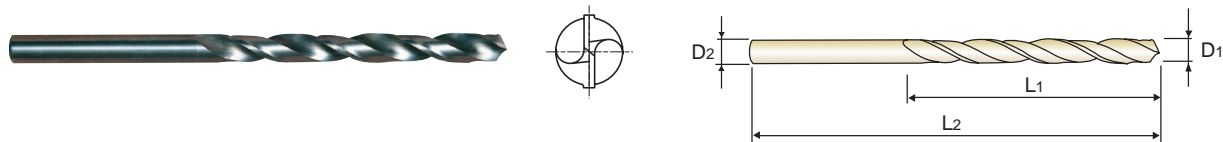
CARBIDE DRILLS
VOLLHARTMETALL-SPIRALBOHRER

JOBBER

KURZ

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D1=D2

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D5407010	1.0	12	34	D5407032	3.2	36	65
D5407011	1.1	14	36	D5407033	3.3	36	65
D5407012	1.2	16	38	D5407034	3.4	39	70
D5407013	1.3	16	38	D5407035	3.5	39	70
D5407014	1.4	18	40	D5407036	3.6	39	70
D5407015	1.5	18	40	D5407037	3.7	39	70
D5407016	1.6	20	43	D5407038	3.8	43	75
D5407017	1.7	20	43	D5407039	3.9	43	75
D5407018	1.8	22	46	D5407040	4.0	43	75
D5407019	1.9	22	46	D5407041	4.1	43	75
D5407020	2.0	24	49	D5407042	4.2	43	75
D5407021	2.1	24	49	D5407043	4.3	47	80
D5407022	2.2	27	53	D5407044	4.4	47	80
D5407023	2.3	27	53	D5407045	4.5	47	80
D5407024	2.4	30	57	D5407046	4.6	47	80
D5407025	2.5	30	57	D5407047	4.7	47	80
D5407026	2.6	30	57	D5407048	4.8	52	86
D5407027	2.7	33	61	D5407049	4.9	52	86
D5407028	2.8	33	61	D5407050	5.0	52	86
D5407029	2.9	33	61	D5407051	5.1	52	86
D5407030	3.0	33	61	D5407052	5.2	52	86
D5407031	3.1	36	65	D5407053	5.3	52	86

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◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎				○	○	○	○	◎		



GENERAL CARBIDE DRILLS

D5407 SERIES

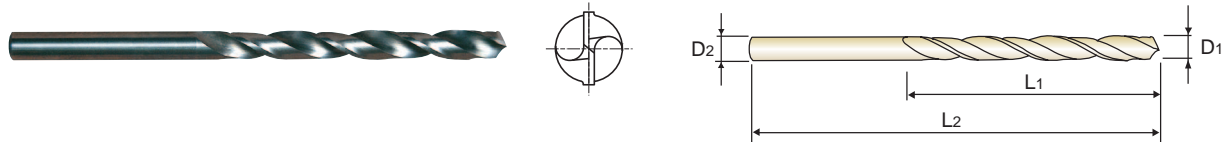
CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER

JOBBER

KURZ

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$D_1=D_2$

Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
D5407054	5.4	57	93	D5407068	6.8	69	109
D5407055	5.5	57	93	D5407070	7.0	69	109
D5407056	5.6	57	93	D5407080	8.0	75	117
D5407057	5.7	57	93	D5407085	8.5	75	117
D5407058	5.8	57	93	D5407100	10.0	87	133
D5407059	5.9	57	93	D5407102	10.2	87	133
D5407060	6.0	57	93	D5407105	10.5	87	133
D5407061	6.1	63	101	D5407110	11.0	94	142
D5407062	6.2	63	101	D5407115	11.5	94	142
D5407063	6.3	63	101	D5407120	12.0	101	151
D5407064	6.4	63	101	D5407130	13.0	101	151
D5407065	6.5	63	101				

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Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
			HRc45~55	HRc55~							
~HB225	HB225~325	HRc30~45									
◎	◎				○	○	○	○	◎		

◎ : Excellent ○ : Good


**CARBIDE DRILLS, DIN6539, DIN338
VOLLHARTMETALL SPIRALBOHRER, DIN 6539, DIN 338**
D5405, D5407 SERIES

Unit : mm

WORK MATERIAL	NON-ALLOY STEELS		ALLOY STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON		STAINLESS STEELS		Al-Si ALLOYS, Si<10%		Al-Si ALLOYS, Si>10%		Ti, Ni ALLOY STEELS	
	< 700 N/mm ²		< 1000 N/mm ²		< HB240, GG25		< HB300, GG40									
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S	N	S	N	S
1	23000	0.03	17200	0.03	32000	0.04	23000	0.04	12000	0.04	54000	0.05	42000	0.05	11800	0.02
2	11500	0.04	8600	0.04	16000	0.05	11500	0.05	6000	0.03	27000	0.06	21000	0.06	5900	0.03
3	7800	0.05	5750	0.05	10500	0.06	7600	0.06	4000	0.04	18000	0.07	14000	0.07	3900	0.04
4	5800	0.06	4300	0.06	7800	0.07	5700	0.07	3000	0.05	13000	0.08	10500	0.08	2950	0.05
5	4700	0.07	3450	0.07	6200	0.08	4550	0.08	2400	0.06	10500	0.09	8500	0.09	2350	0.06
6	3900	0.08	2850	0.08	5200	0.09	3800	0.09	2000	0.07	8800	0.11	7100	0.11	1950	0.07
7	3350	0.09	2450	0.09	4500	0.10	3250	0.10	1700	0.08	7600	0.13	6100	0.13	1700	0.08
8	2900	0.10	2150	0.10	3900	0.12	2850	0.12	1500	0.09	6600	0.15	5350	0.15	1450	0.09
9	2600	0.11	1900	0.11	3450	0.14	2550	0.14	1350	0.10	5900	0.17	4750	0.17	1300	0.10
10	2350	0.12	1700	0.12	3100	0.16	2300	0.16	1200	0.11	5300	0.19	4250	0.19	1200	0.11
11	2150	0.13	1600	0.13	2850	0.18	2100	0.18	1100	0.12	4850	0.21	3900	0.21	1050	0.12
12	1950	0.14	1450	0.14	2600	0.20	1900	0.20	1000	0.13	4450	0.23	3550	0.23	980	0.13
13	1800	0.16	1350	0.16	2400	0.20	1750	0.20	950	0.13	4100	0.25	3300	0.25	905	0.13

N = R.P.M

S = Feed per Revolution (mm/rev.)