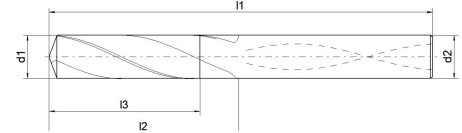


VHM-Universal-Spiralbohrer 3xd mit IK

Solid carbide universal twist drills 3xd with IC



Artikelnummer Article-No.	forming taps	d1 m7	taps	l1	l2	l3	d2 h6
E.3646.1.0100	M 1,1	1	-	55	5	3	3,0
E.3646.1.0110	M 1,2	1.1	M 1,4	55	5	3	3,0
E.3646.1.0120	-	1.2	-	55	5	3	3,0
E.3646.1.0130	-	1.3	-	55	5	3	3,0
E.3646.1.0140	-	1.4	-	55	5	3	3,0
E.3646.1.0150	-	1.5	-	55	6	4	3,0
E.3646.1.0160	-	1.6	M 2	55	6	4	3,0
E.3646.1.0170	-	1.7	-	55	6	4	3,0
E.3646.1.0180	-	1.8	-	55	6	4	3,0
E.3646.1.0190	-	1.9	M 2,3	55	6	4	3,0
E.3646.1.0200	-	2	-	57	10	7	3,0
E.3646.1.0210	-	2.1	-	57	10	7	3,0
E.3646.1.0220	-	2.2	-	57	10	7	3,0
E.3646.1.0230	-	2.3	-	57	10	7	3,0
E.3646.1.0240	-	2.4	-	57	10	7	3,0
E.3646.1.0250	-	2.5	M 3	63	12	9	6,0
E.3646.1.0260	-	2.6	-	63	12	9	6,0
E.3646.1.0270	-	2.7	-	63	12	9	6,0
E.3646.1.0280	M 3	2.8	-	63	12	9	6,0
E.3646.1.0290	M 3 x 0,25	2.9	M 3,5	63	12	9	6,0
E.3646.1.0300	-	3	-	63	20	14	6,0
E.3646.1.0310	-	3.1	-	63	20	14	6,0
E.3646.1.0320	-	3.2	-	63	20	14	6,0
E.3646.1.0330	M 3,5 x 0,5	3.3	M 4	63	20	14	6,0
E.3646.1.0340	-	3.4	-	63	20	14	6,0
E.3646.1.0350	-	3.5	M 4 x 0,5	63	20	14	6,0
E.3646.1.0360	-	3.6	-	63	20	14	6,0
E.3646.1.0370	M 4	3.7	M 4,5	63	20	14	6,0
E.3646.1.0380	M 4 x 0,5	3.8	-	67	24	17	6,0
E.3646.1.0390	-	3.9	-	67	24	17	6,0
E.3646.1.0400	-	4	M 4,5 x 0,5	67	24	17	6,0
E.3646.1.0410	-	4.1	-	67	24	17	6,0
E.3646.1.0420	M 4,5	4.2	M 5	67	24	17	6,0
E.3646.1.0430	M 4,5 x 0,5	4.3	-	67	24	17	6,0
E.3646.1.0440	-	4.4	-	67	24	17	6,0

PRODUCT DATA SHEET



Artikelnummer Article-No.	forming taps	d1 m7	taps	l1	l2	l3	d2 h6
E.3646.1.0450	-	4.5	M 5 x 0,5	67	24	17	6,0
E.3646.1.0460	-	4.6	M 5,5	67	24	17	6,0
E.3646.1.0465	M 5	4.65	-	67	24	17	6,0
E.3646.1.0470	M 5 x 0,75	4.7	-	67	24	17	6,0
E.3646.1.0480	M 5 x 0,5	4.8	-	67	28	20	6,0
E.3646.1.0490	-	4.9	-	67	28	20	6,0
E.3646.1.0500	-	5	M 6 / M5,5x0,5	67	28	20	6,0
E.3646.1.0510	M 5,5	5.1	-	67	28	20	6,0
E.3646.1.0520	-	5.2	M 6 x 0,75	67	28	20	6,0
E.3646.1.0530	M 5,5 x 0,5	5.3	-	67	28	20	6,0
E.3646.1.0540	-	5.4	-	67	28	20	6,0
E.3646.1.0550	-	5.5	M 6 x 0,5	67	28	20	6,0
E.3646.1.0555	-	5.55	-	67	28	20	6,0
E.3646.1.0560	M 6	5.6	-	67	28	20	6,0
E.3646.1.0570	M 6 x 0,75	5.7	-	67	28	20	6,0
E.3646.1.0580	M 6 x 0,5	5.8	-	67	28	20	6,0
E.3646.1.0590	-	5.9	-	67	28	20	6,0
E.3646.1.0600	-	6	M 7	67	28	20	6,0
E.3646.1.0610	-	6.1	-	80.5	34	24	8,0
E.3646.1.0620	-	6.2	M 7 x 0,75	80.5	34	24	8,0
E.3646.1.0630	-	6.3	-	80.5	34	24	8,0
E.3646.1.0640	-	6.4	-	80.5	34	24	8,0
E.3646.1.0650	-	6.5	-	80.5	34	24	8,0
E.3646.1.0660	M 7	6.6	-	80.5	34	24	8,0
E.3646.1.0670	M 7 x 0,75	6.7	-	80.5	34	24	8,0
E.3646.1.0680	M 7 x 0,5	6.8	M 8	80.5	34	24	8,0
E.3646.1.0690	-	6.9	-	80.5	34	24	8,0
E.3646.1.0700	-	7	M 8 x 1	80.5	34	24	8,0
E.3646.1.0710	-	7.1	-	80.5	41	29	8,0
E.3646.1.0720	-	7.2	M 8 x 0,75	80.5	41	29	8,0
E.3646.1.0730	-	7.3	-	80.5	41	29	8,0
E.3646.1.0740	M 8	7.4	-	80.5	41	29	8,0
E.3646.1.0750	-	7.5	M 8 x 0,5	80.5	41	29	8,0
E.3646.1.0760	M 8 x 1	7.6	-	80.5	41	29	8,0
E.3646.1.0770	M 8 x 0,75	7.7	-	80.5	41	29	8,0
E.3646.1.0780	M 8 x 0,5	7.8	M 9	80.5	41	29	8,0
E.3646.1.0790	-	7.9	-	80.5	41	29	8,0
E.3646.1.0800	-	8	M 9 x 1	80.5	41	29	8,0
E.3646.1.0810	-	8.1	-	90.5	47	35	10,0
E.3646.1.0820	-	8.2	M 9 x 0,75	90.5	47	35	10,0
E.3646.1.0830	-	8.3	-	90.5	47	35	10,0
E.3646.1.0840	M 9	8.4	-	90.5	47	35	10,0
E.3646.1.0850	-	8.5	M 10	90.5	47	35	10,0
E.3646.1.0860	M 9 x 1	8.6	-	90.5	47	35	10,0
E.3646.1.0870	M 9 x 0,75	8.7	-	90.5	47	35	10,0
E.3646.1.0880	M 9 x 0,5	8.8	M 10 x 1,25	90.5	47	35	10,0
E.3646.1.0890	-	8.9	-	90.5	47	35	10,0
E.3646.1.0900	-	9	M 10 x 1	90.5	47	35	10,0
E.3646.1.0910	-	9.1	-	90.5	47	35	10,0
E.3646.1.0920	-	9.2	M 10 x 0,75	90.5	47	35	10,0
E.3646.1.0930	M 10	9.3	-	90.5	47	35	10,0

PRODUCT DATA SHEET



Artikelnummer Article-No.	forming taps	d1 m7	taps	l1	l2	l3	d2 h6
E.3646.1.0940	-	9.4	-	90.5	47	35	10,0
E.3646.1.0950	-	9.5	M 11	90.5	47	35	10,0
E.3646.1.0960	M 10 x 1	9.6	-	90.5	47	35	10,0
E.3646.1.0970	M 10 x 0,75	9.7	-	90.5	47	35	10,0
E.3646.1.0980	M 10 x 0,5	9.8	-	90.5	47	35	10,0
E.3646.1.0990	-	9.9	-	90.5	47	35	10,0
E.3646.1.1000	-	10	M 11 x 1	90.5	47	35	10,0
E.3646.1.1010	-	10.1	-	104	55	40	12,0
E.3646.1.1020	-	10.2	M 12 / M11x0,75	104	55	40	12,0
E.3646.1.1030	-	10.3	-	104	55	40	12,0
E.3646.1.1040	-	10.4	-	104	55	40	12,0
E.3646.1.1050	-	10.5	M 12 x 1,5	104	55	40	12,0
E.3646.1.1060	M 11 x 1	10.6	-	104	55	40	12,0
E.3646.1.1070	M 11 x 0,75	10.7	-	104	55	40	12,0
E.3646.1.1080	-	10.8	M 12 x 1,25	104	55	40	12,0
E.3646.1.1090	-	10.9	-	104	55	40	12,0
E.3646.1.1100	-	11	M 12 x 1	104	55	40	12,0
E.3646.1.1110	-	11.1	-	104	55	40	12,0
E.3646.1.1120	M 12	11.2	-	104	55	40	12,0
E.3646.1.1130	-	11.3	-	104	55	40	12,0
E.3646.1.1140	-	11.4	-	104	55	40	12,0
E.3646.1.1150	-	11.5	-	104	55	40	12,0
E.3646.1.1160	M 12 x 1	11.6	-	104	55	40	12,0
E.3646.1.1170	M 12 x 0,75	11.7	-	104	55	40	12,0
E.3646.1.1180	-	11.8	-	104	55	40	12,0
E.3646.1.1190	-	11.9	-	104	55	40	12,0
E.3646.1.1200	-	12	M 14	104	55	40	12,0
E.3646.1.1230	-	12.3	-	109	60	43	14,0
E.3646.1.1250	-	12.5	M 14 x 1,5	109	60	43	14,0
E.3646.1.1280	-	12.8	M 14 x 1,25	109	60	43	14,0
E.3646.1.1300	-	13	M 14 x 1	109	60	43	14,0
E.3646.1.1350	-	13.5	-	109	60	43	14,0
E.3646.1.1380	-	13.8	-	109	60	43	14,0
E.3646.1.1400	-	14	M 16 / M 15 x 1	109	60	43	14,0
E.3646.1.1450	-	14.5	M 16 x 1,5	117.5	65	45	16,0
E.3646.1.1480	-	14.8	-	117.5	65	45	16,0
E.3646.1.1500	-	15	M 16 x 1	117.5	65	45	16,0
E.3646.1.1550	-	15.5	M 18	117.5	65	45	16,0
E.3646.1.1580	-	15.8	-	117.5	65	45	16,0
E.3646.1.1600	-	16	M 18 x 2	117.5	65	45	16,0
E.3646.1.1650	-	16.5	-	125.5	73	51	18,0
E.3646.1.1680	-	16.8	-	125.5	73	51	18,0
E.3646.1.1700	-	17	-	125.5	73	51	18,0
E.3646.1.1750	-	17.5	M 20	125.5	73	51	18,0
E.3646.1.1780	-	17.8	-	125.5	73	51	18,0
E.3646.1.1800	-	18	-	125.5	73	51	18,0
E.3646.1.1850	-	18.5	-	134	79	55	20,0
E.3646.1.1900	-	19	-	134	79	55	20,0
E.3646.1.1950	-	19.5	M 22	134	79	55	20,0
E.3646.1.1980	-	19.8	-	134	79	55	20,0
E.3646.1.2000	-	20	-	134	79	55	20,0

PRODUCT DATA SHEET



Individuelle Schnittdaten online im
Schnittdaten-Rechner berechnen lassen:
Calculate individual cutting
data online in the cutting data calculator
www.nachreiner-schnittdaten.eu

PRODUCT DATA SHEET



Materialbezeichnung material description	Bearbeitung Process	Vc m/min	fz					
			Ø 1.00-2.90	Ø 3.00-5.90	Ø 6.00-8.90	Ø 9.00-11.90	Ø 12.00-15.80	Ø 16.00-20.00
PA allg. Stähle General steels	Bohrer VHM	140.00	0.060	0.140	0.200	0.260	0.350	0.370
	Bohrer VHM	130.00	0.060	0.140	0.200	0.260	0.350	0.370
	Bohrer VHM	130.00	0.060	0.140	0.200	0.260	0.350	0.370
	Bohrer VHM	115.00	0.055	0.120	0.160	0.200	0.300	0.330
	Bohrer VHM	100.00	0.050	0.100	0.130	0.170	0.260	0.300
PV Vergütungsstähle < 850N/mm ² Tempering steel < 850N/mm ²	Bohrer VHM	115.00	0.060	0.140	0.200	0.260	0.350	0.370
	Bohrer VHM	110.00	0.055	0.120	0.160	0.200	0.300	0.330
	Bohrer VHM	75.00	0.050	0.100	0.130	0.170	0.260	0.300
	Bohrer VHM	75.00	0.040	0.090	0.120	0.160	0.250	0.290
M Rost und säurebeständige Stähle Stainless steels	Bohrer VHM	70.00	0.020	0.055	0.110	0.200	0.250	0.300
	Bohrer VHM	60.00	0.020	0.052	0.090	0.180	0.200	0.250
K Gusseisen Cast iron	Bohrer VHM	150.00	0.075	0.140	0.220	0.350	0.500	0.520
	Bohrer VHM	130.00	0.075	0.140	0.210	0.350	0.430	0.450
	Bohrer VHM	115.00	0.060	0.130	0.200	0.300	0.400	0.420
N AL- und AL-Legierungen AL und AL-alloys	Bohrer VHM	220.00	0.070	0.130	0.220	0.320	0.350	0.400
	Bohrer VHM	200.00	0.070	0.120	0.220	0.320	0.350	0.400
	Bohrer VHM	180.00	0.070	0.120	0.220	0.320	0.350	0.400
	Bohrer VHM	130.00	0.070	0.120	0.160	0.210	0.270	0.300
	Bohrer VHM	120.00	0.050	0.085	0.110	0.150	0.190	0.250