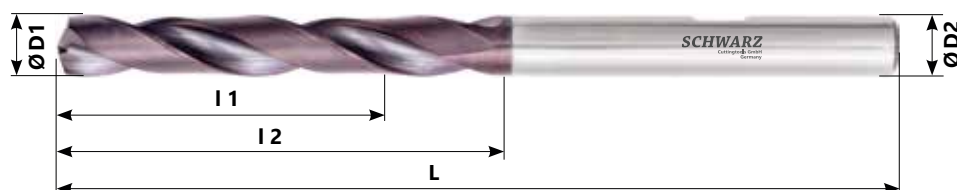


# 5xD VHM UNI - FORCE DRILL OHNE IK

## 5xD SC - UNI FORCE DRILL WITHOUT IC

### SW 50005



5xD VHM-Bohrer-UNI ohne Innenkühlung (5xD SC-Drill-UNI without Internal Coolant)

Bestellcode (Ordering Code)	Bezeichnung (Label)	Maße in mm (Dimensions in mm)				
		D1 (h7)	D2 (h6)	I 1 (SL)	I 2 (FL)	L (GL)
SW50005-0300	VHM-Bohrer 5xD Ø 3,0mm (UNI)	3,0	6	23	28	66
SW50005-0310	VHM-Bohrer 5xD Ø 3,1mm (UNI)	3,1	6	23	28	66
SW50005-0320	VHM-Bohrer 5xD Ø 3,2mm (UNI)	3,2	6	23	28	66
SW50005-0325	VHM-Bohrer 5xD Ø 3,25mm (UNI)	3,25	6	23	28	66
SW50005-0330	VHM-Bohrer 5xD Ø 3,3mm (UNI)	3,3	6	23	28	66
SW50005-0340	VHM-Bohrer 5xD Ø 3,4mm (UNI)	3,4	6	23	28	66
SW50005-0350	VHM-Bohrer 5xD Ø 3,5mm (UNI)	3,5	6	23	28	66
SW50005-0360	VHM-Bohrer 5xD Ø 3,6mm (UNI)	3,6	6	23	28	66
SW50005-0370	VHM-Bohrer 5xD Ø 3,7mm (UNI)	3,7	6	23	28	66
SW50005-0380	VHM-Bohrer 5xD Ø 3,8mm (UNI)	3,8	6	29	36	74
SW50005-0390	VHM-Bohrer 5xD Ø 3,9mm (UNI)	3,9	6	29	36	74
SW50005-0400	VHM-Bohrer 5xD Ø 4,0mm (UNI)	4,0	6	29	36	74
SW50005-0410	VHM-Bohrer 5xD Ø 4,1mm (UNI)	4,1	6	29	36	74
SW50005-0420	VHM-Bohrer 5xD Ø 4,2mm (UNI)	4,2	6	29	36	74
SW50005-0430	VHM-Bohrer 5xD Ø 4,3mm (UNI)	4,3	6	29	36	74
SW50005-0440	VHM-Bohrer 5xD Ø 4,4mm (UNI)	4,4	6	29	36	74
SW50005-0450	VHM-Bohrer 5xD Ø 4,5mm (UNI)	4,5	6	29	36	74
SW50005-0460	VHM-Bohrer 5xD Ø 4,6mm (UNI)	4,6	6	29	36	74
SW50005-0465	VHM-Bohrer 5xD Ø 4,65mm (UNI)	4,65	6	29	36	74
SW50005-0470	VHM-Bohrer 5xD Ø 4,7mm (UNI)	4,7	6	29	36	74
SW50005-0480	VHM-Bohrer 5xD Ø 4,8mm (UNI)	4,8	6	35	44	82
SW50005-0490	VHM-Bohrer 5xD Ø 4,9mm (UNI)	4,9	6	35	44	82
SW50005-0500	VHM-Bohrer 5xD Ø 5,0mm (UNI)	5,0	6	35	44	82
SW50005-0510	VHM-Bohrer 5xD Ø 5,1mm (UNI)	5,1	6	35	44	82
SW50005-0520	VHM-Bohrer 5xD Ø 5,2mm (UNI)	5,2	6	35	44	82
SW50005-0530	VHM-Bohrer 5xD Ø 5,3mm (UNI)	5,3	6	35	44	82
SW50005-0540	VHM-Bohrer 5xD Ø 5,4mm (UNI)	5,4	6	35	44	82
SW50005-0550	VHM-Bohrer 5xD Ø 5,5mm (UNI)	5,5	6	35	44	82
SW50005-0555	VHM-Bohrer 5xD Ø 5,55mm (UNI)	5,55	6	35	44	82
SW50005-0560	VHM-Bohrer 5xD Ø 5,6mm (UNI)	5,6	6	35	44	82
SW50005-0570	VHM-Bohrer 5xD Ø 5,7mm (UNI)	5,7	6	35	44	82
SW50005-0580	VHM-Bohrer 5xD Ø 5,8mm (UNI)	5,8	6	35	44	82
SW50005-0590	VHM-Bohrer 5xD Ø 5,9mm (UNI)	5,9	6	35	44	82
SW50005-0600	VHM-Bohrer 5xD Ø 6,0mm (UNI)	6,0	6	35	44	82



# 5xD VHM UNI - FORCE DRILL OHNE IK

## 5xD SC - UNI FORCE DRILL WITHOUT IC

### SW 50005

Bestellcode (Ordering Code)	Bezeichnung (Label)	Maße in mm (Dimensions in mm)				
		D1 (h7)	D2 (h6)	I 1 (SL)	I 2 (FL)	L (GL)
SW50005-0610	VHM-Bohrer 5xD Ø 6,1mm (UNI)	6,1	8	43	53	91
SW50005-0620	VHM-Bohrer 5xD Ø 6,2mm (UNI)	6,2	8	43	53	91
SW50005-0630	VHM-Bohrer 5xD Ø 6,3mm (UNI)	6,3	8	43	53	91
SW50005-0640	VHM-Bohrer 5xD Ø 6,4mm (UNI)	6,4	8	43	53	91
SW50005-0650	VHM-Bohrer 5xD Ø 6,5mm (UNI)	6,5	8	43	53	91
SW50005-0660	VHM-Bohrer 5xD Ø 6,6mm (UNI)	6,6	8	43	53	91
SW50005-0670	VHM-Bohrer 5xD Ø 6,7mm (UNI)	6,7	8	43	53	91
SW50005-0680	VHM-Bohrer 5xD Ø 6,8mm (UNI)	6,8	8	43	53	91
SW50005-0690	VHM-Bohrer 5xD Ø 6,9mm (UNI)	6,9	8	43	53	91
SW50005-0700	VHM-Bohrer 5xD Ø 7,0mm (UNI)	7,0	8	43	53	91
SW50005-0710	VHM-Bohrer 5xD Ø 7,1mm (UNI)	7,1	8	43	53	91
SW50005-0720	VHM-Bohrer 5xD Ø 7,2mm (UNI)	7,2	8	43	53	91
SW50005-0730	VHM-Bohrer 5xD Ø 7,3mm (UNI)	7,3	8	43	53	91
SW50005-0740	VHM-Bohrer 5xD Ø 7,4mm (UNI)	7,4	8	43	53	91
SW50005-0750	VHM-Bohrer 5xD Ø 7,5mm (UNI)	7,5	8	43	53	91
SW50005-0760	VHM-Bohrer 5xD Ø 7,6mm (UNI)	7,6	8	43	53	91
SW50005-0770	VHM-Bohrer 5xD Ø 7,7mm (UNI)	7,7	8	43	53	91
SW50005-0780	VHM-Bohrer 5xD Ø 7,8mm (UNI)	7,8	8	43	53	91
SW50005-0790	VHM-Bohrer 5xD Ø 7,9mm (UNI)	7,9	8	43	53	91
SW50005-0800	VHM-Bohrer 5xD Ø 8,0mm (UNI)	8,0	8	43	53	91
SW50005-0810	VHM-Bohrer 5xD Ø 8,1mm (UNI)	8,1	10	49	61	103
SW50005-0820	VHM-Bohrer 5xD Ø 8,2mm (UNI)	8,2	10	49	61	103
SW50005-0830	VHM-Bohrer 5xD Ø 8,3mm (UNI)	8,3	10	49	61	103
SW50005-0840	VHM-Bohrer 5xD Ø 8,4mm (UNI)	8,4	10	49	61	103
SW50005-0850	VHM-Bohrer 5xD Ø 8,5mm (UNI)	8,5	10	49	61	103
SW50005-0860	VHM-Bohrer 5xD Ø 8,6mm (UNI)	8,6	10	49	61	103
SW50005-0870	VHM-Bohrer 5xD Ø 8,7mm (UNI)	8,7	10	49	61	103
SW50005-0880	VHM-Bohrer 5xD Ø 8,8mm (UNI)	8,8	10	49	61	103
SW50005-0890	VHM-Bohrer 5xD Ø 8,9mm (UNI)	8,9	10	49	61	103
SW50005-0900	VHM-Bohrer 5xD Ø 9,0mm (UNI)	9,0	10	49	61	103
SW50005-0910	VHM-Bohrer 5xD Ø 9,1mm (UNI)	9,1	10	49	61	103
SW50005-0920	VHM-Bohrer 5xD Ø 9,2mm (UNI)	9,2	10	49	61	103
SW50005-0930	VHM-Bohrer 5xD Ø 9,3mm (UNI)	9,3	10	49	61	103
SW50005-0940	VHM-Bohrer 5xD Ø 9,4mm (UNI)	9,4	10	49	61	103
SW50005-0950	VHM-Bohrer 5xD Ø 9,5mm (UNI)	9,5	10	49	61	103
SW50005-0960	VHM-Bohrer 5xD Ø 9,6mm (UNI)	9,6	10	49	61	103
SW50005-0970	VHM-Bohrer 5xD Ø 9,7mm (UNI)	9,7	10	49	61	103
SW50005-0980	VHM-Bohrer 5xD Ø 9,8mm (UNI)	9,8	10	49	61	103
SW50005-0990	VHM-Bohrer 5xD Ø 9,9mm (UNI)	9,9	10	49	61	103
SW50005-1000	VHM-Bohrer 5xD Ø 10,0mm (UNI)	10,0	10	49	61	103
SW50005-1010	VHM-Bohrer 5xD Ø 10,1mm (UNI)	10,1	12	56	71	118
SW50005-1020	VHM-Bohrer 5xD Ø 10,2mm (UNI)	10,2	12	56	71	118
SW50005-1030	VHM-Bohrer 5xD Ø 10,3mm (UNI)	10,3	12	56	71	118
SW50005-1040	VHM-Bohrer 5xD Ø 10,4mm (UNI)	10,4	12	56	71	118
SW50005-1050	VHM-Bohrer 5xD Ø 10,5mm (UNI)	10,5	12	56	71	118
SW50005-1060	VHM-Bohrer 5xD Ø 10,6mm (UNI)	10,6	12	56	71	118

## SW 50005

Bestellcode (Ordering Code)	Bezeichnung (Label)	Maße in mm (Dimensions in mm)				
		D1 (h7)	D2 (h6)	I 1 (SL)	I 2 (FL)	L (GL)
SW50005-1070	VHM-Bohrer 5xD Ø 10,7mm (UNI)	10,7	12	56	71	118
SW50005-1080	VHM-Bohrer 5xD Ø 10,8mm (UNI)	10,8	12	56	71	118
SW50005-1090	VHM-Bohrer 5xD Ø 10,9mm (UNI)	10,9	12	56	71	118
SW50005-1100	VHM-Bohrer 5xD Ø 11,0mm (UNI)	11,0	12	56	71	118
SW50005-1110	VHM-Bohrer 5xD Ø 11,1mm (UNI)	11,1	12	56	71	118
SW50005-1120	VHM-Bohrer 5xD Ø 11,2mm (UNI)	11,2	12	56	71	118
SW50005-1130	VHM-Bohrer 5xD Ø 11,3mm (UNI)	11,3	12	56	71	118
SW50005-1140	VHM-Bohrer 5xD Ø 11,4mm (UNI)	11,4	12	56	71	118
SW50005-1150	VHM-Bohrer 5xD Ø 11,5mm (UNI)	11,5	12	56	71	118
SW50005-1160	VHM-Bohrer 5xD Ø 11,6mm (UNI)	11,6	12	56	71	118
SW50005-1170	VHM-Bohrer 5xD Ø 11,7mm (UNI)	11,7	12	56	71	118
SW50005-1180	VHM-Bohrer 5xD Ø 11,8mm (UNI)	11,8	12	56	71	118
SW50005-1190	VHM-Bohrer 5xD Ø 11,9mm (UNI)	11,9	12	56	71	118
SW50005-1200	VHM-Bohrer 5xD Ø 12,0mm (UNI)	12,0	12	56	71	118
SW50005-1220	VHM-Bohrer 5xD Ø 12,2mm (UNI)	12,2	14	60	77	124
SW50005-1230	VHM-Bohrer 5xD Ø 12,3mm (UNI)	12,3	14	60	77	124
SW50005-1250	VHM-Bohrer 5xD Ø 12,5mm (UNI)	12,5	14	60	77	124
SW50005-1280	VHM-Bohrer 5xD Ø 12,8mm (UNI)	12,8	14	60	77	124
SW50005-1300	VHM-Bohrer 5xD Ø 13,0mm (UNI)	13,0	14	60	77	124
SW50005-1350	VHM-Bohrer 5xD Ø 13,5mm (UNI)	13,5	14	60	77	124
SW50005-1380	VHM-Bohrer 5xD Ø 13,8mm (UNI)	13,8	14	60	77	124
SW50005-1400	VHM-Bohrer 5xD Ø 14,0mm (UNI)	14,0	14	60	77	124
SW50005-1420	VHM-Bohrer 5xD Ø 14,2mm (UNI)	14,2	16	63	83	133
SW50005-1450	VHM-Bohrer 5xD Ø 14,5mm (UNI)	14,5	16	63	83	133
SW50005-1480	VHM-Bohrer 5xD Ø 14,8mm (UNI)	14,8	16	63	83	133
SW50005-1500	VHM-Bohrer 5xD Ø 15,0mm (UNI)	15,0	16	63	83	133
SW50005-1510	VHM-Bohrer 5xD Ø 15,1mm (UNI)	15,1	16	63	83	133
SW50005-1550	VHM-Bohrer 5xD Ø 15,5mm (UNI)	15,5	16	63	83	133
SW50005-1580	VHM-Bohrer 5xD Ø 15,8mm (UNI)	15,8	16	63	83	133
SW50005-1600	VHM-Bohrer 5xD Ø 16,0mm (UNI)	16,0	16	63	83	133
SW50005-1650	VHM-Bohrer 5xD Ø 16,5mm (UNI)	16,5	18	71	93	143
SW50005-1700	VHM-Bohrer 5xD Ø 17,0mm (UNI)	17,0	18	71	93	143
SW50005-1750	VHM-Bohrer 5xD Ø 17,5mm (UNI)	17,5	18	71	93	143
SW50005-1800	VHM-Bohrer 5xD Ø 18,0mm (UNI)	18,0	18	71	93	143
SW50005-1850	VHM-Bohrer 5xD Ø 18,5mm (UNI)	18,5	20	77	101	153
SW50005-1900	VHM-Bohrer 5xD Ø 19,0mm (UNI)	19,0	20	77	101	153
SW50005-1950	VHM-Bohrer 5xD Ø 19,5mm (UNI)	19,5	20	77	101	153
SW50005-2000	VHM-Bohrer 5xD Ø 20,0mm (UNI)	20,0	20	77	101	153

**SW 50005**

**Schnittwerte (Cutting data)**

	Zu bearbeitendes Material (Material to be machined)	Beschaffenheit (Condition)	Schnittgeschwindigkeit (Cutting speed) Vc (m/min)	Vorschub f in mm/U (Feed rate f in mm/rev)				
				Ø3-5mm	Ø5-8mm	Ø8-12mm	Ø12-16mm	Ø16-20mm
<b>P</b>	Stahl (Steel)	<700 N/mm <sup>2</sup>	110	0,12-0,13	0,13-0,17	0,17-0,30	0,30-0,37	0,37-0,45
		<1000 N/mm <sup>2</sup>	90	0,12-0,13	0,13-0,17	0,17-0,30	0,30-0,37	0,37-0,45
		<1300 N/mm <sup>2</sup>	80	0,12-0,13	0,13-0,17	0,17-0,30	0,30-0,37	0,37-0,45
<b>M</b>	Rostfreie Stähle (Stainless Steel)	Martensit	40	0,09-0,1	0,1-0,11	0,11-0,18	0,18-0,19	0,19-0,25
		Austenit	30	0,07-0,08	0,08-0,09	0,09-0,16	0,16-0,17	0,17-0,21
<b>K</b>	Gussseisen (Cast Iron)	<180HB	90	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
	Temperguss (Malleable Cast Iron)	-	80	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
	Gusseisen mit Kugelgraphit (Cast Iron with nodular graphite)	-	80	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
<b>N</b>	Aluminium (Aluminum)	kurzspanend (short chipping)	170	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
		langspanend (long chipping)	180	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
	Messing (Brass)	-	115	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
	Bronze (Bronze)	-	100	0,14-0,15	0,15-0,16	0,16-0,26	0,26-0,27	0,27-0,35
<b>S</b>	Titanlegierungen (Titanium alloys)	-	40	0,07-0,08	0,08-0,09	0,09-0,16	0,16-0,17	0,17-0,21
	Nickellegierungen (Nickel alloys)	Inconel, Monel, Hastelloy	30	0,07-0,08	0,08-0,09	0,09-0,16	0,16-0,17	0,17-0,21

Alle Schnittwerte dienen zur Orientierung (All cutting datas serve to orientation)