

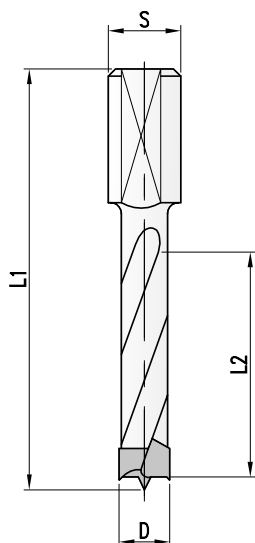
ProChipper®



tooling systems

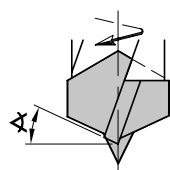


Bohrer
Drill Bits



Zum Bohren von Sacklöchern. Mit Zentrierspitze und Vorschneidergeometrie.

For drilling blind holes. Design includes centre point and scoring geometry.



Modifikation
modification

Negativ angeschliffene Vorschneider für verbesserte Lochrandqualität und höhere Standzeit.

Negative-sharpened scorers for improved perimeter quality and longer tool life.

Schaft ø 8 mm
Shank ø 8 mm

MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	57,5	8x27	2	8363.005.130	8363.005.030
6	30	57,5	8x27	2	8363.006.130	8363.006.030
7	30	57,5	8x27	2	8363.007.130	8363.007.030
8	30	57,5	8x27	2	8363.008.130	8363.008.030
9	30	57,5	8x27	2	8363.009.130	8363.009.030
10	30	57,5	8x27	2	8363.010.130	8363.010.030
12	30	57,5	8x27	2	8363.012.130	8363.012.030
5	40	70	8x30	2	8363.005.140	8363.005.040
6	40	70	8x30	2	8363.006.140	8363.006.040
7	40	70	8x30	2	8363.007.140	8363.007.040
8	40	70	8x30	2	8363.008.140	8363.008.040
9	40	70	8x30	2	8363.009.140	8363.009.040
10	40	70	8x30	2	8363.010.140	8363.010.040
12	40	70	8x30	2	8363.012.140	8363.012.040

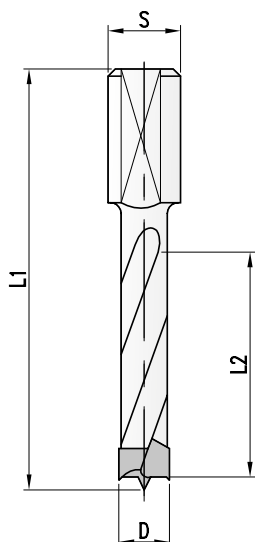
Schaft ø 10 mm
Shank ø 10 mm

MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
4	30	57,5	10x27	2	8363.004.130	8363.004.030
5	30	57,5	10x27	2	8363.005.330	8363.005.230
6	30	57,5	10x27	2	8363.006.330	8363.006.230
7	30	57,5	10x27	2	8363.007.330	8363.007.230
8	30	57,5	10x27	2	8363.008.330	8363.008.230
9	30	57,5	10x27	2	8363.009.330	8363.009.230
10	30	57,5	10x27	2	8363.010.330	8363.010.230
11	30	57,5	10x27	2	8363.011.130	8363.011.030
12	30	57,5	10x27	2	8363.012.330	8363.012.230
13	30	57,5	10x27	2	8363.013.130	8363.013.030
14	30	57,5	10x27	2	8363.014.130	8363.014.030
15	30	57,5	10x27	2	8363.015.130	8363.015.030
16	30	57,5	10x27	2	8363.016.130	8363.016.030
4	40	70	10x30	2	8363.004.143	8363.004.043
5	40	70	10x30	2	8363.005.143	8363.005.043
6	40	70	10x30	2	8363.006.143	8363.006.043
7	40	70	10x30	2	8363.007.143	8363.007.043
8	40	70	10x30	2	8363.008.143	8363.008.043
9	40	70	10x30	2	8363.009.143	8363.009.043
10	40	70	10x30	2	8363.010.143	8363.010.043
11	40	70	10x30	2	8363.011.143	8363.011.043
12	40	70	10x30	2	8343.012.143	8363.012.043
14	40	70	10x30	2	8363.014.143	8363.014.043
15	40	70	10x30	2	8363.015.143	8363.015.043
16	40	70	10x30	2	8363.016.143	8363.016.043
5	45	77	10x30	2	8363.005.150	8363.005.050
6	45	77	10x30	2	8363.006.150	8363.006.050
7	45	77	10x30	2	8363.007.150	8363.007.050
8	45	77	10x30	2	8363.007.150	8363.008.050
10	45	77	10x30	2	8363.010.150	8363.010.050
12	45	77	10x30	2	8363.012.150	8363.012.050
14	45	77	10x30	2	8363.014.150	8363.014.050

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180



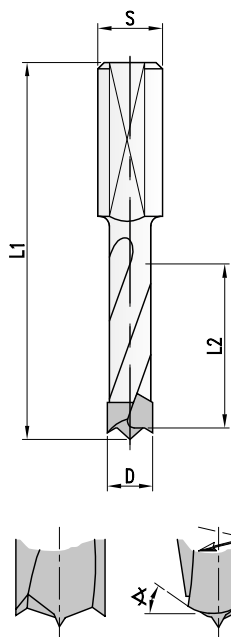
- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Vorschneid-
dergeometrie
- Kombinierbar mit Aufstecksenker
- *for drilling blind holes*
- *including centre point and*
scoring geometry
- *can be combined with arbor-
mounted counterbore*

Schaft ø 8 mm
Shank ø 8 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	57,5	8x27	2	8373.005.130	8373.005.030
6	30	57,5	8x27	2	8373.006.130	8373.006.030
7	30	57,5	8x27	2	8373.007.130	8373.007.030
8	30	57,5	8x27	2	8373.008.130	8373.008.030
9	30	57,5	8x27	2	8373.009.130	8373.009.030
10	30	57,5	8x27	2	8373.010.130	8373.010.030
12	30	57,5	8x27	2	8373.012.130	8373.012.030
5	40	67	8x27	2	8373.005.140	8373.005.040
6	40	67	8x27	2	8373.006.140	8373.006.040
7	40	67	8x27	2	8373.007.140	8373.007.040
8	40	67	8x27	2	8373.008.140	8373.008.040
9	40	67	8x27	2	8373.009.140	8373.009.040
10	40	67	8x27	2	8373.010.140	8373.010.040
12	40	67	8x27	2	8373.012.140	8373.012.040

Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
4	30	57,5	10x27	2	8373.004.130	8373.004.030
5	30	57,5	10x27	2	8373.005.330	8373.005.230
6	30	57,5	10x27	2	8373.006.330	8373.006.230
7	30	57,5	10x27	2	8373.007.330	8373.007.230
8	30	57,5	10x27	2	8373.008.330	8373.008.230
9	30	57,5	10x27	2	8373.009.330	8373.009.230
10	30	57,5	10x27	2	8373.010.330	8373.010.230
11	30	57,5	10x27	2	8373.011.130	8373.011.230
12	30	57,5	10x27	2	8373.012.330	8373.012.230
13	30	57,5	10x27	2	8373.013.330	8373.013.230
14	30	57,5	10x27	2	8373.014.330	8373.014.230
15	30	57,5	10x27	2	8373.015.330	8373.015.230
16	30	57,5	10x27	2	8373.016.330	8373.016.230
4	43	70	10x27	2	8373.004.143	8373.004.043
5	43	70	10x27	2	8373.005.143	8373.005.043
6	43	70	10x27	2	8373.006.143	8373.006.043
7	43	70	10x27	2	8373.007.143	8373.007.043
8	43	70	10x27	2	8373.008.143	8373.008.043
9	43	70	10x27	2	8373.009.143	8373.009.043
10	43	70	10x27	2	8373.010.143	8373.010.043
11	43	70	10x27	2	8373.011.143	8373.011.043
12	43	70	10x27	2	8373.012.143	8373.012.043
14	43	70	10x27	2	8373.014.143	8373.014.043
15	43	70	10x27	2	8373.015.143	8373.015.043
16	43	70	10x27	2	8373.016.143	8373.016.043
5	45	85	10x35	2	8373.005.150	8373.005.050
6	45	85	10x35	2	8373.006.150	8373.006.050
7	45	85	10x35	2	8373.007.150	8373.007.050
8	45	85	10x35	2	8373.008.150	8373.008.050
9	45	85	10x35	2	8373.009.150	8373.009.050
10	45	85	10x35	2	8373.010.150	8373.010.050
12	45	85	10x35	2	8373.012.150	8373.012.050
14	45	85	10x35	2	8373.014.150	8373.014.050
5	65	115	10x35	2	8373.005.165	8373.005.065
6	65	115	10x35	2	8373.006.165	8373.006.065
7	65	115	10x35	2	8373.007.165	8373.007.065
8	65	115	10x35	2	8373.008.165	8373.008.065
9	65	115	10x35	2	8373.009.165	8373.009.065
10	65	115	10x35	2	8373.010.165	8373.010.065
12	65	115	10x35	2	8373.012.165	8373.012.065
14	65	115	10x35	2	8373.014.165	8373.014.065



- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Rundformvorschneidern
- for drilling blind holes
- including centre point and rounded scorers

Schaft ø 10 mm
Shank ø 10 mm

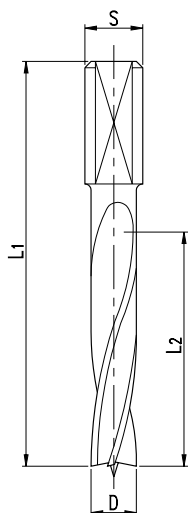
MAN

HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	57,5	10x27	2	8383.005.133	8383.005.033
6	30	57,5	10x27	2	8383.006.133	8383.006.033
7	30	57,5	10x27	2	8383.007.133	8383.007.033
8	30	57,5	10x27	2	8383.008.133	8383.008.033
9	30	57,5	10x27	2	8383.009.133	8383.009.033
10	30	57,5	10x27	2	8383.010.133	8383.010.033
12	30	57,5	10x27	2	8383.012.133	8383.012.033
15	30	57,5	10x27	2	8383.015.133	8383.015.033
5	35	70	10x30	2	8383.005.135	8383.005.035
6	35	70	10x30	2	8383.006.135	8383.006.035
7	35	70	10x30	2	8383.007.135	8383.007.035
8	35	70	10x30	2	8383.008.135	8383.008.035
9	35	70	10x30	2	8383.009.135	8383.009.035
10	35	70	10x30	2	8383.010.135	8383.010.035
12	35	70	10x30	2	8383.012.135	8383.012.035
15	35	70	10x30	2	8383.015.135	8383.015.035

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180



- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Vorschneidengeometrie
- Kombinierbar mit Aufstecksenker
- for drilling blind holes
- including centre point and scoring geometry
- can be combined with arbor-mounted counterbore

Schaft ø 10 mm
Shank ø 10 mm

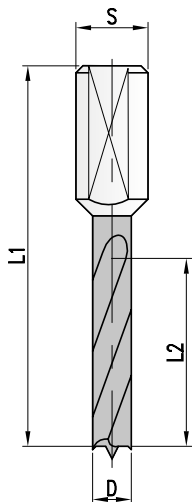
MAN

HS

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	57,5	10x20	2	3363.005.130	3363.005.030
6	30	57,5	10x20	2	3363.006.130	3363.006.030
7	30	57,5	10x20	2	3363.007.130	3363.007.030
8	30	57,5	10x20	2	3363.008.130	3363.008.030
9	30	57,5	10x20	2	3363.009.130	3363.009.030
10	30	57,5	10x20	2	3363.010.130	3363.010.030
12	30	57,5	10x20	2	3363.012.130	3363.012.030
5	43	70	10x20	2	3363.005.143	3363.005.043
6	43	70	10x20	2	3363.006.143	3363.006.043
7	43	70	10x20	2	3363.007.143	3363.007.043
8	43	70	10x20	2	3363.008.143	3363.008.043
9	43	70	10x20	2	3363.009.143	3363.009.043
10	43	70	10x20	2	3363.010.143	3363.010.043
12	43	70	10x20	2	3363.012.143	3363.012.043

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180

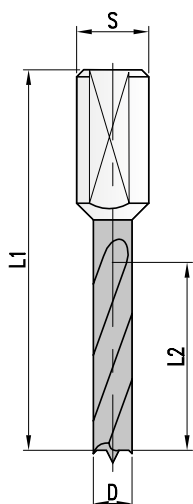

Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
3	27	57,5	10x27	2	6363.003.127	6363.003.027
4	27	57,5	10x27	2	6363.004.127	6363.004.027
5	27	57,5	10x27	2	6363.005.127	6363.005.027
6	27	57,5	10x27	2	6363.006.127	6363.006.027
8	27	57,5	10x27	2	6363.008.127	6363.008.027
10	27	57,5	10x27	2	6363.010.127	6363.010.027
3	35	70	10x30	2	6363.003.135	6363.003.035
4	35	70	10x30	2	6363.004.135	6363.004.035
5	35	70	10x30	2	6363.005.135	6363.005.035
6	35	70	10x30	2	6363.006.135	6363.006.035
8	35	70	10x30	2	6363.008.135	6363.008.035
10	35	70	10x30	2	6363.010.135	6363.010.035
12	35	70	10x30	2	6363.012.135	6363.012.035

- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Vorschneidergeometrie
- *for drilling blind holes, including centre point and scoring geometry*

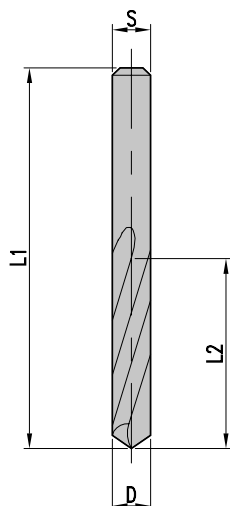
Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - <i>Adjusting screw</i>	M5x10	705.103
SS-Einstellschraube - <i>SS adjusting screw</i>	M5x17	705.180


Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

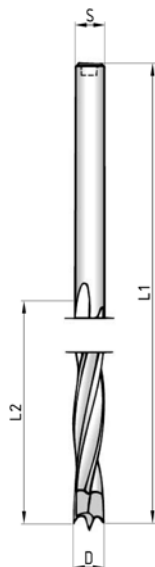
D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
3	27	57,5	10x27	2	6353.003.127	6353.003.027
4	27	57,5	10x27	2	6353.004.127	6353.004.027
5	27	57,5	10x27	2	6353.005.127	6353.005.027
6	27	57,5	10x27	2	6353.006.127	6353.006.027
8	27	57,5	10x27	2	6353.008.127	6353.008.027
10	27	57,5	10x27	2	6353.010.127	6353.010.027
4	35	70	10x30	3	6353.004.135	6353.004.035
5	35	70	10x30	3	6353.005.135	6353.005.035
6	35	70	10x30	3	6353.006.135	6353.006.035
8	35	70	10x30	3	6353.008.135	6353.008.035
10	35	70	10x30	3	6353.010.135	6353.010.035
12	35	70	10x30	3	6353.012.135	6353.012.035

- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Vorschneidergeometrie.
- *for drilling blind holes, including centre point and scoring geometry*


VHW-Spiralbohrer Z=2
Solid carbide twist drill Z=2
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
1,2	13	33	1,2	2	6355.012.113	6355.012.013
2	25	49	2,0	2	6355.002.125	6355.002.025
2,5	27	55	2,5	2	6355.025.127	6355.025.027
3	27	55	3,0	2	6355.003.127	6355.003.027
3,2	27	52	3,2	2	6355.032.127	6355.032.027
3,5	27	52	3,5	2	6355.035.127	6355.035.027
4	27	55	4,0	2	6355.004.127	6355.004.027
4,5	28	58	4,5	2	6355.045.128	6355.045.028
5	28	62	5,0	2	6355.005.128	6355.005.028
6	28	62	6,0	2	6355.006.128	6355.006.028

- VHW-Spiralbohrer zum Bohren von Sack- und Durchgangslöchern in zylindrischer Ausführung mit flacher Dachformspitze. Bei einer Schaftaufnahme von 10 mm kann das Werkzeug mit einer Reduzierbuchse (Art. 494) oder einem Adapter (Art. 495) verwendet werden.
- solid carbide twist drill for drilling blind and through holes in a cylindrical design with a flat V-point, the 10 mm shank version can be used with reducing bushing (Art. 494) or adapter (Art. 495)*

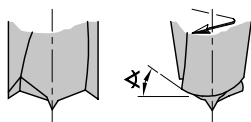
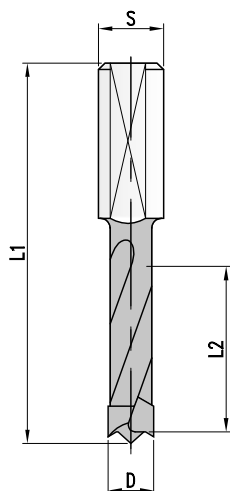

HW-Spiralbohrer Z=2
TC twist drill Z=2
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
4	40	75	4	2	8355.040.104	8355.040.004
4,5	45	80	4,5	2	8355.045.145	8355.045.045
5	50	86	5,0	2	8355.050.105	8355.050.005
5,5	50	93	5,5	2	8355.050.155	8355.050.055
6	50	93	6,0	2	8355.050.106	8355.050.006
	60	110	13x50	2	8355.060.113	8355.060.013
6,5	55	101	6,5	2	8355.055.165	8355.055.065
7	60	109	7,0	2	8355.060.107	8355.060.007
7,5	60	109	7,5	2	8355.060.175	8355.060.075
8	65	117	8,0	2	8355.065.108	8355.065.008
	70	120	13x50	2	8355.070.113	8355.070.013
8,5	65	117	8,5	2	8355.065.185	8355.065.085
9	75	125	9,0	2	8355.075.109	8355.075.009
10	80	130	13x50	2	8355.080.113	8355.080.013
	80	133	10,0	2	8355.080.110	8355.080.010
11	90	142	11,0	2	8355.090.111	8355.090.011
12	90	140	13x50	2	8355.090.113	8355.090.013
	95	151	12,0	2	8355.095.112	8355.095.012
14	95	145	13x50	2	8355.095.113	8355.095.013
	110	160	14,0	2	8355.110.114	8355.110.014
16	100	150	16x50	2	8355.100.116	8355.100.016
18	110	160	16x50	2	8355.110.116	8355.110.016
20	115	165	16x50	2	8355.115.116	8355.115.016
22	120	170	16x50	2	8355.120.116	8355.120.016
24	130	180	16x50	2	8355.130.116	8355.130.016

6373

HW-Dübelbohrer SuperPlus – Massiv

TC Dowel Drill SuperPlus - Solid

PG
02

Schaft $\varnothing$ 10 mm
Shank $\varnothing$ 10 mm

MAN

HW

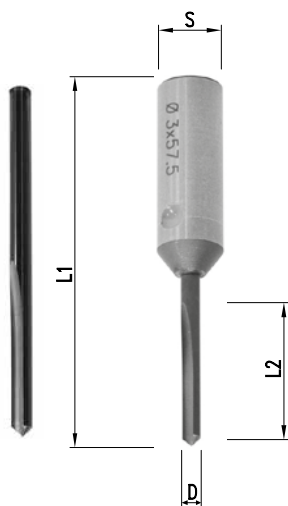
D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
4	27	57,5	10x22	2	6373.004.127	6373.004.027
5	27	57,5	10x22	2	6373.005.127	6373.005.027
6	27	57,5	10x22	2	6373.006.127	6373.006.027
8	27	57,5	10x22	2	6373.008.127	6373.008.027
10	27	57,5	10x22	2	6373.010.127	6373.010.027
4	35	70	10x27	2	6373.004.135	6373.004.035
5	35	70	10x27	2	6373.005.135	6373.005.035
6	35	70	10x27	2	6373.006.135	6373.006.035
8	35	70	10x27	2	6373.008.135	6373.008.035
10	35	70	10x27	2	6373.010.135	6373.010.035

- HW-Dübelbohrer mit Zentrierspitze und Rundformvorschneidern zum Bohren von Sacklöchern
- Durch den Einsatz von Mikro-Feinkornhartmetall und dem Anschliff mit Rundformvorschneidern wird eine extrem hohe Standzeit garantiert
- TC dowel drill including centre point and rounded scorers for drilling blind holes
- micro-grain carbide and sharpening with rounded scorers guarantee extremely long tool life

6359

HW-Bohrstift – Massiv

TC Drilling Bit - Solid

PG
02

VHW-Bohrstift Z=1 R/L

Solid carbide drilling bit Z=1 RH/LH

MAN

HW

D	L2	L1	S	Z	Art. Nr.
2,5	18	50	2,5	1	6359.025.018
3	18	50	3	1	6359.003.118
3,5	18	50	3,5	1	6359.035.018
4	20	50	4	1	6359.004.020
2,5	18	57,5	10	1	6359.025.118
3	18	57,5	10	1	6359.003.118
3,5	18	57,5	10	1	6359.035.018
4	23	57,5	10	1	6359.004.023
5	23	57,5	10	1	6359.005.023
6	25	57,5	10	1	6359.006.025
2,5	18	70	10	1	6359.025.218
3	23	70	10	1	6359.003.023
3,5	23	70	10	1	6359.035.023
4	35	70	10	1	6359.004.035
5	43	70	10	1	6359.005.043
6	43	70	10	1	6359.006.043
8	43	70	10	1	6359.008.043

- Vollhartmetall-Bohrstift mit einer Spannut und Dachformspitze, geeignet für Rechts- oder Linkslauf sowie zum Bohren von Sack- und Durchgangslöchern.
- solid carbide drilling bit with a chip flute and v-point, suitable for clockwise or counter-clockwise rotation, and for drilling blind and through holes

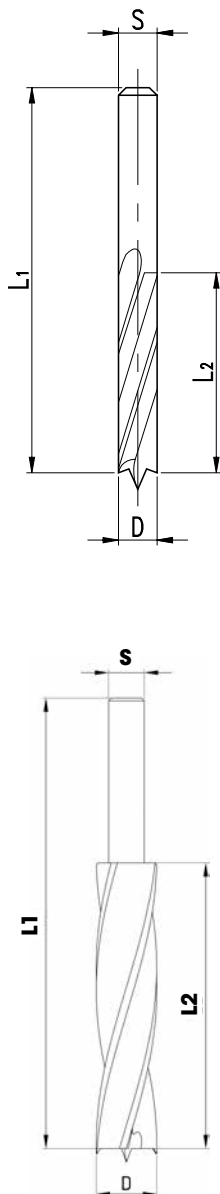

VHW-Akustikbohrer Z=1
Solid carbide acoustic panel drill Z=1

MAN

HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
1,2	6,0	70	10x27	1	6385.001.106	6385.001.006
1,5	6,0	70	10x27	1	6385.002.106	6385.002.006
2	6,0	70	10x27	1	6385.002.306	6385.002.206

- Für die Herstellung von Akustikwänden zur Schalldämmung
- Mit Spannfläche und Einstellschraube
- *for producing acoustic panels for acoustic insulation*
- *with clamping surface and adjusting screw*


HS-Spiralbohrer Z=2
HSS twist drill Z=2

MAN

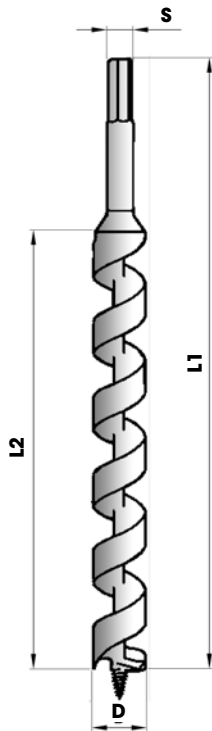
HS

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
2	24	49	2,0	2	3365.002.124	3365.002.024
2,5	30	57	2,5	2	3365.003.130	3365.003.030
3	33	61	3,0	2	3365.003.133	3365.003.033
3,5	39	70	3,5	2	3365.004.139	3365.004.039
4	43	75	4,0	2	3365.004.143	3365.004.043
4,5	47	80	4,5	2	3365.005.147	3365.005.047
5	52	86	5,0	2	3365.005.152	3365.005.052
5,5	57	93	5,5	2	3365.006.157	3365.006.057
6	57	93	6,0	2	3365.006.357	3365.006.257
6,5	63	100	6,5	2	3365.007.163	3365.007.063
7	69	109	7,0	2	3365.007.169	3365.007.069
7,5	69	108	7,5	2	3365.008.169	3365.008.069
8	75	117	8,0	2	3365.008.175	3365.008.075
8,5	75	115	8,5	2	3365.009.175	3365.009.075
9	81	125	9,0	2	3365.009.181	3365.009.081
9,5	81	125	9,5	2	3365.010.181	3365.010.081
10	87	133	10,0	2	3365.010.187	3365.010.087
10,5	87	130	10,5	2	3365.011.187	3365.011.087
11	94	140	11,0	2	3365.011.194	3365.011.094
11,5	94	140	11,5	2	3365.012.194	3365.012.094
12	101	150	12,0	2	3365.012.201	3365.012.101
13	101	150	13,0	2	3365.013.201	3365.013.101
14	108	160	13,0	2	3365.014.208	3365.014.108
15	114	168	13,0	2	3365.015.214	3365.015.114
16	120	176	13,0	2	3365.016.220	3365.016.120
18	130	190	13,0	2	3365.018.230	3365.018.130
20	140	210	13,0	2	3365.020.240	3365.020.140

Lange Ausführung - Long-reach version

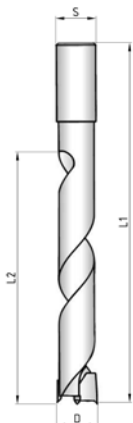
5	180	250	5,0	2		3365.005.180
6	180	250	6,0	2		3365.006.180
8	180	250	8,0	2		3365.008.180
10	180	250	10,0	2		3365.010.180
12	180	250	12,0	2		3365.012.180
13	180	250	13,0	2		3365.013.180
14	180	250	13,0	2		3365.014.180
16	180	250	13,0	2		3365.016.180

- Zum Bohren von ausrissfreien Sacklöchern
- Ausführung mit Zentrierspitze und Vorschneidern
- *for drilling tear-free blind holes, including centre point and scorers*

3463
WS-Schlangenbohrer Typ Lewis – Massiv
Tool Steel Auger Drill Bit Type Lewis - Solid
**PG
02****WS-Lewisbohrer***Tool steel auger drill bit type Lewis***MAN****HS**

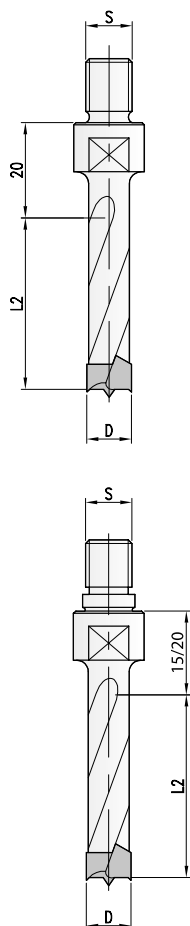
D	L2	L1	S	Z	Art. Nr.
4	160	230	3,5	1	3463.004.160
6	160	230	5,5	1	3463.006.160
8	160	230	7,5	1	3463.008.160
10	160	230	6 kt.	1	3463.010.160
11	160	230	6 kt.	1	3463.011.160
12	160	230	6 kt.	1	3463.012.160
14	160	230	6 kt.	1	3463.014.160
16	160	230	6 kt.	1	3463.016.160
18	160	230	6 kt.	1	3463.018.160
20	160	230	6 kt.	1	3463.020.160
22	160	230	6 kt.	1	3463.022.160
24	160	230	6 kt.	1	3463.024.160
26	160	230	6 kt.	1	3463.026.160
28	160	230	6 kt.	1	3463.028.160
30	160	230	6 kt.	1	3463.030.160
32	160	230	6 kt.	1	3463.032.160
34	160	230	6 kt.	1	3463.034.160
36	160	230	6 kt.	1	3463.036.160
38	160	230	6 kt.	1	3463.038.160
40	160	230	6 kt.	1	3463.040.160
6	380	460	5,5	1	3463.006.380
8	380	460	7,5	1	3463.008.380
10	380	460	6 kt.	1	3463.010.380
12	380	460	6 kt.	1	3463.012.380
14	380	460	6 kt.	1	3463.014.380
16	380	460	6 kt.	1	3463.016.380
18	380	460	6 kt.	1	3463.018.380
20	380	460	6 kt.	1	3463.020.380
22	380	460	6 kt.	1	3463.022.380
24	380	460	6 kt.	1	3463.024.380
26	380	460	6 kt.	1	3463.026.380
28	380	460	6 kt.	1	3463.028.380
30	380	460	6 kt.	1	3463.030.380
32	380	460	6 kt.	1	3463.032.380
34	380	460	6 kt.	1	3463.034.380
36	380	460	6 kt.	1	3463.036.380
38	380	460	6 kt.	1	3463.038.380
40	380	460	6 kt.	1	3463.040.380

- WS-Lewisbohrer mit Gewindefzentrierspitze und Vorschneider für sehr tiefe Bohrungen
- *tool steel drill bit type Lewis with threaded centre point and scorers for drilling substantial holes*

8365
HW-Tieflochbohrer mit einer Spiralnute – Festbestückt
TC Deep Hole Drill with Spiral Flute - Tipped
**PG
02****HW-Tieflochbohrer Z=1***TC deep hole drill Z=1***MAN****HW**

D	L2	L1	S	Z	Art. Nr.
10	100	150	13	1	8365.010.100
12	110	160	13	1	8365.012.110
14	130	180	13	1	8365.014.130
16	160	200	16	1	8365.016.160
18	170	220	16	1	8365.018.170
20	170	220	16	1	8365.020.170
22	170	220	16	1	8365.022.170
24	170	220	16	1	8365.024.170

- Hartmetallbestückte Ausführung mit Zentrierspitze und Vorschneidern für sehr tiefe Bohrungen
- *TC-tipped version including centre point and scorers for drilling substantial holes*


Schaft Ø M8 bzw. M10
Shank Ø M8 or M10

MAN

HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	43	63	M8	2	8368.005.143	8368.005.043
6	43	63	M8	2	8368.006.143	8368.006.043
8	43	63	M8	2	8368.008.143	8368.008.043
10	43	63	M8	2	8368.010.143	8368.010.043
12	43	63	M8	2	8368.012.143	8368.012.043
14	43	63	M8	2	8368.014.143	8368.014.043
16	43	63	M8	2	8368.016.143	8368.016.043
5	60	80	M8	2	8368.005.160	8368.005.060
6	60	80	M8	2	8368.006.160	8368.006.060
8	60	80	M8	2	8368.008.160	8368.008.060
10	60	80	M8	2	8368.010.160	8368.010.060
12	60	80	M8	2	8368.012.160	8368.012.060
14	60	80	M8	2	8368.014.160	8368.014.060
16	60	80	M8	2	8368.016.160	8368.016.060
5	43	63	M10	2	8368.005.343	8368.005.243
6	43	63	M10	2	8368.006.343	8368.006.243
8	43	63	M10	2	8368.008.343	8368.008.243
10	43	63	M10	2	8368.010.343	8368.010.243
12	43	63	M10	2	8368.012.343	8368.012.243
14	43	63	M10	2	8368.014.343	8368.014.243
16	43	63	M10	2	8368.016.343	8368.016.243
5	60	80	M10	2	8368.005.360	8368.005.260
6	60	80	M10	2	8368.006.360	8368.006.260
8	60	80	M10	2	8368.008.360	8368.008.260
10	60	80	M10	2	8368.010.360	8368.010.260
12	60	80	M10	2	8368.012.360	8368.012.260
14	60	80	M10	2	8368.014.360	8368.014.260
16	60	80	M10	2	8368.016.360	8368.016.260

- Zum Bohren von Sacklöchern
- Ausführung mit Zentrierspitze und Vorschneidergeometrie
- Der Gewindeschaft ermöglicht eine direkte und stabile Einspannung in die Bohrspindeln

- *for drilling blind holes including a centre-point and scoring geometry the threaded shank enables direct and stable clamping into boring spindles*

- Gewindeschaft M8 für Nottmeier
- Gewindeschaft M8 mit Passsitz für SCM
- Gewindeschaft M10 für Tornegge, Ayen, Mayer
- Gewindeschaft M10 mit Passsitz für Biesse, Weeke, Morbidelli

- *M8 threaded shank for Nottmeier*
- *M8 threaded shank with precision fit for SCM*
- *M10 threaded shank for Tornegge, Ayen, Mayer*
- *M10 threaded shank with precision fit for Biesse, Weeke, Morbidelli*

- Alle Abmessungen sind auch aus gehärtetem Werkzeugstahl verfügbar

- *all dimensions also available in hardened tool steel*

Schaft Ø M8/9 bzw. M10/11
Shank Ø M8/9 or M10/11

MAN

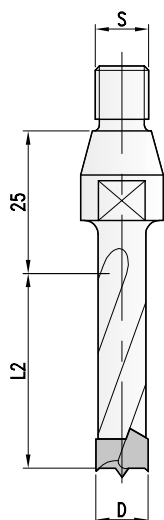
HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	43	63	M8/9	2	8368.005.543	8368.005.443
6	43	63	M8/9	2	8368.006.543	8368.006.443
8	43	63	M8/9	2	8368.008.543	8368.008.443
10	43	63	M8/9	2	8368.010.543	8368.010.443
12	43	63	M8/9	2	8368.012.543	8368.012.443
14	43	63	M8/9	2	8368.014.543	8368.014.443
16	43	63	M8/9	2	8368.016.543	8368.016.443
5	60	75	M8/9	2	8368.005.560	8368.005.460
6	60	75	M8/9	2	8368.006.560	8368.006.460
8	60	75	M8/9	2	8368.008.560	8368.008.460
10	60	75	M8/9	2	8368.010.560	8368.010.460
12	60	75	M8/9	2	8368.012.560	8368.012.460
14	60	75	M8/9	2	8368.014.560	8368.014.460
16	60	75	M8/9	2	8368.016.560	8368.016.460
5	43	63	M10/11	2	8368.005.743	8368.005.643
6	43	63	M10/11	2	8368.006.743	8368.006.643
8	43	63	M10/11	2	8368.008.743	8368.008.643
10	43	63	M10/11	2	8368.010.743	8368.010.643
12	43	63	M10/11	2	8368.012.743	8368.012.643
14	43	63	M10/11	2	8368.014.743	8368.014.643
16	43	63	M10/11	2	8368.016.743	8368.016.643
5	60	75	M10/11	2	8368.005.760	8368.005.660
6	60	75	M10/11	2	8368.006.760	8368.006.660
8	60	75	M10/11	2	8368.008.760	8368.008.660
10	60	75	M10/11	2	8368.010.760	8368.010.660
12	60	75	M10/11	2	8368.012.760	8368.012.660
14	60	75	M10/11	2	8368.014.760	8368.014.660
16	60	75	M10/11	2	8368.016.760	8368.016.660

8388

HW-Dübelbohrer mit Kegel und Gewindeschaft – Festbestückt

TC Dowel Drill with Taper and Threaded Shank - Tipped

PG
02

- Zum Bohren von Sacklöchern
- Mit Zentrierspitze und Vorschneid-
dergeometrie
- Gewindeschaft M10 mit Kegel für
Alberti, Vitap und Busellato.
- *For drilling blind holes, including
centre point and soring geometry,
M10 threaded shank with taper for
Alberti, Vitap, and Busellato.*

Schaft Ø M10 mit Kegel
 Shank Ø M10 with taper

MAN

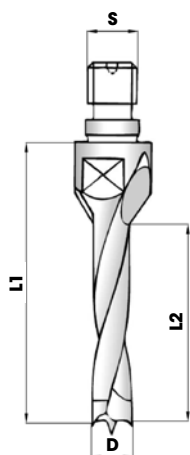
HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	56	M10	2	8388.005.130	8388.005.030
6	30	56	M10	2	8388.006.130	8388.006.030
8	30	56	M10	2	8388.008.130	8388.008.030
10	30	56	M10	2	8388.010.130	8388.010.030
12	30	56	M10	2	8388.012.130	8388.012.030
14	30	56	M10	2	8388.014.130	8388.014.030
16	30	56	M10	2	8388.016.130	8388.016.030
5	40	66	M10	2	8388.005.140	8388.005.040
6	40	66	M10	2	8388.006.140	8388.006.040
8	40	66	M10	2	8388.008.140	8388.008.040
10	40	66	M10	2	8388.010.140	8388.010.040
12	40	66	M10	2	8388.012.140	8388.012.040
14	40	66	M10	2	8388.014.140	8388.014.040
16	40	66	M10	2	8388.016.140	8388.016.040
5	50	76	M10	2	8388.005.150	8388.005.050
6	50	76	M10	2	8388.006.150	8388.006.050
8	50	76	M10	2	8388.008.150	8388.008.050
10	50	76	M10	2	8388.010.150	8388.010.050
12	50	76	M10	2	8388.012.150	8388.012.050
14	50	76	M10	2	8388.014.150	8388.014.050
16	50	76	M10	2	8388.016.150	8388.016.050

8398

HW-Dübelbohrer mit Senkstufe und Gewindeschaft – Festbestückt

TC Dowel Drill with Countersink and Threaded Shank - Tipped

PG
02

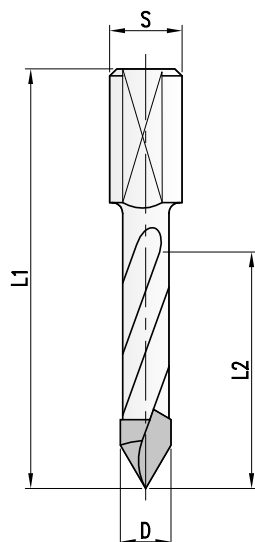
- Zum Bohren von Sacklöchern
mit gleichzeitigem Ansenken des
Lochrands
- Gewindeschaft M10 mit Passsitz
für Biesse, Weeke und Morbidelli
- *for drilling blind holes with simul-
taneous countersinking of hole
edge*
- *M10 threaded shank with precision
fit for Biesse, Weeke, and Morbidelli*

Schaft Ø M10/11
 Shank Ø M10/11

MAN

HW

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	47	M10/11	2	8398.005.130	8398.005.030
6	30	47	M10/11	2	8398.006.130	8398.006.030
8	30	47	M10/11	2	8398.008.130	8398.008.030
10	30	47	M10/11	2	8398.010.130	8398.010.030
12	30	47	M10/11	2	8398.012.130	8398.012.030
14	30	47	M10/11	2	8398.014.130	8398.014.030
16	30	47	M10/11	2	8398.016.130	8398.016.030
5	40	57	M10/11	2	8398.005.140	8398.005.040
6	40	57	M10/11	2	8398.006.140	8398.006.040
8	40	57	M10/11	2	8398.008.140	8398.008.040
10	40	57	M10/11	2	8398.010.140	8398.010.040
12	40	57	M10/11	2	8398.012.140	8398.012.040
14	40	57	M10/11	2	8398.014.140	8398.014.040
16	40	57	M10/11	2	8398.016.140	8398.016.040
5	50	67	M10/11	2	8398.005.150	8398.005.050
6	50	67	M10/11	2	8398.006.150	8398.006.050
8	50	67	M10/11	2	8398.008.150	8398.008.050
10	50	67	M10/11	2	8398.010.150	8398.010.050
12	50	67	M10/11	2	8398.012.150	8398.012.050
14	50	67	M10/11	2	8398.014.150	8398.014.050
16	50	67	M10/11	2	8398.016.150	8398.016.050

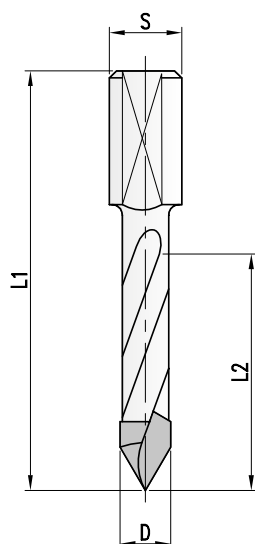

Schaft ø 8 mm
Shank ø 8 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	30	55,5	8x20	2	8353.005.130	8353.005.030
6	30	55,5	8x20	2	8353.006.130	8353.006.030
8	30	55,5	8x20	2	8353.008.130	8353.008.030
10	30	55,5	8x20	2	8353.010.130	8353.010.030
12	30	55,5	8x20	2	8353.012.130	8353.012.030
5	40	67	8x20	2	8353.005.160	8353.005.040
6	40	67	8x20	2	8353.006.140	8353.006.040
7	40	67	8x20	2	8353.007.140	8353.007.040
8	40	67	8x20	2	8353.008.140	8353.008.040
10	40	67	8x20	2	8353.010.140	8353.010.040
12	40	67	8x20	2	8353.012.140	8353.012.040

Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	27	57,5	10x27	2	8353.005.127	8353.005.027
6	27	57,5	10x27	2	8353.006.127	8353.006.027
7	27	57,5	10x27	2	8353.007.127	8353.007.027
8	27	57,5	10x27	2	8353.008.127	8353.008.027
10	27	57,5	10x27	2	8353.010.127	8353.010.027
12	27	57,5	10x27	2	8353.012.127	8353.012.027
5	35	70	10x30	2	8353.005.135	8353.005.035
6	35	70	10x30	2	8353.006.135	8353.006.035
7	35	70	10x30	2	8353.007.135	8353.007.035
8	35	70	10x30	2	8353.008.135	8353.008.035
10	35	70	10x30	2	8353.010.135	8353.010.035
12	35	70	10x30	2	8353.012.135	8353.012.035
5	44	77	10x30	2	8353.005.144	8353.005.044
6	44	77	10x30	2	8353.006.144	8353.006.044
7	44	77	10x30	2	8353.007.144	8353.007.044
8	44	77	10x30	2	8353.008.144	8353.008.044
10	44	77	10x30	2	8353.010.144	8353.010.044
12	44	77	10x30	2	8353.012.144	8353.012.044
5	45	85	10x35	2	8353.005.148	8353.005.048
6	45	85	10x35	2	8353.006.148	8353.006.048
8	45	85	10x35	2	8353.008.148	8353.008.048
10	45	85	10x35	2	8353.010.148	8353.010.048
12	45	85	10x35	2	8353.012.148	8353.012.048
5	65	115	10x35	2	8353.005.165	8353.005.065
6	65	115	10x35	2	8353.006.165	8353.006.065
8	65	115	10x35	2	8353.008.165	8353.008.065
10	65	115	10x35	2	8353.010.165	8353.010.065
12	65	115	10x35	2	8353.012.165	8353.012.065

- Zum Bohren ausrissfreier Durchgangslöcher mit gefastem Dachformanschliff für eine bestmögliche Lochrandqualität auf der Austrittsseite
- *for drilling tear-free through holes with chamfered V-point sharpening for maximum perimeter quality on the exit side*

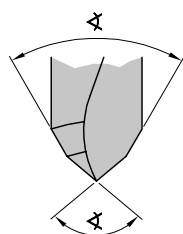
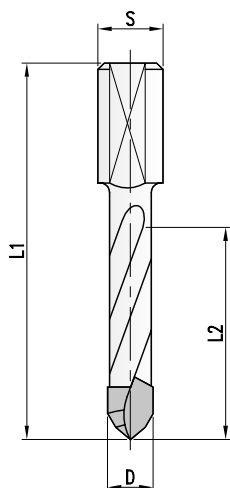

Schaft Ø 10 mm mit Rückenführung
Shank Ø 10 mm with depth stop
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	27	57,5	10x20	2	8353.105.127	8353.105.027
6	27	57,5	10x20	2	8353.106.127	8353.106.027
7	27	57,5	10x20	2	8353.107.127	8353.107.027
8	27	57,5	10x20	2	8353.108.127	8353.108.027
10	27	57,5	10x20	2	8353.110.127	8353.110.027
12	27	57,5	10x20	2	8353.112.127	8353.112.027
5	35	70	10x20	2	8353.105.135	8353.105.035
6	35	70	10x20	2	8353.106.135	8353.106.035
7	35	70	10x20	2	8353.107.135	8353.107.035
8	35	70	10x20	2	8353.108.135	8353.108.035
10	35	70	10x20	2	8353.110.135	8353.110.035
12	35	70	10x20	2	8353.112.135	8353.112.035

- Zum Bohren ausrissfreier Durchgangslöcher mit gefastem Dachformanschliff für eine bestmögliche Lochrandqualität auf der Austrittsseite
- Kombinierbar mit einem Aufstecksenker.
- *for drilling tear-free through holes with chamfered V-point sharpening for maximum perimeter quality on the exit side*
- *can be combined with arbor-mounted counterbore.*

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - <i>Adjusting screw</i>	M5x10	705.103
SS-Einstellschraube - <i>SS adjusting screw</i>	M5x17	705.180


Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

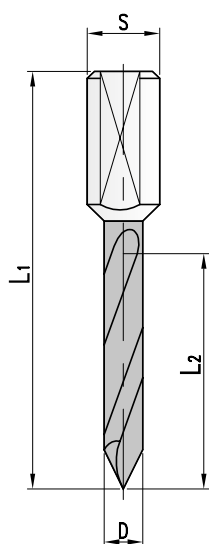
D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
5	33	57,5	10x27	2	8333.005.133	8333.005.033
6	33	57,5	10x27	2	8333.006.133	8333.006.033
8	33	57,5	10x27	2	8333.008.133	8333.008.033
10	33	57,5	10x27	2	8333.010.133	8333.010.033
12	33	57,5	10x27	2	8333.012.133	8333.012.033
5	35	70	10x30	2	8333.005.135	8333.005.035
6	35	70	10x30	2	8333.006.135	8333.006.035
8	35	70	10x30	2	8333.008.135	8333.008.035
10	35	70	10x30	2	8333.010.135	8333.010.035
12	35	70	10x30	2	8333.012.135	8333.012.035

Zum Bohren ausrissfreier Durchgangslöcher mit gefastem Dachformanschliff für eine bestmögliche Lochrandqualität auf der Austrittsseite. Der Doppelfasenanschliff sorgt für eine verbesserte Lochrandqualität beim Bearbeiten spröder Deckschichten. Zudem garantiert das Mikro-Feinkornhartmetall besonders hohe Standzeiten.

For drilling tear-free through holes with chamfered V-point sharpening for maximum perimeter quality on the exit side. The double-flute sharpening provides improved perimeter quality when drilling into brittle surface layers and the micro-grain carbide tipping guarantees exceptionally long tool life.

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180


Schaft ø 10 mm
Shank ø 10 mm
MAN**HW**

D	L2	L1	S	Z	Art. Nr. LH	Art. Nr. RH
3	27	57,5	10x24	2	6383.003.127	6383.003.027
4	27	57,5	10x24	2	6383.004.127	6383.004.027
5	27	57,5	10x24	2	6383.005.027	6383.005.027
6	27	57,5	10x24	2	6383.006.127	6383.006.027
8	27	57,5	10x24	2	6383.008.127	6383.008.027
10	27	57,5	10x24	2	6383.010.127	6383.010.027
4	35	70	10x24	2	6383.004.135	6383.004.035
5	35	70	10x24	2	6383.005.135	6383.005.035
6	35	70	10x24	2	6383.006.135	6383.006.035
8	35	70	10x24	2	6383.008.135	6383.008.035
10	35	70	10x24	2	6383.010.135	6383.010.035

- Zum Bohren ausrissfreier Durchgangslöcher mit gefastem Dachformanschliff für eine bestmögliche Lochrandqualität auf der Austrittsseite
- *for drilling tear-free through holes with chamfered V-point sharpening guarantees maximum perimeter quality on exit side*

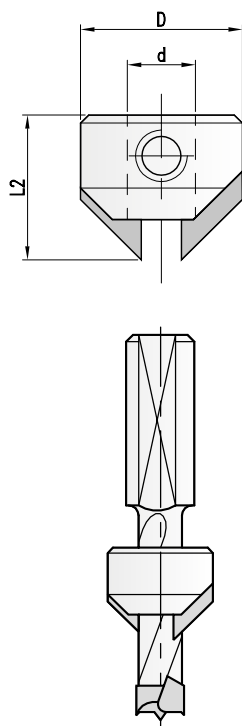
Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180

8850

HW-Aufstecksenker 45° – Festbestückt

TC Arbor-Mounted Counterbore 45° - Tipped

**PG
02**

Für Bohrer mit Rückenführung
For drill bits with depth stop

MAN**HW**

D	L2	S	Z	Art. Nr. LH	Art. Nr. RH
4	16	16,5	2	8850.016.104	8850.016.004
5	16	16,5	2	8850.016.105	8850.016.005
6	16	16,5	2	8850.016.106	8850.016.006
7	16	16,5	2	8850.016.107	8850.016.007
8	18	16,5	2	8850.018.108	8850.018.008
9	18	16,5	2	8850.018.109	8850.018.009
10	20	16,5	2	8850.020.110	8850.020.010
11	20	16,5	2	8850.020.111	8850.020.011
12	20	16,5	2	8850.020.112	8850.020.012

- Zur Befestigung an der Spirale des Bohrers mit Rückenführung
- for mounting to the spiral of the drill bit with depth stop

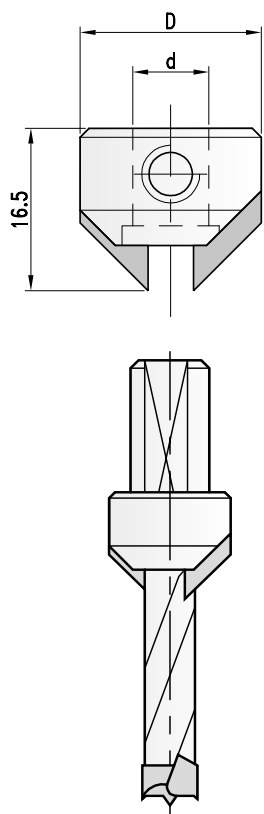
Ersatzteile
Spare parts

	Dim.	Art. Nr.
Gewindestift - Setscrew	M5x5	705.102
Sechskantschlüssel - Hex wrench	SW2,5	706.152

8870

HW-Aufstecksenker 45° – Festbestückt

TC Arbor-Mounted Counterbore 45° - Tipped

**PG
02**

Für Befestigung am Schaft
For mounting to the shank

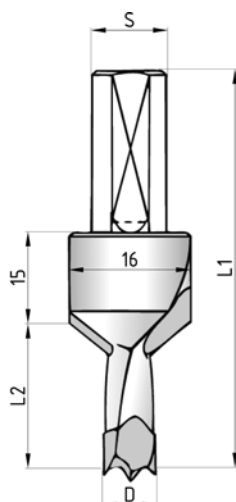
MAN**HW**

D	L2	Ø	Z	Art. Nr. LH	Art. Nr. RH
10	20	16,5	5-10	8870.020.110	8870.020.010
10	22	16,5	11-12	8870.022.110	8870.022.010

- Zur Befestigung am Schaft
- Ø gibt den Nenndurchmesser des Bohrers an
- for mounting to the shank
- Ø indicates the nominal diameter of the drill bit

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Gewindestift - Setscrew	M5x5	705.102
Sechskantschlüssel - Hex wrench	SW2,5	706.152

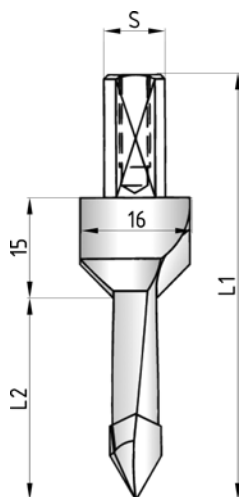

Schaft Ø 10 mm
Shank Ø 10 mm

MAN

HW

D	L2	L1	S	Art. Nr.
5	20	70	10	8235.005.020
5	25	70	10	8235.005.025
5	30	70	10	8235.005.030
6	20	70	10	8235.006.020
6	25	70	10	8235.006.025
6	30	70	10	8235.006.030
8	20	70	10	8235.008.020
8	25	70	10	8235.008.025
8	30	70	10	8235.008.030
10	20	70	10	8235.010.020
10	25	70	10	8235.010.025
10	30	70	10	8235.010.030
12	20	70	10	8235.012.020
12	25	70	10	8235.012.025
12	30	70	10	8235.012.030
14	20	70	10	8235.014.020
14	25	70	10	8235.014.025
14	30	70	10	8235.014.030
16	20	70	10	8235.016.020
16	25	70	10	8235.016.025
16	30	70	10	8235.016.030

- Zum Bohren von Sacklöchern bei gleichzeitigem Ansenken des Lochrands
- Einteilige Ausführung
- *for drilling blind holes with simultaneous countersinking of the hole edge*
- *single-piece design.*

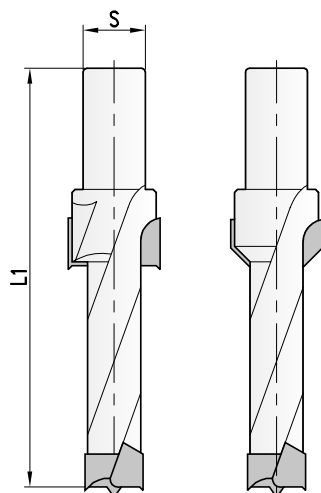

Schaft Ø 10 mm
Shank Ø 10 mm

MAN

HW

D	L2	L1	S	Art. Nr.
5	20	70	10	8275.005.020
5	25	70	10	8275.005.025
5	30	70	10	8275.005.030
6	20	70	10	8275.006.020
6	25	70	10	8275.006.025
6	30	70	10	8275.006.030
8	20	70	10	8275.008.020
8	25	70	10	8275.008.025
8	30	70	10	8275.008.030
10	20	70	10	8275.010.020
10	25	70	10	8275.010.025
10	30	70	10	8275.010.030
12	20	70	10	8275.012.020
12	25	70	10	8275.012.025
12	30	70	10	8275.012.030
14	20	70	10	8275.014.020
14	25	70	10	8275.014.025
14	30	70	10	8275.014.030
16	20	70	10	8275.016.020
16	25	70	10	8275.016.025
16	30	70	10	8275.016.030

- Zum Durchbohren bei gleichzeitigem Ansenken des Lochrands
- Einteilige Ausführung
- *for drilling through holes with simultaneous countersinking*
- *single-piece design*


Sonderanfertigung
Bespoke design

MAN

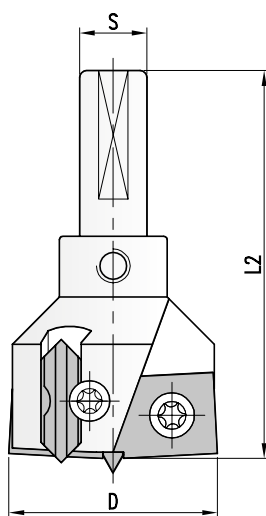
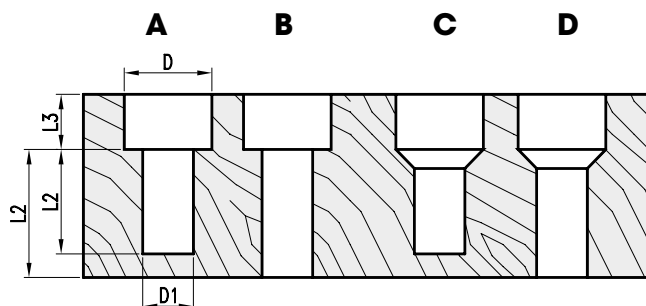
HW/HS

D	L1	S	Art. Nr.
3-30	50-130	•	8113.003.050

- Auf Anfrage erhältlich. Bitte geben Sie bei der Bestellung die Ausführung (A-D), Maßangaben und den gewünschten Schneidstoff an.

available on request, please specify finish (A-D), dimensions and required cutting material when ordering

Ausführung der Stufenbohrung - Finish of stepped hole


Schaft Ø 10 mm
Shank Ø 10 mm

MAN

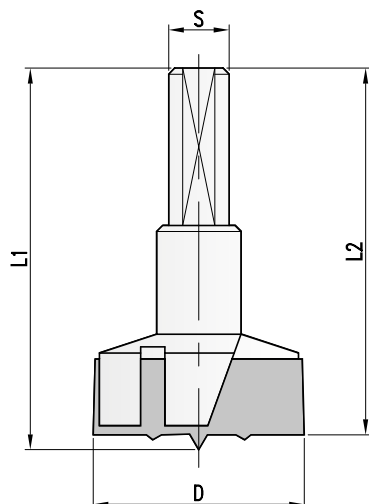
HW

D	L2	L1	S	Z	V	Art. Nr. LH	Art. Nr. RH
25	55,5	57,5	10x26	2	2	4163.025.158	4163.025.058
26	55,5	57,5	10x26	2	2	4163.026.158	4163.026.058
30	55,5	57,5	10x26	2	2	4163.030.158	4163.030.058
35	55,5	57,5	10x26	2	2	4163.035.158	4163.035.058
25	55,5	70	10x26	2	2	4163.025.170	4163.025.070
26	55,5	70	10x26	2	2	4163.026.170	4163.026.070
30	55,5	70	10x26	2	2	4163.030.170	4163.030.070
35	55,5	70	10x26	2	2	4163.035.170	4163.035.070

- Zum Bohren von Beschlag- und Topfbandbohrungen. Vorschneider, Räumer und Zentrierspitze sind als Wechselmesser ausgeführt.
- *For drilling hinge holes and concealed hinge holes. Scoring blades, rakers, and centre point are implemented as replaceable knives.*

Ersatzteile
Spare parts

	D	Dim.	Art. Nr.
Wechselmesser - Replacement knife	25	10,5x12x1,5	750.200
	26	11x12x1,5	750.209
	30	13x12x1,5	750.202
	35	15,7x12x1,5	750.203
Schraube - Screw		M3,5x5	705.352
		M3,5x6,5	705.350
Vorschneider - Scoring blade		18x6x3,5	795.102
Schraube - Screw		M3,5x6	705.312.06
Zentrierspitze - Centre point		Ø 3x33,5	795.101
Gewindestift - Setscrew		M6x6	705.583
Einstellschraube - Adjusting screw		M5x10	705.103
Sechskantschlüssel - Hex wrench		SW3	706.153
Torx-Schlüssel - Torx wrench		T15	706.302



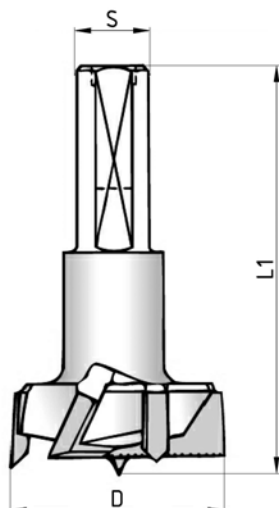
- Zum Bohren von Beschlag- und Topfbandbohrungen. Ausführung mit zwei Vorschneidern, zwei Räubern und Zentrierspitze.
- For drilling hinge holes and concealed hinge holes. Including two rakers, two scorers and a centre point.

Schaft Ø 10 mm
Shank Ø 10 mm
MAN**HW**

D	L2	L1	S	Z	V	Art. Nr. LH	Art. Nr. RH
8	55,5	57,5	10x26	2	2	8163.008.156	8163.008.056
10	55,5	57,5	10x26	2	2	8163.010.156	8163.010.056
12	55,5	57,5	10x26	2	2	8163.012.156	8163.012.056
15	55,5	57,5	10x26	2	2	8163.015.156	8163.015.056
16	55,5	57,5	10x26	2	2	8163.016.156	8163.016.056
17	55,5	57,5	10x26	2	2	8163.017.156	8163.017.056
18	55,5	57,5	10x26	2	2	8163.018.156	8163.018.056
19	55,5	57,5	10x26	2	2	8163.019.156	8163.019.056
20	55,5	57,5	10x26	2	2	8163.020.156	8163.020.056
22	55,5	57,5	10x26	2	2	8163.022.156	8163.022.056
23	55,5	57,5	10x26	2	2	8163.023.156	8163.023.056
24	55,5	57,5	10x26	2	2	8163.024.156	8163.024.056
25	55,5	57,5	10x26	2	2	8163.025.156	8163.025.056
26	55,5	57,5	10x26	2	2	8163.026.156	8163.026.056
28	55,5	57,5	10x26	2	2	8163.028.156	8163.028.056
30	55,5	57,5	10x26	2	2	8163.030.156	8163.030.056
32	55,5	57,5	10x26	2	2	8163.032.156	8163.032.056
35	55,5	57,5	10x26	2	2	8163.035.156	8163.035.056
38	55,5	57,5	10x26	2	2	8163.038.156	8163.038.056
40	55,5	57,5	10x26	2	2	8163.040.156	8163.040.056
42	55,5	57,5	10x26	2	2	8163.042.156	8163.042.056
50	55,5	57,5	10x26	2	2	8163.050.156	8163.050.056
60	55,5	57,5	10x26	2	2	8163.060.156	8163.060.056
15	68,0	70	10x40	2	2	8163.015.168	8163.015.068
16	68,0	70	10x40	2	2	8163.016.168	8163.016.068
18	68,0	70	10x40	2	2	8163.018.168	8163.018.068
20	68,0	70	10x40	2	2	8163.020.168	8163.020.068
22	68,0	70	10x40	2	2	8163.022.168	8163.022.068
24	68,0	70	10x40	2	2	8163.024.168	8163.024.068
25	68,0	70	10x40	2	2	8163.025.168	8163.025.068
26	68,0	70	10x40	2	2	8163.026.168	8163.026.068
28	68,0	70	10x40	2	2	8163.028.168	8163.028.068
30	68,0	70	10x40	2	2	8163.030.168	8163.030.068
35	68,0	70	10x40	2	2	8163.035.168	8163.035.068
40	68,0	70	10x40	2	2	8163.040.168	8163.040.068
50	68,0	70	10x40	2	2	8163.050.168	8163.050.068
60	68,0	70	10x40	2	2	8163.060.168	8163.060.068
15	75,0	77	10x40	2	2	8163.015.175	8163.015.075
16	75,0	77	10x40	2	2	8163.016.175	8163.016.075
18	75,0	77	10x40	2	2	8163.018.175	8163.018.075
20	75,0	77	10x40	2	2		8163.020.075
22	75,0	77	10x40	2	2	8163.022.175	8163.022.075
24	75,0	77	10x40	2	2	8163.024.175	8163.024.075
25	75,0	77	10x40	2	2	8163.025.175	8163.025.075
26	75,0	77	10x40	2	2	8163.026.175	8163.026.075
28	75,0	77	10x40	2	2	8163.028.175	8163.028.075
30	75,0	77	10x40	2	2	8163.030.175	8163.030.075
32	75,0	77	10x40	2	2	8163.032.168	8163.032.068
35	75,0	77	10x40	2	2	8163.035.175	8163.035.075
38	75,0	77	10x40	2	2	8163.038.175	8163.038.075
40	75,0	77	10x40	2	2	8163.040.175	8163.040.075

Ersatzteile
Spare parts

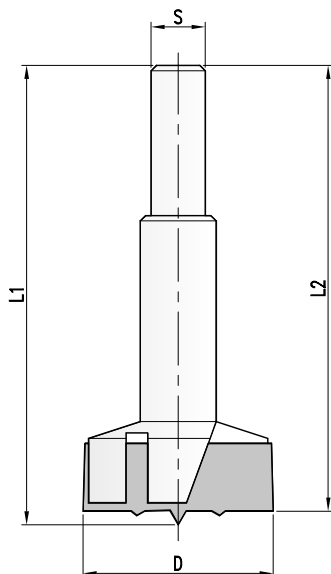
	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180


Schaft Ø 10 mm
Shank Ø 10 mm
MAN**HW**

D	L2	L1	S	Z	V	Art. Nr. LH	Art. Nr. RH
15	55,5	57,5	10x26	2	2	8263.015.156	8263.015.056
16	55,5	57,5	10x26	2	2	8263.016.156	8263.016.056
18	55,5	57,5	10x26	2	2	8263.018.156	8263.018.056
20	55,5	57,5	10x26	2	2	8263.020.156	8263.020.056
22	55,5	57,5	10x26	2	2	8263.022.156	8263.022.056
24	55,5	57,5	10x26	2	2	8263.024.156	8263.024.056
25	55,5	57,5	10x26	2	2	8263.025.156	8263.025.056
26	55,5	57,5	10x26	2	2	8263.026.156	8263.026.056
28	55,5	57,5	10x26	2	2	8263.028.156	8263.028.056
30	55,5	57,5	10x26	2	2	8263.030.156	8263.030.056
32	55,5	57,5	10x26	2	2	8263.032.156	8263.032.056
35	55,5	57,5	10x26	2	2	8263.035.156	8263.035.056
38	55,5	57,5	10x26	2	2	8263.038.156	8263.038.056
40	55,5	57,5	10x26	2	2	8263.040.156	8263.040.056
50	55,5	57,5	10x26	2	2	8263.050.156	8263.050.056
60	55,5	57,5	10x26	2	2	8263.060.156	8263.060.056
15	68,8	70	10x40	2	2	8263.015.168	8263.015.068
16	68,8	70	10x40	2	2	8263.016.168	8263.016.068
18	68,8	70	10x40	2	2	8263.018.168	8263.018.068
20	68,8	70	10x40	2	2	8263.020.168	8263.020.068
22	68,8	70	10x40	2	2	8263.022.168	8263.022.068
24	68,8	70	10x40	2	2	8263.024.168	8263.024.068
25	68,8	70	10x40	2	2	8263.025.168	8263.025.068
26	68,8	70	10x40	2	2	8263.026.168	8263.026.068
28	68,8	70	10x40	2	2	8263.028.168	8263.028.068
30	68,8	70	10x40	2	2	8263.030.168	8263.030.068
32	68,8	70	10x40	2	2	8263.032.168	8263.032.068
35	68,8	70	10x40	2	2	8263.035.168	8263.035.068
38	68,8	70	10x40	2	2	8263.038.168	8263.038.068
40	68,8	70	10x40	2	2	8263.040.168	8263.040.068

Zum Bohren von Beschlag- und Topfbandbohrungen. Ausführung mit zwei Vorschneidern, zwei Räumern und Zentrierspitze. Die Räumern sind mit Spanbrechernuten geschliffen und sorgen daher für eine verbesserte Spanabfuhr und reduzierte Vorspaltung.

For drilling hinge holes and concealed hinge holes. Equipped with two scorers, two rakers and a centre point. The rakers are ground with chipbreaker grooves for improved chip removal and reduced pre-splitting.



- Lange Ausführung
Ohne Spannfläche und Einstellschraube
- long-reach design
without clamping surface and adjusting screw

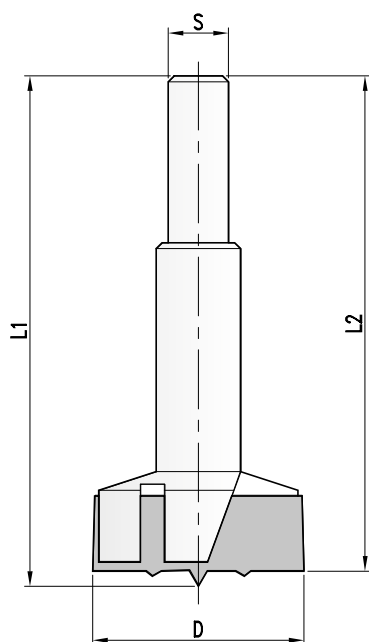
Schaft Ø 10 mm bzw. 16 mm
Shank Ø 10 mm or 16 mm

MAN

HW

D	L2	L1	S	Z	V	Art. Nr. RH
8	90	92	10x30	2	2	8163.008.090
9	90	92	10x30	2	2	8163.009.090
10	90	92	10x30	2	2	8163.010.090
11	90	92	10x30	2	2	8163.011.090
12	90	92	10x30	2	2	8163.012.090
13	90	92	10x30	2	2	8163.013.090
14	90	92	10x30	2	2	8163.014.090
15	90	92	10x30	2	2	8163.015.090
16	90	92	10x30	2	2	8163.016.090
17	90	92	10x30	2	2	8163.017.090
18	90	92	10x30	2	2	8163.018.090
19	90	92	10x30	2	2	8163.019.090
20	90	92	10x30	2	2	8163.020.090
21	90	92	10x30	2	2	8163.021.090
22	90	92	10x30	2	2	8163.022.090
23	90	92	10x30	2	2	8163.023.090
24	90	92	10x30	2	2	8163.024.090
25	90	92	10x30	2	2	8163.025.090
26	90	92	10x30	2	2	8163.026.090
27	90	92	10x30	2	2	8163.027.090
28	90	92	10x30	2	2	8163.028.090
29	90	92	10x30	2	2	8163.029.090
30	90	92	10x30	2	2	8163.030.090
31	90	92	10x30	2	2	8163.031.090
32	90	92	10x30	2	2	8163.032.090
33	90	92	10x30	2	2	8163.033.090
34	90	92	10x30	2	2	8163.034.090
35	90	92	10x30	2	2	8163.035.090
36	90	92	10x30	2	2	8163.036.090
37	90	92	10x30	2	2	8163.037.090
38	90	92	10x30	2	2	8163.038.090
39	90	92	10x30	2	2	8163.039.090
40	90	92	10x30	2	2	8163.040.090
41	90	92	10x30	2	2	8163.041.090
42	90	92	10x30	2	2	8163.042.090
43	90	92	10x30	2	2	8163.043.090
44	90	92	10x30	2	2	8163.044.090
45	90	92	10x30	2	2	8163.045.090
46	90	92	10x30	2	2	8163.046.090
47	90	92	10x30	2	2	8163.047.090
48	90	92	10x30	2	2	8163.048.090
49	90	92	10x30	2	2	8163.049.090
50	90	92	10x30	2	2	8163.050.090
51	90	92	10x30	2	2	8163.051.090
52	90	92	10x30	2	2	8163.052.090
53	90	92	10x30	2	2	8163.053.090
54	90	92	10x30	2	2	8163.054.090
55	90	92	10x30	2	2	8163.055.090
56	90	92	10x30	2	2	8163.056.090
57	90	92	10x30	2	2	8163.057.090
58	90	92	10x30	2	2	8163.058.090
59	90	92	10x30	2	2	8163.059.090
60	90	92	10x30	2	2	8163.060.090
50	120	122	16x50	2	2	8165.050.120
55	120	122	16x50	2	2	8165.055.120
60	120	122	16x50	2	2	8165.060.120

- Zum Bohren von Beschlag- und Topfbandbohrungen. Ausführung mit zwei Vorschneidern, zwei Räumern und Zentrierspitze.
- For drilling hinge holes and concealed hinge holes. Equipped with two scorers, two rakers and a centre point.



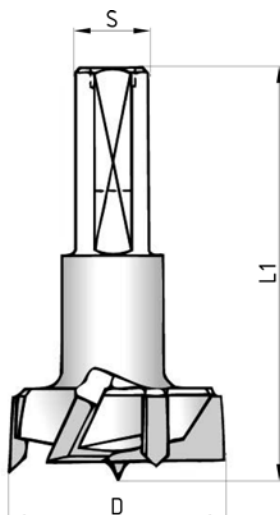
- Lange Ausführung
- Ohne Spannfläche und Einstellschraube
- *long-reach design*
- *without clamping surface and adjusting screw*

Schaft Ø 13 mm, 16 mm bzw. 20 mm
Shank Ø 13 mm, 16 mm or 20 mm

MAN**HW**

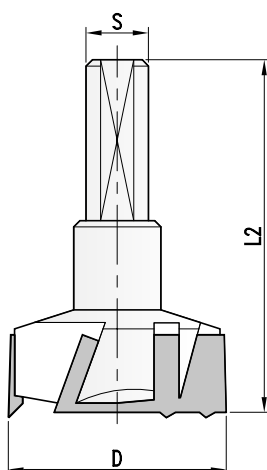
D	L2	L1	S	Z	V	Art. Nr. RH
10	138	140	13x50	2	2	8165.010.138
12	138	140	13x50	2	2	8165.012.138
14	138	140	13x50	2	2	8165.014.138
15	138	140	13x50	2	2	8165.015.138
16	138	140	13x50	2	2	8165.016.138
18	138	140	13x50	2	2	8165.018.138
20	138	140	13x50	2	2	8165.020.138
22	138	140	13x50	2	2	8165.022.138
24	138	140	13x50	2	2	8165.024.138
25	138	140	13x50	2	2	8165.025.138
26	138	140	13x50	2	2	8165.026.138
28	138	140	13x50	2	2	8165.028.138
30	138	140	13x50	2	2	8165.030.138
32	138	140	16x50	2	2	8165.032.138
34	138	140	16x50	2	2	8165.034.138
35	138	140	16x50	2	2	8165.035.138
36	138	140	16x50	2	2	8165.036.138
38	138	140	16x50	2	2	8165.038.138
40	138	140	16x50	2	2	8165.040.138
42	138	140	16x50	2	2	8165.042.138
44	138	140	16x50	2	2	8165.044.138
45	138	140	16x50	2	2	8165.045.138
46	138	140	16x50	2	2	8165.046.138
48	138	140	16x50	2	2	8165.048.138
50	138	140	16x50	2	2	8165.050.138
52	138	140	16x50	2	2	8165.052.138
54	138	140	16x50	2	2	8165.054.138
55	138	140	16x50	2	2	8165.055.138
56	138	140	16x50	2	2	8165.056.138
58	138	140	16x50	2	2	8165.058.138
60	138	140	16x50	2	2	8165.060.138
62	138	140	16x50	2	2	8165.062.138
63	138	140	16x50	2	2	8165.063.138
64	138	140	16x50	2	2	8165.064.138
65	138	140	16x50	2	2	8165.065.138
68	138	140	16x50	2	2	8165.068.138
70	138	140	16x50	2	2	8165.070.138
72	138	140	20x50	2	2	8165.072.138
75	138	140	20x50	2	2	8165.075.138
78	138	140	20x50	2	2	8165.078.138
80	138	140	20x50	2	2	8165.080.138
85	138	140	20x50	2	2	8165.085.138
90	138	140	20x50	2	2	8165.090.138
95	138	140	20x50	2	2	8165.095.138
100	138	140	20x50	2	2	8165.100.138
105	138	140	20x50	2	2	8165.105.138
110	138	140	20x50	2	2	8165.110.138
115	138	140	20x50	2	2	8165.115.138
120	138	140	20x50	2	2	8165.120.138
130	138	140	20x50	2	2	8165.130.138
140	138	140	20x50	2	2	8165.140.138

- Zum Bohren von Beschlag- und Topfbandbohrungen
- Ausführung mit zwei Vorschneidern und Zentrierspitze
- *for drilling hinge holes and concealed hinge holes*
- *equipped with two scorers and a centre point*

8173**HW-Zylinderkopfbohrer Z3+V3 – Festbestückt***TC Hinge Boring Bit Z3+V3 - Tipped***PG
02****Schaft Ø 10 mm**
Shank Ø 10 mm**MAN****HW**

D	L2	L1	S	Z	V	Art. Nr. LH	Art. Nr. RH
18	55,5	57,5	10x26	3	3	8173.018.156	8173.018.056
20	55,5	57,5	10x26	3	3	8173.020.156	8173.020.056
25	55,5	57,5	10x26	3	3	8173.025.156	8173.025.056
26	55,5	57,5	10x26	3	3	8173.026.156	8173.026.056
30	55,5	57,5	10x26	3	3	8173.030.156	8173.030.056
35	55,5	57,5	10x26	3	3	8173.035.156	8173.035.056
38	55,5	57,5	10x26	3	3	8173.038.156	8173.038.056
40	55,5	57,5	10x26	3	3	8173.040.156	8173.040.056
50	55,5	57,5	10x26	3	3	8173.050.156	8173.050.056

- Zum Bohren von Beschlag- und Topfbandbohrungen
- Ausführung mit drei Vorschneidern, drei Räumern und Zentrierspitze; 3-Schneider-Ausführung sorgt für erhöhte Bohrleistung
- *for drilling hinge holes and concealed hinge holes*
- *equipped with three scorers, three rakers and a centre point; three-flute design ensures increased drilling performance*

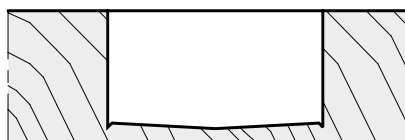
8183**HW-Zylinderkopfbohrer mit verkürzter Zentrierspitze – Festbestückt***TC Hinge Boring Bit with Shortened Centre Point - Tipped***PG
02****Schaft Ø 10 mm**
Shank Ø 10 mm**MAN****HW**

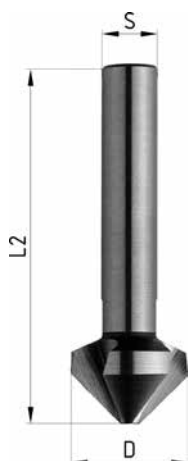
D	L2	S	Z	V	Art. Nr. LH	Art. Nr. RH
25	55,5	10x26	3	3	8183.025.156	8183.025.056
30	55,5	10x26	3	3	8183.030.156	8183.030.056
35	55,5	10x26	3	3	8183.035.156	8183.035.056

- Zum Bohren von Beschlag- und Topfbandbohrungen
- Ausführung mit drei Vorschneidern, drei Räumern und verkürzter Zentrierspitze
- *for drilling hinge holes and concealed hinge holes*
- *equipped with three scorers, three rakers and a shortened centre point*

Ersatzteile
Spare parts

	Dim.	Art. Nr.
Einstellschraube - Adjusting screw	M5x10	705.103
SS-Einstellschraube - SS adjusting screw	M5x17	705.180



3479
HS-Senker – Massiv
HSS Countersink - Solid
**PG
02**
HS-Senker 90°
HSS countersink 90°
MAN**HW**

D	L2	S	Z	Art. Nr.
12,4	56	8	3	3479.012.056
16,5	60	10	3	3479.017.060
20,5	63	10	3	3479.021.063
25	67	10	3	3479.025.067
30	71	12	3	3479.030.071
40	71	12	3	3479.040.071

- Zum nachträglichen Ansenken von Bohrungen
- *for countersinking holes subsequently*

3459
HS-Querlochsенker – Massiv
HSS Cross-Hole Countersink - Solid
**PG
02**
HS-Senker
HSS countersink
MAN**HW**

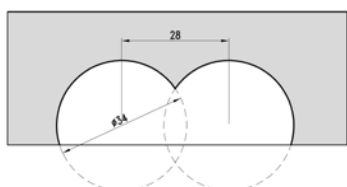
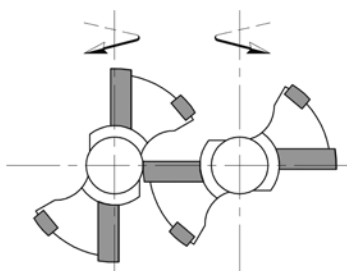
D	L2	S	Z	Art. Nr.
21	65	10	1	3459.021.065
27,5	85	12	1	3459.028.085
35	102	15	1	3459.035.102

- Querlochsенker für ein sauberes und ratterfreies Schnittbild
- Zum nachträglichen Ansenken von Bohrungen
- Besonders geeignet für harte Werkstoffe wie HPL und NE-Metalle
- *cross-hole countersink for a clean and chatter-free finish*
- *for countersinking holes subsequently*
- *particularly suitable for hard materials such as HPL or non-ferrous metals*

8273

HW-Doppel-Topfbandbohrer für System MACO TREND – Festbestückt

TC Double Concealed Hinge Boring Bit for MACO TREND System - Tipped

**PG
02**

Schaft Ø 10 mm für L/R-Lauf mit Lochabstand 28 mm
Shank Ø 10 mm for LH/RH operation with 28 mm hole spacing

MAN**HW**

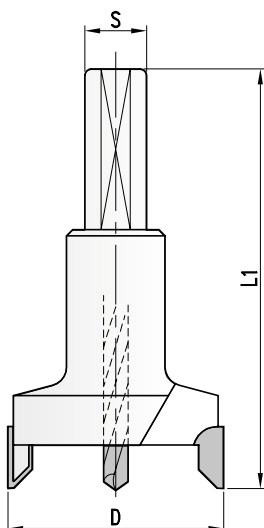
D	L2	L1	S	V	Art. Nr. LH	Art. Nr. RH
34	57,5	10x26	2	2	8273.034.158	8273.034.058

- Zum Bohren von Doppelbeschlag- und Topfbandbohrungen
- Ausführung mit zwei Vorschneidern, zwei Räumern und Zentrierspitze
- Zum Einbauen von Doppel-Topfbandbeschlägen und Scherenlagern DT
- Mit Spannfläche und Einstellschraube
- *for drilling double and concealed hinge holes*
- *equipped with two scorers, two rakers and a centre point*
- *for the installation of double concealed hinges and stay bearings in window construction*
- *with clamping surface and adjusting screw*

8193

HW-Zylinderkopfbohrer für Aluminiumprofile – Festbestückt

TC Hinge Boring Bit for Aluminium Profiles - Tipped

**PG
02**

Schaft Ø 10 mm
Shank Ø 10 mm

MAN**HW**

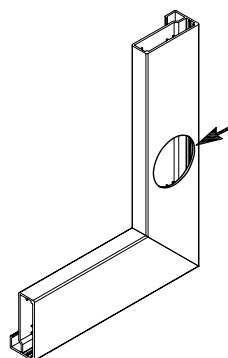
D	L2	S	Z	Art. Nr.
26	70	10x26	2	8193.026.070
35	70	10x26	2	8193.035.070

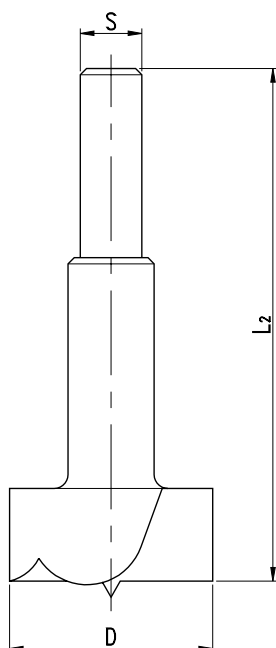
- Zum Bohren von Beschlagbohrungen in Aluminiumprofilen
- Ausführung mit drei Vorschneidern
- *for drilling hinge holes into aluminium profiles*
- *equipped with three scorers*

Ersatzteile

Spare parts

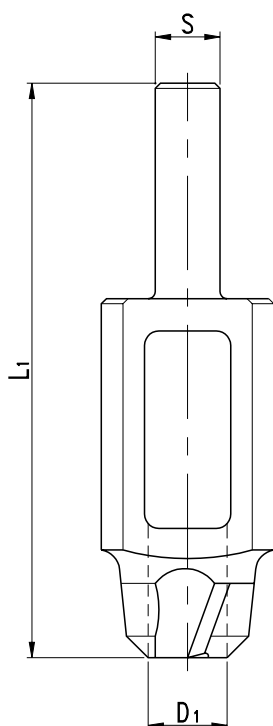
	Dim.	Art. Nr.
Einstellschraube - <i>Adjusting screw</i>	M5x10	705.103
Zentrierschraube - <i>Centre point</i>		A201.004.130.04
Gewindestift - <i>Set screw</i>	M5x5	705.102



3465
SP-Forstnerbohrer – Massiv
Forstner Bit - Solid
PG
02
Schaft Ø 8 mm bzw. 10 mm
Shank Ø 8 mm or 10 mm
MAN**SP**

D	L2	S	Z	V	Art. Nr.
10	92	8x28	2	2	3465.010.092
12	92	8x28	2	2	3465.012.092
14	92	8x28	2	2	3465.014.092
15	92	8x28	2	2	3465.015.092
16	92	8x28	2	2	3465.016.092
18	92	8x28	2	2	3465.018.092
20	92	8x28	2	2	3465.020.092
22	92	8x28	2	2	3465.022.092
24	92	8x28	2	2	3465.024.092
25	92	8x28	2	2	3465.025.092
26	92	8x28	2	2	3465.026.092
28	92	8x28	2	2	3465.028.092
30	92	8x28	2	2	3465.030.092
32	92	8x28	2	2	3465.032.092
34	92	8x28	2	2	3465.034.092
35	92	10x28	2	2	3465.035.092
36	92	10x28	2	2	3465.036.092
38	92	10x28	2	2	3465.038.092
40	92	10x28	2	2	3465.040.092
45	92	10x28	2	2	3465.045.092
50	92	10x28	2	2	3465.050.092

- Zylinderkopfböhrer mit scharfen kreisförmigen Vorschneidern
- Besonders geeignet für Weichhölzer
- *forstner bit with sharp circular scorers*
- *particularly suitable for softwoods*

3495
WS-Scheibenschneider – Massiv
Tool Steel Plug Cutter - Solid
PG
02
Schaft Ø 13 mm bzw. 16 mm
Shank Ø 13 mm or 16 mm
MAN**WS**

D	L1	S	Z	Art. Nr.
10	140	13x50	4	3495.010.140
12	140	13x50	4	3495.012.140
15	140	13x50	4	3495.015.140
20	140	13x50	4	3495.020.140
25	140	13x50	5	3495.025.140
30	140	13x50	5	3495.030.140
35	140	16x50	5	3495.035.160
40	140	16x50	6	3495.040.160
45	140	16x50	6	3495.045.160
50	140	16x50	6	3495.050.160

- Scheibenschneider zur Herstellung von Holzscheiben wie Astlochdübeln
- Besonders geeignet für Weichhölzer
- *plug cutter for producing wooden discs such as knot-hole dowels*
- *particularly suitable for softwoods*



