

HOLE SAWS

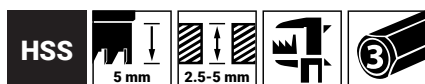
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Type and applications overview

	Surface	Cutting edges	Ø tolerance	Cutting depth	Material thickness	Shank	Ø mm	Item no.	Page/s
	Blank	HSS		 5 mm	 2.5-5 mm		12,0 – 80,0	128 xxx	246
	Blank	TC HM		 28 mm	 4 mm		15,0 – 100,0	113 xxx	247
	Blank	TC HM		 10 mm	 4 mm		16,0 – 120,0	105 xxx	248 – 249
		HSSE Co8		 38 mm	 28 mm		14,0 – 210,0	126 xxx	250
		HSS		 38 mm	 28 mm		14,0 – 210,0	106 xxx	251

Structural steel < 900 N/mm ²	Inox <1100 N/mm ²	High strength steel <1300 N/mm ²	Aluminium	Brass	Bronze	Plastics	Cast iron
●			●	●	○	○	○
●	●	●	●	●	○	○	●
●	●	●	●	●	○	○	●
●	●		●	●	○	○	
●			●	●	○	○	



Hole saw HSS



Packaging: cardboard box



Ø1 mm	Ø inch	PG	Tube dimensi- ons inch	Ø2 mm	HSS	
12.0	15/32			8.0	128 012	1
13.0				8.0	128 013	1
14.0	9/16			8.0	128 014	1
15.0				10.0	128 015	1
16.0	5/8	PG 9		10.0	128 016	1
17.0				10.0	128 017	1
18.0				10.0	128 018	1
19.0	3/4		3/8	10.0	128 019	1
20.0				10.0	128 020	1
21.0				10.0	128 021	1
22.0			1/2	10.0	128 022	1
23.0				10.0	128 023	1
24.0	15/16			10.0	128 024	1
25.0				10.0	128 025	1
26.0				10.0	128 026	1
27.0	1 1/16			10.0	128 027	1
28.0	1 3/32			10.0	128 028	1
29.0			3/4	10.0	128 029	1
30.0	1 3/16			10.0	128 030	1
31.0	1 7/32			10.0	128 031	1
32.0	1 1/4			10.0	128 032	1
33.0				10.0	128 033	1
34.0				10.0	128 034	1

Ø1 mm	Ø inch	PG	Tube dimensi- ons inch	Ø2 mm	HSS	
35.0	1 3/8		1	10.0	128 035	1
36.0				10.0	128 036	1
37.0	1 7/16	PG 29		10.0	128 037	1
38.0	1 1/2			10.0	128 038	1
39.0				10.0	128 039	1
40.0	1 9/16			10.0	128 040	1
41.0	1 5/8			10.0	128 041	1
42.0				10.0	128 042	1
43.0	1 11/16			10.0	128 043	1
44.0	1 3/4		1 1/4	10.0	128 044	1
45.0				10.0	128 045	1
46.0				10.0	128 046	1
47.0	1 7/8	PG 36		10.0	128 047	1
48.0				10.0	128 048	1
49.0				10.0	128 049	1
50.0	1 31/32			10.0	128 050	1
55.0				12.0	128 055	1
60.0	2 3/8	PG 48		12.0	128 060	1
65.0				12.0	128 065	1
70.0	2 3/4			12.0	128 070	1
75.0				12.0	128 075	1
80.0				12.0	128 080	1



Accessories

Packaging: plastic

Holder including guide drill.

For hole saws Ø mm	Shank Ø mm	suitable for magnetic drilling machine	HSS	
12.0 - 14.0	8.0	A10	128 211	1
15.0 - 34.0	10.0		128 212	1
35.0 - 50.0	10.0	RU25 RU40	128 213	1
51.0 - 100.0	12.0		128 214	1

	for hole saws Ø mm		
Pilot pin Ø 6,0 x 52.0 mm	12.0 - 100.0	128 215	1
Ejector spring	Ø > 20.0	128 216	1



128 ...



128 215



128 216



Tungsten carbide multigrade hole saw



Adapter: thread M 18 x 6 P1,5

Ø 15.0 up to 30.0 mm hole saw MHS and shank in one piece. Complete with pilot pin and wrench.
Ø 31.0 up to 100.0 mm hole saws MHS without arbor.



! For tungsten carbide multigrade hole saws Ø 65.0 bis 100.0 mm we recommend to use our morse taper holder item no. 113 203, 108 104, 108 105.

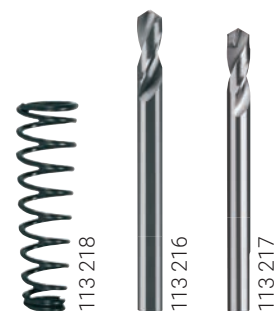
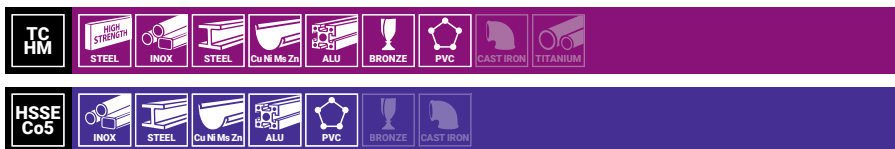
Packaging: plastic tube

Ø1 mm	Ø inch	Tube dimensions inch	Ø2 mm	TC / HM		Ø1 mm	Ø inch	Tube dimensions inch	Ø2 mm	TC / HM	
15.0	19/32		13.0	113 015	1	34.0	1 11/32		13.0 / MT 2/3	113 034	1
16.0	5/8		13.0	113 016	1	35.0	1 3/8	1	13.0 / MT 2/3	113 035	1
17.0	11/16		13.0	113 017	1	36.0	1 1/4		13.0 / MT 2/3	113 036	1
18.0	45/64		13.0	113 018	1	38.0	1 1/2		13.0 / MT 2/3	113 038	1
19.0	3/4	3/8	13.0	113 019	1	40.0	1 9/16		13.0 / MT 2/3	113 040	1
20.0	25/32		13.0	113 020	1	42.0	1 21/32		13.0 / MT 2/3	113 042	1
21.0	13/16		13.0	113 021	1	44.0	1 3/4	1 1/4	13.0 / MT 2/3	113 044	1
22.0	7/8	1/2	13.0	113 022	1	45.0	-		13.0 / MT 2/3	113 045	1
23.0	29/32		13.0	113 023	1	50.0	1 31/32		13.0 / MT 2/3	113 050	1
24.0	15/16		13.0	113 024	1	55.0	2 11/64		13.0 / MT 2/3	113 055	1
25.0	1		13.0	113 025	1	60.0	2 3/8		13.0 / MT 2/3	113 060	1
26.0	1 1/32		13.0	113 026	1	65.0	2 9/16		13.0 / MT 2/3	113 065	1
27.0	1 1/16		13.0	113 027	1	68.0	2 11/16		13.0 / MT 2/3	113 068	1
28.0	1 3/32		13.0	113 028	1	70.0	2 3/4		13.0 / MT 2/3	113 070	1
29.0	1 1/8	3/4	13.0	113 029	1	75.0	2 61/64		13.0 / MT 2/3	113 075	1
30.0	1 3/16		13.0	113 030	1	80.0	3 5/32		13.0 / MT 2/3	113 080	1
32.0	1 1/4		13.0 / MT 2/3	113 032	1	100.0	3 15/16		13.0 / MT 2/3	113 100	1

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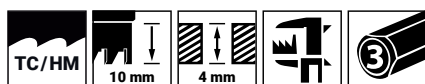
Accessories

Packaging: plastic



	for hole saws Ø mm	TC / HM		HSSE-Co 5	
Pilot pin Ø 6.0 x 80.0 mm	15.0 - 150.0	113 217	1	-	1
Pilot pin Ø 6.0 x 72.0 mm	15.0 - 150.0	-	1	113 216	1

Ejector spring	113 218	1
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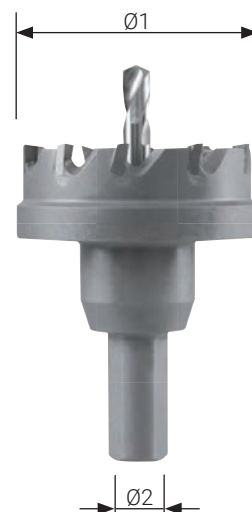


Tungsten carbide hole saw, shallow cut



Hole saw and holder made from one piece.
Guide drill included.

Packaging: cardboard box



Ø1 mm	Ø inch	M + PG	Tube dimensions inch	Ø2 mm	TC / HM	
16.0	5/8	~ PG 9		10.0	105 016	1
16.5	-	M 16		10.0	105 165	1
17.0	11/16			10.0	105 017	1
18.0	45/64			10.0	105 018	1
18.6	47/64	PG 11		10.0	105 186	1
19.0	3/4		3/8	10.0	105 019	1
20.0	25/32			10.0	105 020	1
20.4	-	M 20 / PG 13.5		10.0	105 204	1
21.0	13/16			10.0	105 021	1
22.0	7/8		1/2	10.0	105 022	1
22.5	-	PG 16		10.0	105 225	1
23.0	29/32			10.0	105 023	1
24.0	15/16			10.0	105 024	1
25.0	1"			10.0	105 025	1
25.5	-	M 25		10.0	105 255	1
26.0	1 1/32			10.0	105 026	1
27.0	1 1/16			10.0	105 027	1
28.0	1 3/32			10.0	105 028	1
28.3	1 1/8	PG 21		10.0	105 283	1
29.0	1 1/8		3/4	10.0	105 029	1
30.0	1 3/16			10.0	105 030	1
32.0	1 1/4			10.0	105 032	1
32.5	-	M 32		10.0	105 325	1
34.0	1 11/32			10.0	105 034	1
35.0	1 3/8		1	10.0	105 035	1
36.0	1 1/4			10.0	105 036	1
37.0	1 7/16	PG 29		10.0	105 037	1
38.0	1 1/2			10.0	105 038	1

Ø1 mm	Ø inch	M + PG	Tube dimensions inch	Ø2 mm	TC / HM	
40.0	1 9/16			10.0	105 040	1
40.5	-	M 40		10.0	105 405	1
41.0	1 5/8			10.0	105 041	1
42.0	1 21/32			10.0	105 042	1
43.0	1 11/16			10.0	105 043	1
44.0	1 3/4		1 1/4	10.0	105 044	1
45.0	1 25/32			10.0	105 045	1
48.0	1 29/32			10.0	105 048	1
50.0	1 31/32			10.0	105 050	1
50.5	-	M 50		10.0	105 505	1
51.0	2		1 1/2	13.0	105 051	1
52.0	2 1/16			13.0	105 052	1
54.0	2 1/8	PG 42		13.0	105 054	1
55.0	2 11/64			13.0	105 055	1
57.0	2 1/4			13.0	105 057	1
60.0	2 3/8	~ PG 48		13.0	105 060	1
63.5	2 1/2	M 63	2	13.0	105 635	1
65.0	2 9/16			13.0	105 065	1
68.0	2 11/16			13.0	105 068	1
70.0	2 3/4			13.0	105 070	1
75.0	2 61/64			13.0	105 075	1
80.0	3 5/32			13.0	105 080	1
85.0	3 11/32			13.0	105 085	1
90.0	3 35/64			13.0	105 090	1
95.0	3 3/4			13.0	105 095	1
100.0	3 15/16			13.0	105 100	1
110.0	4 11/32			13.0	105 110	1
120.0	4 23/32			13.0	105 120	1

		HSSE-Co 5
5 tlg./pcs.	Tungsten carbide hole saw set Ø 20.0 22.0 25.0 32.0 35.0 mm + 1 cutting paste 40 ml item no. 101 021 + 1 pilot drill 6.0 mm HSSE-Co 5 item no.105 170	105 300
4 tlg./pcs.	Tungsten carbide hole saw set Ø 16.5 20.4 25.5 32.5 mm + 1 cutting paste 40 ml item no. 101 021 + 1 pilot drill 6.0 mm HSSE-Co 5 item no.105 170	105 302



Accessories

Packaging: plastic tube

TC
HM

STEEL

INOX

STEEL

Cu Ni Ms Zn

ALU

BRONZE

PVC

CAST IRON

TITANIUM

HSSE
Co5

INOX

STEEL

Cu Ni Ms Zn

ALU

PVC

BRONZE

CAST IRON



	for hole saws Ø mm	TC / HM		HSSE-Co 5	
Pilot pin Ø 6.0 x 52.0 mm	16.0 - 70.0	105 172	1	105 170	1
Pilot pin Ø 6.0 x 52.0 mm	75.0 - 150.0	105 173	1	105 171	1

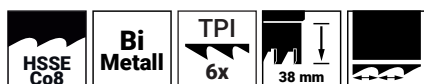
Ejector spring	105 174	1



Application tip

If possible, do not use automatic feed motion, since otherwise the risk of fracture increases.
Unsuitable for percussion-drill operation, only slight pressure required to start drilling.
Avoid pendulum movements while drilling and use prescribed cooling agents.





Bi-metal hole saw HSSE-Co 8 with fine toothting



Particularly suitable for cutting metals. For smoother running and less effort. Increased service life due to lower heat generation.

Body: Special steel

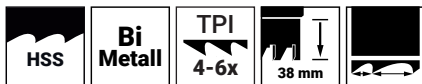
Packaging: cardboard box



Best results up to max. 5 mm.



Ø1 mm	Ø inch	M + PG	Pipe dimensions inch	for holder	HSSE-Co 8	
14.0	9/16			A1 / A4 / A5	126 014	1
16.0	5/8	~ PG 9			126 016	
17.0	11/16				126 017	
19.0	3/4	~ PG 11	3/8		126 019	
20.0	25/32				126 020	
21.0	13/16	~ PG 13.5			126 021	
22.0	7/8		1/2		126 022	
24.0	15/16	~ PG 16			126 024	
25.0	1"				126 025	
27.0	1 1/16				126 027	
28.0	1 3/32				126 028	
29.0	1 1/8	~ PG 21	3/4		126 029	
30.0	1 3/16				126 030	
32.0	1 1/4			A2 / A6 / A7	126 032	
33.0	1 5/16				126 033	
35.0	1 3/8		1		126 035	
36.0	1 1/4				126 036	
37.0	1 7/16	PG 29			126 037	
38.0	1 1/2				126 038	
40.0	1 9/16				126 040	
41.0	1 5/8				126 041	
43.0	1 11/16				126 043	
44.0	1 3/4		1 1/4		126 044	
46.0	1 13/16				126 046	
48.0	1 7/8	~ PG 36			126 048	
50.0	1 31/32				126 050	
51.0	2"		1 1/2		126 051	
52.0	2 1/16				126 052	
54.0	2 1/8	PG 42			126 054	
55.0	2 11/64				126 055	
57.0	2 1/4				126 057	
59.0	2 5/16				126 059	
60.0	2 3/8	~ PG 48			126 060	
63.0	2 15/32				126 063	
64.0	2 1/2		2		126 064	
65.0	2 9/16				126 065	
67.0	2 5/8				126 067	
68.0	2 11/16				126 068	
70.0	2 3/4				126 070	
73.0	2 7/8				126 073	
76.0	3"		2 1/2		126 076	
79.0	3 1/8				126 079	
83.0	3 1/4				126 083	
86.0	3 3/8				126 086	
89.0	3 1/2				126 089	
92.0	3 5/8		3		126 092	
95.0	3 3/4				126 095	
98.0	3 7/8				126 098	
102.0	4"				126 102	
105.0	4 1/8		3 1/2		126 105	
108.0	4 1/4				126 108	
111.0	4 3/8				126 111	
114.0	4 1/2		4		126 114	
121.0	4 3/4				126 121	
127.0	5"				126 127	
133.0	5 1/4				126 133	
140.0	5 1/2				126 140	
152.0	6"				126 152	
160.0	6 5/16				126 160	
168.0	6 5/8				126 168	
177.0	6 31/32				126 177	
210.0	8 1/4				126 200	



Bi-metal hole saw HSS with varied toothing



For a more even cut and less effort. The reduced vibration and heat generation increase the service life up to three times.

Body: Special steel

Packaging: cardboard box



Best results up to max. 5 mm.

Ø1 mm	Ø inch	M + PG	Pipe dimensions inch	for holder	HSS	
14.0	9/16			A1 / A4 / A5	106 014	1
16.0	5/8	~ PG 9			106 016	
17.0	11/16				106 017	
19.0	3/4	~ PG 11	3/8		106 019	
20.0	25/32				106 020	
21.0	13/16	~ PG 13.5			106 021	
22.0	7/8		1/2		106 022	
24.0	15/16	~ PG 16			106 024	
25.0	1"				106 025	
27.0	1 1/16				106 027	
28.0	1 3/32				106 028	
29.0	1 1/8	~ PG 21	3/4		106 029	
30.0	1 3/16				106 030	
32.0	1 1/4			A2 / A6 / A7	106 032	
33.0	1 5/16				106 033	
35.0	1 3/8		1		106 035	
36.0	1 1/4				106 036	
37.0	1 7/16	PG 29			106 037	
38.0	1 1/2				106 038	
40.0	1 9/16				106 040	
41.0	1 5/8				106 041	
43.0	1 11/16				106 043	
44.0	1 3/4		1 1/4		106 044	
46.0	1 13/16				106 046	
48.0	1 7/8	~ PG 36			106 048	
50.0	1 31/32				106 050	
51.0	2"		1 1/2		106 051	
52.0	2 1/16				106 052	
54.0	2 1/8	PG 42			106 054	
55.0	2 11/64				106 055	
57.0	2 1/4				106 057	
59.0	2 5/16				106 059	
60.0	2 3/8	~ PG 48			106 060	
63.0	2 15/32				106 063	
64.0	2 1/2		2		106 064	
65.0	2 9/16				106 065	
67.0	2 5/8				106 067	
68.0	2 11/16				106 068	
70.0	2 3/4				106 070	
73.0	2 7/8				106 073	
76.0	3"		2 1/2		106 076	
79.0	3 1/8				106 079	
83.0	3 1/4				106 083	
86.0	3 3/8				106 086	
89.0	3 1/2				106 089	
92.0	3 5/8		3		106 092	
95.0	3 3/4				106 095	
98.0	3 7/8				106 098	
102.0	4"				106 102	
105.0	4 1/8		3 1/2		106 105	
108.0	4 1/4				106 108	
111.0	4 3/8				106 111	
114.0	4 1/2		4		106 114	
121.0	4 3/4				106 121	
127.0	5"				106 127	
133.0	5 1/4				106 133	
140.0	5 1/2				106 140	
152.0	6"				106 152	
160.0	6 5/16				106 160	
168.0	6 5/8				106 168	
177.0	6 31/32				106 177	
210.0	8 1/4				106 200	



Bi-metal hole saw sets HSSE-Co 8 fine tooththing | HSS varied tooththing



		HSSE-Co 8	HSS
8 tlg./pcs.	Plumbers 1 Bi-metal hole saw set Ø 19.0 22.0 29.0 38.0 44.0 57.0 mm + 2 arbor holders A2 + A4	126 301	106 301
11 tlg./pcs.	Plumbers 2 Bi-metal hole saw set Ø 19.0 22.0 29.0 35.0 38.0 44.0 51.0 57.0 64.0 mm + 2 arbor holders A2 + A4	126 306	106 306
8 tlg./pcs.	Electricians 1 Bi-metal hole saw set Ø 22.0 29.0 35.0 44.0 51.0 64.0 mm + 2 arbor holders A2 + A4	126 305	106 305
8 tlg./pcs.	Electricians 2 Bi-metal hole saw set Ø 22.0 29.0 35.0 44.0 51.0 68.0 mm + 2 arbor holders A2 + A4	126 302	106 302
12 tlg./pcs.	Universal Bi-metal hole saw set Ø 19.0 22.0 25.0 29.0 35.0 38.0 44.0 51.0 57.0 64.0 mm + 2 arbor holders A2 + A4	126 303	106 303
12 tlg./pcs.	Super Bi-metal hole saw set Ø 22.0 25.0 32.0 35.0 41.0 44.0 51.0 54.0 60.0 68.0 mm + 2 arbor holders A2 + A4	126 304	106 304
19 tlg./pcs.	Premium Bi-metal hole saw set Ø 16.0 19.0 21.0 24.0 25.0 29.0 32.0 37.0 40.0 48.0 51.0 54.0 60.0 73.0 83.0 mm + 2 arbor holders A1 + A2 + 1 pilot drill HSS Ø 6.35 mm x 82.0 mm + 1 extension 300.0 mm, arbors for A1 + A2	126 318	106 318

10



106 306



126 304



106 318



Arbor holders including pilot drill for bi-metal hole saws HSS and HSSE-Co 8



Packaging: cardboard box

Hole saws Ø mm	Holder type	Shank Ø mm	Shank shape	Thread	HSSE-Co 8	HSS	
14.0 - 30.0	A1	11.0		1/2" x 20	126 201	106 201	1
32.0 - 210.0	A2	11.0		5/8" x 18	126 202	106 202	1
14.0 - 30.0	A4	6.0		1/2" x 20	126 204	106 204	1
14.0 - 30.0	A5	9.5		1/2" x 20	126 210	106 210	1
32.0 - 210.0	A6	9.5		5/8" x 18	126 209	106 209	1
32.0 - 210.0	A7	10.0	SDS-Plus	5/8" x 18	126 211	106 211	1

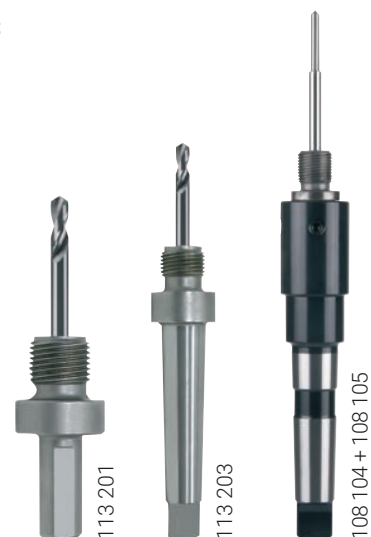
Accessories for bi-metal hole saws HSS and HSSE-Co 8



Packaging: plastic

	Holder type	HSSE-Co 5	HSS	
Adapter to support HSS and HSSE-Co 8 bi-metal hole saws from Ø 32.0 to Ø 210.0 mm	A1 / A4 / A5	—	106 212	1
Pilot drill HSSE-Co 5 ground, Ø 6,35 x 102,0 mm and split point in accordance with DIN 1412 C	A4	126 207	106 207	1
Pilot drill HSSE-Co 5 ground, Ø 6,35 x 82,0 mm and split point in accordance with DIN 1412 C	A1 / A2 / A5 / A6 / A7	126 206	106 206	1
Extension 300.0 mm, Shank shape  11.0 mm	A1 / A2	—	106 205	1
Ejector spring	—	—	106 208	1

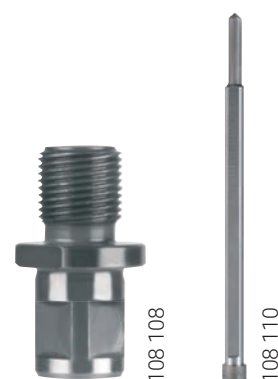
Arbor holders for tungsten carbide multigrade hole saws with threaded retainer M18 x 6 P1,5



Packaging: plastic

	for hole saws MHS Ø mm	Shank	suitable for magnetic drilling machines		
Arbor holder including guide drill item no. 113 216	31.0 - 100.0	Ø 13.0 mm	A10	113 201	1
Arbor holder including guide drill item no. 113 216	31.0 - 100.0	MT 2	RU25	113 203	1
Arbor holder with internal cooling including adapter item no. 108 108 and ejector pin item no. 108 110	31.0 - 100.0	MT 2	RU25	108 104	1
Arbor holder with internal cooling including adapter item no. 108 108 and ejector pin item no. 108 110	31.0 - 100.0	MT 3	RU40	108 105	1

Adapter for tungsten carbide multigrade hole saws with threaded retainer M18 x 6 P1,5



Packaging: plastic

	for hole saws MHS Ø mm		
Adapter with weldon shank 3/4" for multigrade hole saws MHS with threaded retainer M18 x 6 P1,5	31.0 - 100.0	108 108	1
Ejector pin Ø 6.35 x 118.0 mm	31.0 - 100.0	108 110	1



Recommended cutting speeds – for tungsten carbide hole saws

Material:		High carbon struc. steel up to 700 N/mm ²	Alloyed steel up to 1000 N/mm ²	Cast iron over 250 N/mm ²	CuZn alloy	Aluminium alloy up to 11% Si	Thermo- plastics	Duro- plastics	Wood
Vc = m/min		30	20	10	60	35	30	20	15
Coolant:		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø mm	Ø inch	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
16.0	5/8	995	697	796	1194	1194	896	796	995
16.5	-	965	676	772	1158	1158	869	772	965
17.0	11/16	937	656	749	1124	1124	843	749	937
18.0	45/64	885	619	708	1062	1062	796	708	885
18.6	47/64	856	599	685	1027	1027	770	685	856
19.0	3/4	838	587	670	1006	1006	754	670	838
20.0	25/32	796	557	637	955	955	717	637	796
20.4	13/16	781	546	624	937	937	703	624	781
21.0	13/16	758	531	607	910	910	682	607	758
22.0	7/8	724	507	579	869	869	651	579	724
22.5	57/64	708	495	566	849	849	637	566	708
23.0	29/32	692	485	554	831	831	623	554	692
24.0	15/16	663	464	531	796	796	597	531	663
25.0	1"	637	446	510	764	764	573	510	637
25.5	-	624	437	500	749	749	562	500	624
26.0	1 1/32	612	429	490	735	735	551	490	612
27.0	1 1/16	590	413	472	708	708	531	472	590
28.0	1 3/32	569	398	455	682	682	512	455	569
28.3	1 1/8	563	394	450	675	675	506	450	563
29.0	-	549	384	439	659	659	494	439	549
30.0	1 3/16	531	372	425	637	637	478	425	531
31.0	1 7/32	514	360	411	616	616	462	411	514
32.0	1 1/4	498	348	398	597	597	448	398	498
32.5	-	490	343	392	588	588	441	392	490
33.0	1 5/16	483	338	386	579	579	434	386	483
34.0	1 11/32	468	328	375	562	562	422	375	468
35.0	1 3/8	455	318	364	546	546	409	364	455
36.0	1 1/4	442	310	354	531	531	398	354	442
37.0	1 7/16	430	301	344	516	516	387	344	430
38.0	1 1/2	419	293	335	503	503	377	335	419
39.0	1 17/32	408	286	327	490	490	367	327	408
40.0	1 9/16	398	279	318	478	478	358	318	398
40.5	1 19/32	393	275	315	472	472	354	315	393
41.0	1 5/8	388	272	311	466	466	350	311	388
42.0	1 21/32	379	265	303	455	455	341	303	379
43.0	1 11/16	370	259	296	444	444	333	296	370
44.0	1 3/4	362	253	290	434	434	326	290	362
45.0	-	354	248	283	425	425	318	283	354
46.0	1 13/16	346	242	277	415	415	312	277	346
47.0	-	339	237	271	407	407	305	271	339
48.0	1 7/8	332	232	265	398	398	299	265	332
49.0	1 15/16	325	227	260	390	390	292	260	325
50.0	1 31/32	318	223	255	382	382	287	255	318
50.5	1 63/64	315	221	252	378	378	284	252	315
51.0	2"	312	219	250	375	375	281	250	312
52.0	2 1/16	306	214	245	367	367	276	245	306
53.0	2 3/32	300	210	240	361	361	270	240	300
54.0	2 1/8	295	206	236	354	354	265	236	295
55.0	2 11/64	290	203	232	347	347	261	232	290
56.0	2 13/64	284	199	227	341	341	256	227	284
57.0	2 1/4	279	196	223	335	335	251	223	279
58.0	2 9/32	275	192	220	329	329	247	220	275
59.0	2 5/16	270	189	216	324	324	243	216	270
60.0	2 3/8	265	186	212	318	318	239	212	265
63.5	2 1/2	251	176	201	301	301	226	201	251
65.0	2 9/16	245	171	196	294	294	220	196	245
70.0	2 3/4	227	159	182	273	273	205	182	227
75.0	2 61/64	212	149	170	255	255	191	170	212
80.0	3 5/32	199	139	159	239	239	179	159	199
85.0	3 11/32	187	131	150	225	225	169	150	187
90.0	3 35/64	177	124	142	212	212	159	142	177
95.0	3 3/4	168	117	134	201	201	151	134	168
100.0	3 15/16	159	111	127	191	191	143	127	159
110.0	4 11/32	145	101	116	174	174	130	116	145
120.0	4 23/32	133	93	106	159	159	119	106	133
130.0	5 1/8	122	86	98	147	147	110	98	122
140.0	5 1/2	114	80	91	136	136	102	91	114
150.0	5 29/32	106	74	85	127	127	96	85	106

Recommended cutting speeds – for bi-metal hole saws HSS and HSSE-Co 8

Material:		High carbon struc. steel up to 700 N/mm ²	Alloyed steel up to 1000 N/mm ²	Cast iron over 250 N/mm ²	CuZn alloy	Aluminium alloy up to 11% Si	Thermo- plastics	Duro- plastics	Wood
Vc = m/min		30	20	10	35	30	20	15	40
Coolant:		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø mm	Ø inch	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
14.0	9/16	682	455	227	796	682	455	341	910
16.0	5/8	597	398	199	697	597	398	299	796
17.0	11/16	562	375	187	656	562	375	281	749
19.0	3/4	503	335	168	587	503	335	251	670
21.0	13/16	455	303	152	531	455	303	227	607
22.0	7/8	434	290	145	507	434	290	217	579
24.0	15/16	398	265	133	464	398	265	199	531
25.0	1"	382	255	127	446	382	255	191	510
27.0	1 1/16	354	236	118	413	354	236	177	472
28.0	1 3/32	341	227	114	398	341	227	171	455
29.0	1 1/8	329	220	110	384	329	220	165	439
30.0	1 3/16	318	212	106	372	318	212	159	425
32.0	1 1/4	299	199	100	348	299	199	149	398
33.0	1 5/16	290	193	97	338	290	193	145	386
35.0	1 3/8	273	182	91	318	273	182	136	364
36.0	1 1/4	265	177	88	310	265	177	133	354
37.0	1 7/16	258	172	86	301	258	172	129	344
38.0	1 1/2	251	168	84	293	251	168	126	335
40.0	1 9/16	239	159	80	279	239	159	119	318
41.0	1 5/8	233	155	78	272	233	155	117	311
43.0	1 11/16	222	148	74	259	222	148	111	296
44.0	1 3/4	217	145	72	253	217	145	109	290
46.0	1 13/16	208	138	69	242	208	138	104	277
48.0	1 7/8	199	133	66	232	199	133	100	265
50.0	1 31/32	190	128	64	225	194	129	97	257
51.0	2"	187	125	62	219	187	125	94	250
52.0	2 1/16	184	122	61	214	184	122	92	245
54.0	2 1/8	177	118	59	206	177	118	88	236
57.0	2 1/4	168	112	56	196	168	112	84	223
59.0	2 5/16	162	108	54	189	162	108	81	216
60.0	2 3/8	159	106	53	186	159	106	80	212
63.0	2 15/32	152	101	51	177	152	101	76	202
64.0	2 1/2	149	100	50	174	149	100	75	199
65.0	2 9/16	147	98	49	171	147	98	73	196
67.0	2 5/8	143	95	48	166	143	95	71	190
68.0	2 11/16	141	94	47	164	141	94	70	187
70.0	2 3/4	136	91	45	159	136	91	68	182
73.0	2 7/8	131	87	44	153	131	87	65	175
76.0	3"	126	84	42	147	126	84	63	168
79.0	3 1/8	121	81	40	141	121	81	60	161
83.0	3 1/4	115	77	38	134	115	77	58	153
86.0	3 3/8	111	74	37	130	111	74	56	148
89.0	3 1/2	107	72	36	125	107	72	54	143
92.0	3 5/8	104	69	35	121	104	69	52	138
95.0	3 3/4	101	67	34	117	101	67	50	134
98.0	3 7/8	97	65	32	114	97	65	49	130
102.0	4"	94	62	31	109	94	62	47	125
105.0	4 1/8	91	61	30	106	91	61	45	121
108.0	4 1/4	88	59	29	103	88	59	44	118
111.0	4 3/8	86	57	29	100	86	57	43	115
114.0	4 1/2	84	56	28	98	84	56	42	112
121.0	4 3/4	79	53	26	92	79	53	39	105
127.0	5"	75	50	25	88	75	50	38	100
140.0	5 1/2	68	45	23	80	68	45	34	91
152.0	6"	63	42	21	73	63	42	31	84
160.0	6 5/16	60	40	20	70	60	40	30	80
168.0	6 5/8	57	38	19	66	57	38	28	76
177.0	6 31/32	54	36	18	63	54	36	27	72
210.0	8 1/4	45	30	15	53	45	30	23	61