

The POWERBOR® complete cutting technology allows holes to be produced quicker and more efficiently, compared to conventional drills, and due to the cutter design, the load per tooth is greatly reduced; and the power used by the machine is kept to a minimum. This greatly increases productivity and the life expectancy of the machine.

**POWERBOR®**

ANNULAR HOLE CUTTERS AND ACCESSORIES



## ANNULAR HOLE CUTTERS AND ACCESSORIES



### POWERBOR® STANDARD M2 HSS CUTTERS

- For cutting general engineering and structural steels
- Dramatically outperform conventional twist drills, in terms of cutting speed and tool life



### POWERBOR® PREMIUM M42 COBALT CUTTERS

- Keep their cutting edge for longer than standard HSS - producing more holes between resharpening, reducing the cost per cut and increasing productivity



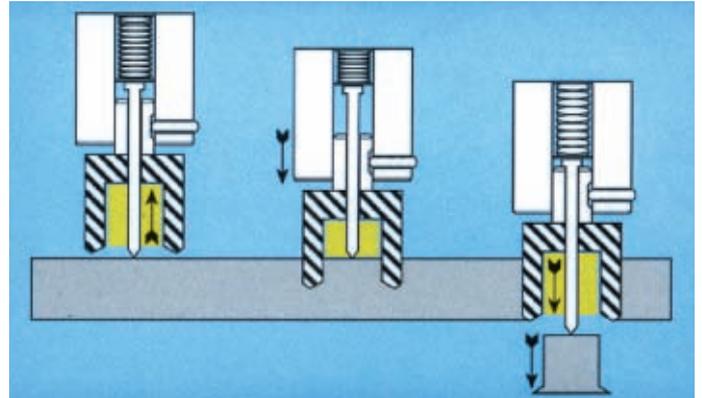
### POWERBOR® BLUE CUTTERS

- Distinctive 'blue' finish provides improved cutter properties and improved cutting performance
- Improved wear resistance, reducing friction and minimising 'pick up' of work piece material
- Greatly enhanced cutting tool life - three times longer - even without coolant
- Less stress on the drilling machine motor, leading to longer machine life

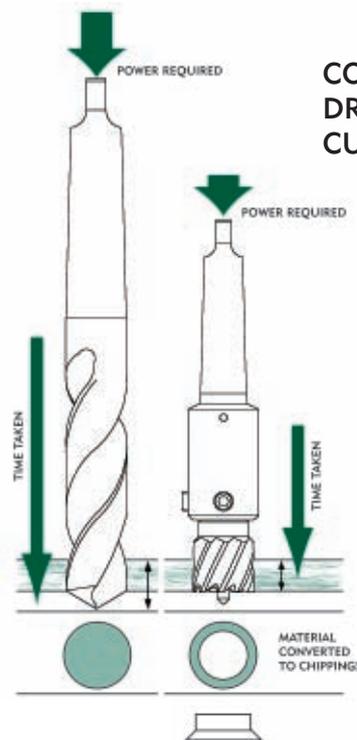


### POWERBOR® TUNGSTEN CARBIDE CUTTERS

- Suitable for drilling harder materials such as stainless steel, castings and higher grade wear resistant steels



POWERBOR® cutters produce a solid slug of steel which is ejected when the cutter breaks through and the hole is complete. This reduces the problems experienced by the swarf and chips generated by conventional drilling.



### COMPARISON OF TWIST DRILL AND BROACHING CUTTER PERFORMANCE

## POWERBOR® ACCESSORIES

REF NO	ITEM
PBA 130	1/2" x 20 Arbor
PBA 101	No. 2 MTS Arbor
PBA 102	No. 3 MTS Arbor
PBA 103	No. 4 MTS Arbor
PBA 104	No.2 Arbor (coolant)
PBA 105	No.3 Arbor (coolant)
PBA 106	No.4 Arbor (coolant)
PBA 113	Countersink 32mm
PBA 114	Countersink 65mm
	Clamping Plate
	Oil / Lubrication
	Spare Parts

## ANNULAR HOLE CUTTERS SPECIFICATIONS

### POWERBOR® CUTTER AVAILABILITY - METRIC



#### STANDARD M2 HSS

POWERBOR M2 CUT DEPTH 25MM		POWERBOR M2 CUT DEPTH 50MM	
DIA. MM.	AVAILABILITY	DIA. MM.	AVAILABILITY
12	•	12	•
13	•	13	•
14	•	14	•
15	•	15	•
16	•	16	•
17	•	17	•
18	•	18	•
19	•	19	•
20	•	20	•
21	•	21	•
22	•	22	•
23	•	23	•
24	•	24	•
25	•	25	•
26	•	26	•
27	•	27	•
28	•	28	•
29	•	29	•
30	•	30	•
31	•	31	•
32	•	32	•
33	•	33	•
34	•	34	•
35	•	35	•
36	•	36	•
37	•	37	•
38	•	38	•
39	•	39	•
40	•	40	•
41	•	41	•
42	•	42	•
43	•	43	•
44	•	44	•
45	•	45	•
46	•	46	•
47	•	47	•
48	•	48	•
49	•	49	•
50	•	50	•
51	•	51	•
52	•	52	•
53	•	53	•
54	•	54	•
55	•	55	•
56	•	56	•
57	•	57	•
58	•	58	•
59	•	59	•
60	•	60	•
61	•	61	•
62	•	62	•
63	•	63	•
64	•	64	•
65	•	65	•

3/4" SHANK

Pilot M12 (s) Pilot M12 (l)  
Pilot (s) Pilot (l)

#### COBALT

POWERBOR M42 CUT DEPTH 25MM		POWERBOR M42 CUT DEPTH 50MM	
DIA. MM.	AVAILABILITY	DIA. MM.	AVAILABILITY
12	•	12	•
13	•	13	•
14	•	14	•
15	•	15	•
16	•	16	•
17	•	17	•
18	•	18	•
19	•	19	•
20	•	20	•
21	•	21	•
22	•	22	•
23	•	23	•
24	•	24	•
25	•	25	•
26	•	26	•
27	•	27	•
28	•	28	•
29	•	29	•
30	•	30	•
31	•	31	•
32	•	32	•
33	•	33	•
34	•	34	•
35	•	35	•
36	•	36	•
37	•	37	•
38	•	38	•
39	•	39	•
40	•	40	•
41	•	41	•
42	•	42	•
43	•	43	•
44	•	44	•
45	•	45	•
46	•	46	•
47	•	47	•
48	•	48	•
49	•	49	•
50	•	50	•
51	•	51	•
52	•	52	•
53	•	53	•
54	•	54	•
55	•	55	•
56	•	56	•
57	•	57	•
58	•	58	•
59	•	59	•
60	•	60	•
61	•	61	•
62	•	62	•
63	•	63	•
64	•	64	•
65	•	65	•

3/4" SHANK

Pilot M12 (s) Pilot M12 (l)  
Pilot (s) Pilot (l)

#### BLUE

POWERBOR BLUE CUT DEPTH 25MM		POWERBOR BLUE CUT DEPTH 50MM	
DIA. MM.	AVAILABILITY	DIA. MM.	AVAILABILITY
12	•	12	•
13	•	13	•
14	•	14	•
15	•	15	•
16	•	16	•
17	•	17	•
18	•	18	•
19	•	19	•
20	•	20	•
21	•	21	•
22	•	22	•
23	•	23	•
24	•	24	•
25	•	25	•
26	•	26	•
27	•	27	•
28	•	28	•
29	•	29	•
30	•	30	•
31	•	31	•
32	•	32	•
33	•	33	•
34	•	34	•
35	•	35	•
36	•	36	•
37	•	37	•
38	•	38	•
39	•	39	•
40	•	40	•
41	•	41	•
42	•	42	•
43	•	43	•
44	•	44	•
45	•	45	•
46	•	46	•
47	•	47	•
48	•	48	•
49	•	49	•
50	•	50	•
51	•	51	•
52	•	52	•
53	•	53	•
54	•	54	•
55	•	55	•
56	•	56	•
57	•	57	•
58	•	58	•
59	•	59	•
60	•	60	•
61	•	61	•
62	•	62	•
63	•	63	•
64	•	64	•
65	•	65	•

3/4" SHANK

Pilot M12 (s) Pilot M12 (l)  
Pilot (s) Pilot (l)

#### TUNGSTEN CARBIDE

TCT CUTTERS CUT DEPTH 35MM	
DIA. MM.	AVAILABILITY
12	•
13	•
14	•
15	•
16	•
17	•
18	•
19	•
20	•
21	•
22	•
23	•
24	•
25	•
26	•
27	•
28	•
29	•
30	•
31	•
32	•
33	•
34	•
35	•
36	•
37	•
38	•
39	•
40	•
41	•
42	•
43	•
44	•
45	•
46	•
47	•
48	•
49	•
50	•
51	•
52	•
53	•
54	•
55	•
56	•
57	•
58	•
59	•
60	•
61	•
62	•
63	•
64	•
65	•

3/4" SHANK

Pilot(s)



Sizes from 66mm upwards are available to special order - ask for more details.

## ANNULAR HOLE CUTTERS SPECIFICATIONS

### POWERBOR® CUTTER AVAILABILITY - IMPERIAL



STANDARD M2 HSS			
POWERBOR M2 CUT DEPTH 1"		POWERBOR M2 CUT DEPTH 2"	
DIA. INCH	AVAILABILITY	DIA. INCH	AVAILABILITY
7/16	•	7/16	•
1/2	•	1/2	•
9/16	•	9/16	•
5/8	•	5/8	•
11/16	•	11/16	•
3/4	•	3/4	•
13/16	•	13/16	•
7/8	•	7/8	•
15/16	•	15/16	•
1	•	1	•
1.1/16	•	1.1/16	•
1.1/8	•	1.1/8	•
1.3/16	•	1.3/16	•
1.1/4	•	1.1/4	•
1.5/16	•	1.5/16	•
1.3/8	•	1.3/8	•
1.7/16	•	1.7/16	•
1.1/2	•	1.1/2	•
1.9/16	•	1.9/16	•
1.5/8	•	1.5/8	•
1.11/16	•	1.11/16	•
1.3/4	•	1.3/4	•
1.13/16	•	1.13/16	•
1.7/8	•	1.7/8	•
1.15/16	•	1.15/16	•
2	•	2	•
2.1/16	•	2.1/16	•
2.1/8	•	2.1/8	•
2.3/16	•	2.3/16	•
2.1/4	•	2.1/4	•
2.5/16	•	2.5/16	•
2.3/8	•	2.3/8	•
2.7/16	•	2.7/16	•
2.1/2	•	2.1/2	•
2.9/16	•	2.9/16	•
2.5/8	•	2.5/8	•
2.11/16	•	2.11/16	•
2.3/4	•	2.3/4	•
2.13/16	•	2.13/16	•
2.7/8	•	2.7/8	•
2.15/16	•	2.15/16	•
3	•	3	•
3.1/16	•	3.1/16	•
3.1/8	•	3.1/8	•
3.3/16	•	3.3/16	•
3.1/4	•	3.1/4	•
3.5/16	•	3.5/16	•
3.3/8	•	3.3/8	•
3.7/16	•	3.7/16	•
3.1/2	•	3.1/2	•
4	•	4	•
Pilot 7/16 (s)	•	Pilot 7/16 (l)	•
Pilot (s)	•	Pilot (l)	•

3/4" SHANK

1.1/4" SHANK

COBALT			
POWERBOR M42 CUT DEPTH 1"		POWERBOR M42 CUT DEPTH 2"	
DIA. INCH	AVAILABILITY	DIA. INCH	AVAILABILITY
7/16	•	7/16	•
1/2	•	1/2	•
9/16	•	9/16	•
5/8	•	5/8	•
11/16	•	11/16	•
3/4	•	3/4	•
13/16	•	13/16	•
7/8	•	7/8	•
15/16	•	15/16	•
1	•	1	•
1.1/16	•	1.1/16	•
1.1/8	•	1.1/8	•
1.3/16	•	1.3/16	•
1.1/4	•	1.1/4	•
1.5/16	•	1.5/16	•
1.3/8	•	1.3/8	•
1.7/16	•	1.7/16	•
1.1/2	•	1.1/2	•
1.9/16	•	1.9/16	•
1.5/8	•	1.5/8	•
1.11/16	•	1.11/16	•
1.3/4	•	1.3/4	•
1.13/16	•	1.13/16	•
1.7/8	•	1.7/8	•
1.15/16	•	1.15/16	•
2	•	2	•
2.1/16	•	2.1/16	•
2.1/8	•	2.1/8	•
2.3/16	•	2.3/16	•
2.1/4	•	2.1/4	•
2.5/16	•	2.5/16	•
2.3/8	•	2.3/8	•
2.7/16	•	2.7/16	•
2.1/2	•	2.1/2	•
2.9/16	•	2.9/16	•
2.5/8	•	2.5/8	•
2.11/16	•	2.11/16	•
2.3/4	•	2.3/4	•
2.13/16	•	2.13/16	•
2.7/8	•	2.7/8	•
2.15/16	•	2.15/16	•
3	•	3	•
3.1/16	•	3.1/16	•
3.1/8	•	3.1/8	•
3.3/16	•	3.3/16	•
3.1/4	•	3.1/4	•
3.5/16	•	3.5/16	•
3.3/8	•	3.3/8	•
3.7/16	•	3.7/16	•
3.1/2	•	3.1/2	•
4	•	4	•
Pilot 7/16 (s)	•	Pilot 7/16 (l)	•
Pilot (s)	•	Pilot (l)	•

3/4" SHANK

1.1/4" SHANK

### RECOMMENDED CUTTING SPEEDS FOR HSS POWERBOR® CUTTERS

CUTTER DIAMETER	HIGH TENSILE STEEL	MILD STEEL
	RPM	RPM
12	239	637
14	205	546
16	179	477
18	159	424
20	143	382
22	130	347
24	119	318
26	110	294
28	102	273
30	95	255
32	90	239
34	84	225
36	80	212
38	75	201
40	72	191
42	68	182
44	65	174
46	62	166
48	60	159
50	57	153
52	55	147
54	53	141
56	51	136
58	49	132
60	48	127
62	46	123
64	45	119
66	43	116
68	42	112
70	41	109
72	40	106
74	39	103
76	38	101
78	37	98
80	36	95
82	35	93
84	34	91
86	33	89
88	33	87
90	32	85
92	31	83
94	30	81
96	30	80
98	29	78
100	29	76

CUTTER DIAMETER	HIGH TENSILE STEEL	MILD STEEL
	RPM	RPM
7/16	262	698
1/2	229	611
9/16	204	543
5/8	183	489
11/16	167	444
3/4	153	407
13/16	141	376
7/8	131	349
15/16	122	326
1	115	306
1.1/16	108	288
1.1/8	102	272
1.3/16	96	257
1.1/4	92	244
1.5/16	87	233
1.3/8	83	222
1.7/16	80	213
1.1/2	76	204
1.9/16	73	196
1.5/8	71	188
1.11/16	68	181
1.3/4	65	175
1.13/16	63	169
1.7/8	61	163
1.15/16	59	158
2	57	153
2.1/16	56	148
2.1/8	54	144
2.3/16	52	140
2.1/4	51	136
2.5/16	50	132
2.3/8	48	129
2.7/16	47	125
2.1/2	46	122
2.9/16	45	119
2.5/8	44	116
2.11/16	43	114
2.3/4	42	111
2.13/16	41	109
2.7/8	40	106
2.15/16	39	104
3	38	102
3.1/16	37	100
3.1/8	37	98
3.3/16	36	96
3.1/4	35	94
3.5/16	35	92
3.3/8	34	91
3.7/16	33	89
3.1/2	33	87
3.9/16	32	86
3.5/8	32	84
3.11/16	31	83
3.3/4	31	81
3.13/16	30	80
3.7/8	30	79
3.15/16	29	78
4	29	76

#### PERIPHERAL SPEED

- MILD STEEL:  
24m/min - 80ft/min
- HIGH TENSILE STEEL:  
9m/min - 30ft/min



Sizes from 2.5/16" upwards are available to special order - ask for more details.