



ASP

Flexible
Drill head System

**“Universal Drilling” for small - to - medium batches
(Symmetrical and asymmetrical hole patterns
of varying types).**

**Each spindle can handle variable machine planes,
revolutions and machining tasks.**

**Drilling Tapping Flow Drilling - Thread molding
Countersinking and Brushing**

The Multi spindle Drill heads going by the Brand Bormaster® are gear driven and, thus, sturdier than comparable drilling heads with universal joints.

The performance figure taken from the equipment availability (activity unit) is greatly increased due to minor and schedulable maintenance times.

Up to 12 spindles can be driven / powered by using gearbox housing with a minimum of 4 idlers.

Only the Spindle plate has to be replaced should there be changes in dimensions or technical change in the machining tasks.

In general the existing interchangeable spindles (EBS) and idler (EBZ) can be reused.

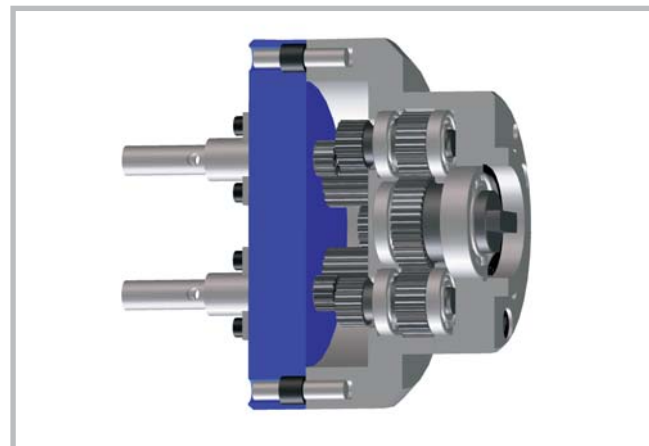
Resulting in a potential saving of up to 90% compared to a new drill head.

EBS Interchangeable Spindles:

There are many types available depending on the torque, center distance or clamping sleeve.

EBZ Interchangeable Idlers:

There are many different types available depending on ratio.



The flexible Drill head System (ASP) is available in three lines

	ASP 0	ASP 1	ASP 2
Max. Drilling Capacity in St 50	8 mm	14 mm	32 mm
Max. Revolution	5000 rpm	3000 rpm	2000 rpm
BM-Code	BM CODE 6313	BM CODE 6323	BM CODE 6333

ASP 0/100

corresponds with line **ASP 0** with a working area diameter of about **105 mm**.

Type	Working area ASP 0	interchangeable spindle / Type	Drilling capacity in St 50	smallest distance in mm	Clamping sleeve
100	105*	EBS/ER8/4	4 mm	M 3 13 mm	E1
150	155*	EBS/60/6	6 mm	M 5 18 mm	B1 B2 B3
200	200	EBS/80/8	8 mm	M 6 22 mm	C1 C2 C3
200R	200R 60 X 200	-			
380R	380R				

ASP 1/155

corresponds with line **ASP 1** with a working area diameter of about **155 mm**

Type	Working area ASP 1	interchangeable spindle / Type	Drilling capacity in St 50	smallest distance in mm	Clamping sleeve
110	110	EBS1/80/8	8 mm	M 6 22 mm	C1 C2 C3
155	155	EBS1/130/11	11 mm	M 10 25 mm	D1 D2 D3
195	195	EBS1/S16/11	11 mm	M 10 25 mm	G1 H1 H2 F1 F2 E3 E4
250	250	EBS1/130/13	13 mm	M 12 30 mm	D1 D2 D3
300	300	EBS1/S16/14	14 mm	M 12 30 mm	G1 H1 H2 F1 F2 E3 E4
250R	95 x 250	EBS1/S20/14	14 mm	M 12 32,5 mm	G3 H1 H2 H3 H4
380R	380R 65 x 380				

ASP 2/200

corresponds with line **ASP 2** with a working area diameter of about **206 mm**

Type	Working area ASP 2	interchangeable spindle / Type	Drilling capacity in St 50	smallest distance in mm	Clamping sleeve
200	206	EBS2/S20/16	16 mm	M 14 34 mm	G2 H1 H2
250	270	EBS2/S25/20	20 mm	M 16 38 mm	G3 H1 H2 H3 H4
300	302	EBS2/S28/23	23 mm	M 18 42 mm	G4 H1 H2 H3 H4 F3 E5
		EBS2/S36/32	32 mm	M 22 55 mm	D1 G5 H3 H4

*)translation / conversion / ratio optionally 1:1 or 1:2 into the fastest speed

Tapping capacity in St 50

		from - to in mm	grading in mm
E 1	collet ER 8	1,0 - 5,0	0,5
E 2	collet ER 11	1,0 - 7,0	0,5
E 3	collet ER 16	2,0 - 10,0	0,5
E 4	collet ER 20	2 - 13	0,5
E 5	collet ER 25	3 - 16	0,5
F 1	collet chuck ER 16 / Ø 16mm	-	-
F 2	collet chuck ER 20 / Ø 16mm	-	-
F 3	collet chuck ER 25 / Ø 28mm	-	-
A	collet 44	1,0 - 4,0	0,1
B 1	collet 60	1,0 - 6,3	0,1
B 3	collet 62	1,0 - 6,3	0,1
B 2	collet 61	M2 - M6	-
C 1	collet 80	1,0 - 8,5	0,1
C 3	collet 82	1,0 - 8,5	0,1
C 2	collet 81	M2 - M8	-
D 1	collet 130	1,0 - 10 10,25 - 14,0	0,1 0,25
D 3	collet 132	1,0 - 10 10,25 - 14,0	0,1 0,25
D 2	collet 131	M2 - M12	-
G 1	shank MT1 Ø 16mm	-	-
G 2	shank MT1 Ø 20mm	-	-
G 3	shank MT1/MT2 Ø 25mm	-	-
G 4	shank MT1/MT2 Ø 28mm	-	-
G 5	shank MT2/MT3 Ø 36mm	-	-
H 1	clamping sleeve MT1 DIN 6329	3,0 - 8,0	0,1
H 2	clamping sleeve MT1 DIN 6328	M3 - M10	-
H 3	clamping sleeve MT2 DIN 6329	5,0 - 13,0	0,1
H 4	clamping sleeve MT2 DIN 6328	M4 - M12	-
notice / drawings			

