

# MD500/2 2-Speed Long-Cutter Magnetic Drill

# A 2-speed 2000 W magnetic drilling machine

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Internal & Confidential

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# Introduction Target group & Applications

### MD500/2 Introduction

The MD500/2 is a two-speed, long-cutter machine. The two gears allow a wider range of cutter diameters to be used while maintaining maximum torque. For drilling with HSS or TCT annular cutters in steel, it is rated at 65 mm diameter with up to 75 mm length. The most outstanding feature of this machine is its exceptional 75 mm deep drilling capacity, with only a few competitors being able to match it. This machine uses an arbor support bracket to optimize its stability using large cutters.

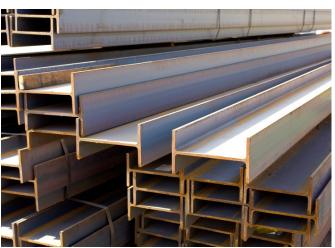
Although its primary purpose is drilling with annular cutters, a 5/8" (16mm) chuck can also be mounted by using the optional chuck adaptor (after temporarily removing the arbor support bracket). This allows the use of twist drills and other types of cutting tools such as countersinks, counterbores, and reamers. This makes the machine useful for a wide range of metalworking applications and industries.



### **Target Groups and Applications**

For operators in the metalworking, fabrication, steel frame construction, bridge building industry, or anyone who needs to drill up to 75mm thick steel, the MD500/2 is the tool for the job. Magnetic drills are convenient and portable, making them the perfect complement to a stationary drill press. Their powerful electromagnet can adhere to ferrous steel in any position needed, allowing accurately aligned perpendicular holes to be created. They are especially useful when the steel to be drilled is part of a larger structure which cannot be drilled by stationary equipment.

Here their ability to magnetically adhere to the workpiece really saves the day. This tool's performance creating large holes in thick steel is the best in its class.



### **Sales Arguments**

### **Extra Long Cutter Capacity**

Drill up to 75 mm thick steel in diameters up to 65 mm.



### 2-Speed Gearbox

Two gear ratios for maximum torque with a wider range of diameters.



#### **Arbor Support Bracket**

Extra stability when drilling with large diameters.



#### Quick-Release Arbor

Tool free cutter changes save time and effort.



#### Powerful Electromagnet

32,000 N electromagnet for reliable stability with large diameters.



### **Integrated Cutting Fluid Feed**

Cutting fluid automatically feeds when using annular cutters and can be fine adjusted as needed.



### **Technical Specification**

Model			MD500/2		
Power Input			2000 W (220 V), 1700 W (110 V)		
Voltage, Frequency			220-240 V~ 50-60 Hz, or 110-120 V~ 50-60 Hz		
No Load (Rated Load) Speeds			380 (230) min <sup>-1</sup>		
No Load (Rated	Load) Speeds	Gear 2	550 (330) min <sup>-1</sup>		
	Ø x Depth of Cut of Cutt	ers	65 mm x 75 mm (2-9/16" x 3")		
Max. Capacity	Ø Twist Drills		≤ 16 mm (5/8") shank		
	Stroke		115 mm (4-1/2")		
Overload Protection			With		
Magnetic Adhesion			32,000 N		
Weight			21.1 kg (46.5 lb)		

- 1 Coolant Tank
- 2 Coolant Feed Tap
- **3** Gear Selector
- 4 Arbor Support Bracket
- **5** Quick-Release Arbor
- 6 Annular Cutter (Not included)
- Magnet Base
- 8 Magnet Switch
- 9 Motor Switch
- 10 Crank Handle





### **Offer Content**

#### **Standard Accessories**

- MD500/2 Magnetic Drilling Machine
- Coolant Tank Kit
- **3** Wrench M8
- 4 L-Hex Key M4
- **5** L-Hex Key M2.5
- 6 Ratchet Strap
- Chip Guard Kit

### **Optional Accessories**

- **8** Chuck Adaptor
- § 5/8" (16 mm) Chuck & Chuck Key





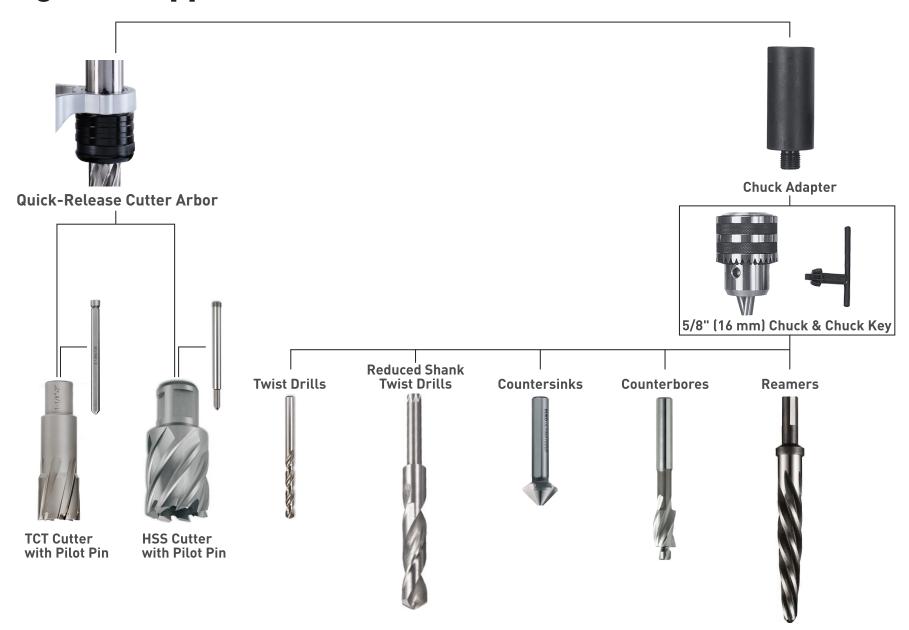








### **Cutting Tools Applications**



### **Comparison Table**

**Brand** 













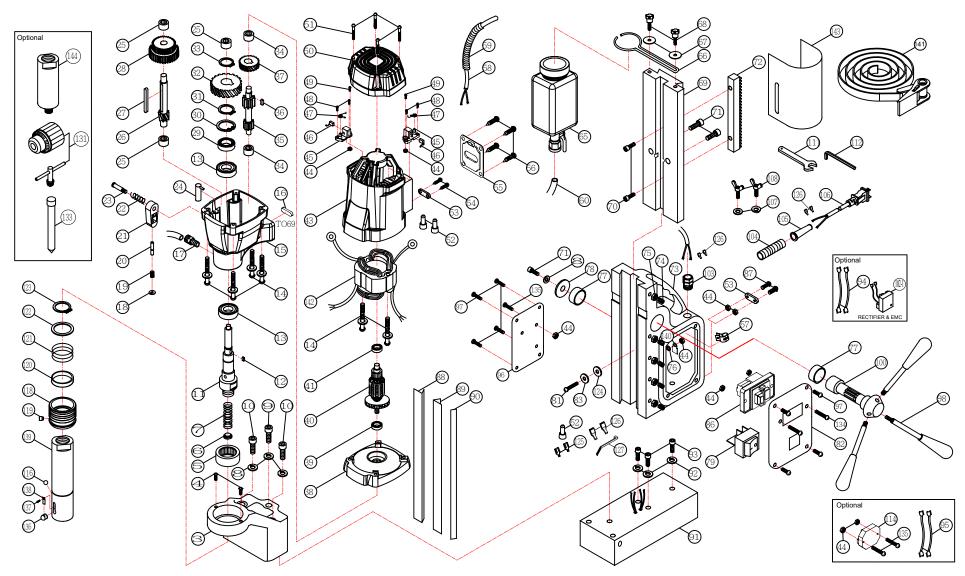


Model	MD500/2	AO-5575	HMD917			
Power	2000 W	1150 W	1553 W			
Capacity Ø (cutters)	65 mm	55 mm	60 mm			
Depth of Cut (cutters)	75 mm	75 mm	75 mm			
Twist Drills	16 mm	N/A	16 mm			
RPM-no load (rated load) I	380 (230) /min	350 (250) /min	(250 /min)			
RPM-no load (rated load) II	550 (330) /min	650 (450) /min	[450 /min]			
Overload Protection	Yes	Yes	Yes			
Gearbox Lubrication	Grease	Grease	Grease			
Cutter Shank	19.05 Weldon	One-Touch	19.05 Weldon			
Quick-Release Arbor	Yes	Yes	No			
Morse Taper Spindle	No	No	Optional			
Swivel Base	No	No	Optional			
Tapping	No	No	Optional (5/8", M16)			
Magnetic Force Display	No	Yes	Yes			
Magnetic Adhesion	32,000 N	10,000 N	1,125 kg (dead lift)			
Weight	21.1 kg	18.0 kg	20.9 kg (22.7 kg swivel base)			
Conclusion	The AGP is by far the most powerful and highest capacity machine in this category. Its magnet is also the strongest. It is the obvious best choice for 75mm depth of cut.					

### **Tool Dimensions**



### **Exploded View**



NO.01~144 Version 2022.05.20 D.888

## **Part List** \*To ensure the correct, most up-to-date price, please double check with AGP Europe.

NO.	PARTS NAME	Q'TY	DISTRIBUTOR	MARKET	WEARING	RECOMMENDED	NO.	PARTS NAME	Q'TY	DISTRIBUTOR	MARKET	WEARING	RECOMMENDED
			(EUR)			TO KEEP MORE				(EUR)	(EUR)	PART	TO KEEP MORE
3	ARBOR SUPPORT BRACKET (SILVER)	1	19.60	39.30			47	BRUSH SPRING (0.4x4x3.5T)	2	0.50	1.00	Υ	Υ
4	TRUSS HEAD MACHINE SCREW (M4-0.7 x 6)	2	0.30	0.40			48	PANHEAD TAPPING SCREW-B (M4x12)	4	0.30	0.40		
5	NEEDLE BEARING (HK 3516)	1	4.60	9.20		Υ	49	PANHEAD MACHINE SCREW (M4-0.7 x 10)	2	0.30	0.40		
6	WATER SEAL (Ø16x15)(WHITE)	1	0.70	1.30	Υ	Υ	50	MOTOR TAIL CASTING (BLACK)	1	3.50	6.90		
7	SPRING (Ø1.5xØ13.3xØ16.3x19Tx172L)	1	0.50	1.00	Υ	Υ	51	PANHEAD TAPPING SCREW-B (M4x20)	4	0.30	0.40		
8	SPRING WASHER (M8)	4	0.30	0.40			52	CRIMP CAP CONNECTOR (C4)	3	0.30	0.40		
9	SOCKET CAP SCREW (M8-1.25 x 60)	1	0.40	0.70			53	CABLE CLIP	2	0.30	0.40	İ	
10	SOCKET CAP SCREW (M8-1.25 x 70)	2	0.50	1.00			54	PANHEAD TAPPING SCREW-B (M4x16)	2	0.30	0.40		
11	SPINDLE (M27-159.6MM)	1	22.30	44.60			55	MOTOR COVER PLATE (BLACK)	1	1.50	3.00	İ	
12	PARALLEL KEY (5x5x12)	1	0.50	1.00		Υ	56	FLAT HEAD TAPPING SCREW-C (M5x10)	4	0.30	0.40		
13	OIL SEAL (Ø22xØ37x7)	2	1.30	2.60	Υ	Υ	57	CABLE CLAMP	1	0.40	0.70	İ	
14	PANHEAD TAPPING SCREW-B-W/WASHER (M5x60)	6	0.30	0.40			58	WIRE (2.0x2Cx90CM-SJTW)	1	4.60	9.20		
15	GEAR HOUSING (SILVER)	1	47.20	94.40			59	CABLE PROTECTOR (3/8"x50CM)	1	1.30	2.60	Υ	
16	PARALLEL KEY (4x4x30)	1	0.50	1.00		Υ	60	TUBE (Ø4xØ6x30CM)	1	0.30	0.40	Υ	Υ
17	PUSH LOCK FITTING (PT1/8"xØ6)(BLACK)	1	1.50	3.00			65	COOLANT TANK ASSEMBLY	1	9.20	18.50	Υ	Υ
18	E-CLIP (E-3)	1	0.30	0.40			66	COOLANT TANK BRACKET	1	1.20	2.30		
19	SPRING (Ø0.6xØ5.3xØ6.5x17Lx5T)	1	0.30	0.40	Υ	Υ	67	FLAT WASHER (Ø5xØ12x1)	2	0.30	0.40	ĺ	
20	DETENT PIN (Ø5x22.5)	1	0.70	1.30		Υ	68	THUMB SCREW (M5x16)(BLACK)	2	1.00	2.00	İ	
21	SELECTOR TAB (BLACK)	1	1.00	2.00		Υ	69	SLIDE PLATE (L375MM)	1	68.50	137.00	ĺ	
22	SPRING (Ø1xØ9xØ11x11Lx4T)	1	0.30	0.40			70	SOCKET CAP SCREW (M8-1.25 x 20)	2	0.30	0.40	İ	
23	SHOULDER SCREW	1	2.00	4.00		Υ	71	SOCKET CAP SCREW-PARTIAL THREAD (M8-1.25 x 16)	3	0.30	0.40		
24	SELECTOR FORK (Ø12x28 / Ø4x16)	1	3.60	7.30		Υ	72	GEAR RACK (M2.0x170L)	1	28.20	56.40	İ	
25	NEEDLE BEARING (HK 1010)	3	3.10	6.30		Υ	73	STAND BODY (CRINKLE FINISH BLACK)	1	123.90	247.80		
26	COUNTERSHAFT (M1.25x10T)	1	12.40	24.80		Υ	74	SOCKET SET SCREW (M5-0.8 x 25)	5	0.30	0.40	İ	
27	PARALLEL KEY (5x5x50)	1	0.70	1.30		Υ	75	HEX NUT (M5xP0.8)	5	0.30	0.40		
28	LAY GEAR (M1.25x30Tx33T)	1	26.60	53.10		Υ	76	EXTERNAL STAR WASHER (M5)	1	0.30	0.40	ĺ	
29	BALL BEARING (6204)	1	9.40	18.80		Υ	77	BUSHING (Ø32xØ38x12)	2	1.20	2.30	Υ	Υ
30	INTERNAL CIRCLIP (R-47)	1	0.40	0.70			78	FLAT WASHER (Ø8xØ40x2.5)	1	0.40	0.70	ĺ	
31	EXTERNAL CIRCLIP (S-20)	1	0.30	0.40			79	MAGNET SWITCH (110V&220V)	1	2.80	5.60		Υ
32	IDLER GEAR (M1.25x39T)	1	11.10	22.10		Υ	81	PANHEAD MACHIME SCREW-W/WASHER (M4-0.7 x 16)	1	0.30	0.40	ĺ	
33	EXTERNAL CIRCLIP (S-15)	1	0.30	0.40			82	SWITCH PANEL (130.5x90.5x1.5T)	1	2.00	4.00		
34	NEEDLE BEARING (HK 0810)	2	4.10	8.30		Υ	83	FLAT WASHER (Ø4xØ10x1)	1	0.30	0.40		
35	INPUT SHAFT (M1.25x10Tx13T)	1	13.90	27.70		Υ	86	MOTOR SWITCH (220V)	1	22.40	44.90		Υ
36	PARALLEL KEY (5x5x8)	1	0.50	1.00		Υ	87	PANHEAD MACHINE SCREW-W/WASHER (M4-0.7 x 30)	2	0.30	0.40		
37	INPUT GEAR (M1.0x29T)	1	6.60	13.20		Υ	88	GIB STRIP-LEFT (308MM)	1	5.90	11.90	Υ	Υ
38	GEAR PLATE (RED-187C)	1	20.30	40.60			89	GIB STRIP-RIGHT (308MM)	1	5.90	11.90	Υ	Υ
39	BALL BEARING (6202)	1	5.60	11.20		Υ	90	GIB TENSIONER (308x15x1.2T)	1	1.50	3.00		
40	ARMATURE (220V-94x54x45)	1	51.80	103.60		Υ	91	ELECTROMAGNET (200x100x68)	1	183.50	367.00		Υ
41	BALL BEARING (6200)	1	6.10	12.20		Υ	92	SPRING WASHER (M6)	3	0.30	0.40		
43	MOTOR HOUSING (GRAY-RAL7016)	1	11.20	22.40			93	SOCKET CAP SCREW (M6-1.0 x 20)	3	0.30	0.40		
44	HEX NUT (M4xP0.7)	10	0.30	0.40			94	WIRE LEAD (1015-16#18CM)	2	0.50	1.00		
45	BRUSH HOLDER (7x17)	2	2.50	5.00	Υ	Υ	95	WIRE LEAD (1015-16#18CM)	2	0.50	1.00		
46	CARBON BRUSH (7x17x17)	2	1.50	3.00	Υ	Υ	96	SIDE PANEL (130.5x90.5x1.5T)	1	2.00	4.00		

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NO.	PARTS NAME	Q'TY				RECOMMENDED
			(EUR)	(EUR)	PART	TO KEEP MORE
97	PANHEAD MACHINE SCREW (M4-0.7 x 8)	8	0.30	0.40		
98	CRANK HANDLE (BLACK)	3	4.30	8.60		
100	CRANK SPINDLE (Ø32)	1	23.80	47.50		
102	RECTIFIER & EMC (110V&220V)	1	12.90	25.70		Υ
103	CABLE GLAND (3/8")	1	4.00	7.90		
104	CABLE PROTECTOR (5/16"x7CM)	1	0.30	0.40	Υ	
105	CORD ARMOR	1	0.40	0.70		
106	POWER SUPPLY CABLE (VDE-1.5x3Cx3.5M-H05VVF)	1	15.70	31.40		
107	FLAT WASHER (Ø6xØ13x1)	2	0.30	0.40		
108	BUTTERFLY SCREW (M6-1.0 x 10)	2	0.70	1.30		
111	WRENCH (M8)	1	1.50	3.00		
112	HEX KEY (M2.5)	1	0.30	0.40		
114	OVER LOAD PROTECTION (220V)	1	26.40	52.80		Υ
116	CHECK BALL (Ø8)	1	0.40	0.70	Υ	Υ
118	QUICK-RELEASE COLLAR	1	17.50	35.00	Υ	Υ
119	COLLAR PIN (Ø8)	1	1.20	2.30		
120	RING (Ø40xØ44x9)(BLACK)	1	0.50	1.00	Υ	Υ
121	SPRING (Ø2.3xØ39xØ43.6x3Tx30L)	1	0.50	1.00	Υ	Υ
122	SPRING SEAT RING (Ø35.1xØ44.5x2)	1	1.20	2.30	Υ	Υ
123	EXTERNAL CIRCLIP (S-35)	1	0.30	0.40		
124	RUBBER WASHER (Ø4xØ11x1)	1	0.30	0.40		
125	FEMALE SPADE TERMINAL	2	0.30	0.40		
126	SPADE TERMINAL BOOT	6	0.30	0.40		
127	ZIP TIE (2.5x100MM)	1	0.30	0.40		
131	CHUCK (5/8")	1	10.90	21.80		Υ
133	PILOT PIN (HSSx77LxØ6.34)	1	3.10	6.30	Υ	Υ
133	PILOT PIN (HSSx103LxØ6.34)	1	3.60	7.30	Υ	Υ
133	PILOT PIN (TCTx90LxØ7.98)	1	3.30	6.60	Υ	Υ
133	PILOT PIN (TCTx90LxØ6.34)	1	3.30	6.60	Υ	Υ
133	PILOT PIN (TCTx106LxØ6.34)	1	3.60	7.30	Υ	Υ
133	PILOT PIN (TCTx108LxØ7.98)	1	4.10	8.30	Υ	Υ
134	PANHEAD MACHINE SCREW-W/WASHER (M4-0.7 x 20)	2	0.30	0.40		
135	PANHEAD MACHINE SCREW (M4-0.7 x 25)	3	0.30	0.40		
136	LOCK PIN (12.3MM)	1	2.50	5.00	Υ	Υ
137	PANHEAD MACHINE SCREW (M3-0.5 x 4)	1	0.30	0.40		
138	LOCK PIN SPRING	1	0.50	1.00	Υ	Υ
139	QUICK RELEASE ARBOR SHAFT (M27-152.5L)	1	27.10	54.10	Υ	Υ
140	EARTHING MARKING	1	0.30	0.40		
141	SAFETY BELT (BLACK)	1	5.00	9.90		
142	STATOR (220V-94x54X45)	1	36.10	72.30		Υ
143	CHIP GUARD	1	1.80	3.60	Υ	Υ
144	CHUCK ADAPTOR (M27 / 5/8")	1	13.40	26.70		Υ

### **Price & Logistics**

### MD500/2 Magnetic Drilling Machine

EAN Code									
Q'TY									
Units Price									

