

# Max 35/50 Plus Metal Core Drilling Machine

Prod.-No.: 17700



## Technical Data

Prod. – No.:	17700
Name :	MAX 35/50 Plus
Input:	1200 Watt
Load rpm:	570 rpm
Tool Holder :	19 mm / ¾“ Weldon
Coolant supply:	internal
Voltage:	(see nameplate)
Magnetic Adhesion:	13000 N
Boring Ø max. in Steel:	
- Core Cutter	12 - 35 mm
- Twist Drills	1 - 13 mm
Countersinking:	Ø 10 – 40 mm
Cutting Depth:	50 mm (2”)
Stroke:	129 mm
Size of Magnet Foot:	80 x 160 mm

## Standard scope of supply

- Transport Case
- Coolant Unit
- Safety Chain
- Allan Key 2,5 mm
- Allan Key 4,0 mm
- Allan Key 6,0 mm
- Toothed Ring Drill Chuck 1 – 13 mm
- Safety Guard

## Prior to use:



**Read Operation Manual!**



**Pay attention to Safety Precautions!**

## Appropriate Use

This device is destined to:

Cut material with magnetizable surface with core cutters, twist drills and to tap threads in sheltered environment for commercial use industry and craft. The device is suitable for drilling vertical, horizontal and overhead.

## Safety Precautions



### Danger of Injuries

During drilling operations on walls and ceilings, the Metal Core Drilling Machine must be safeguarded with the included safety chain. **The magnetic adhesion is not maintained in case of a failure of circuit.**

The cut core will be ejected automatically by the ejector pin. **Danger of accident!**  
**The ejector pin could possibly break in case of improper use.**

Only use undamaged power and extension cords and regularly check on damages!

**Power supply and voltage details at the device must correspond.**

## **Personal protection equipment**

When working with this device, wear the following protection equipment:  
Safety goggles, appropriate footwear, ear protection, hair net (for long hair), possibly also apron and safety helmet.

**Always use safety guard supplied with the machine !**

## **Precautions of use**

The place of installation for the magnet foot must be plane, clean and rust free.  
Remove lacquer- and filler.  
For non-magnetisable materials, please use the Rotabest Vacubest (Prod.-No. 18150).

Do not execute any electric welding on the work piece, on which the Metal Core Drilling Machine is used.

Prior to all operations, mount coolant unit.

## **Danger of injuries! Danger of an electric shock**

For operations on walls and ceilings, we recommend cooling with our spray Alfra BIO 2000, Prod. - No. 21010.

## Switching on and off

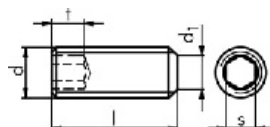


- Check connecting line and plug on damages first!
- Push button MAGNET ON, in order to initiate the magnet and the magnetic adhesion is guaranteed.
- When working on walls and ceilings, safe machine with safety chain.
- Push the button MOTOR ON to start the Motor.
- In case of a damaged magnet, the motor won't start.
- To switch off machine proceed in reverse order: MOTOR OFF and then MAGNET OFF!

## Change of tools

### How to work with annular cutters

- Push ejector pin (center pin) through head of annular cutter.
- Core drills with Weldon shank are tightened with clamping screws (DIN 913) on both clamping surfaces.



## How to work with twist drills

- The drill chuck is only to be used with twist drills
- Insert drill chuck with adaptor in the Weldon arbor.
- Insert twist drill in drill chuck and tighten.

## Operating tips

First, place annular cutter with ejector pin on a marked centre or marking. Drilling with ALFRA Rotabest cutters does not require much expenditure of force. Set the cutter and spot-drill, until the entire cut edge is formed as a circle.

During the drilling process, the cutter should be cooled permanently. Optimal Cooling is possible by internal cooling with our coolant unit.

During the drilling process, do not Stop the motor. After the process, cutter draws back with running motor.

Remove chips and core after each drilling. Remove chips with Chip-Remover – do not touch with bare hands – **DANGER OF INJURY!**

## Cleaning

**Danger of injuries** by unintentional switching on. Pull plug prior to cleaning.

Clean motor by means of dry compressed air (from the outside).

Check connecting lines on damages.

Clean and grease sliding surfaces regularly. Should, nevertheless, lateral play arise by wear of the dovetail guide, this could be adjusted by adjusting the laterally positioned set screw.

Carbon brushes should be replaced after appr. 250 hours running time.

After the work is finished, we recommend to store the Metal Core Drilling Machine in the transport case in a lying position.

## **Maintenance and repair**

**Maintenance, checks and repairs are only to be made by electronic specialists according to the valid regulations of the respective country.**

The Metal Core Drilling Machine MAX 35/50 Plus should be serviced after appr. 250 hours running time by our Alfra workshop or appointed dealers.

Only use genuine spare parts.

Spare part list at the end of this operation manual.

## **Guarantee**

For our ALFRA Rotabest Metal Core Drilling Machines we grant guarantee according to the legal and regional regulations (proven by invoice).

## **CE Declaration of Conformity**

We declare in our exclusive responsibility, that this product correspond to the following standards and specifications:

**Specification 89/392/EWG, 91/368/EWG  
DIN EN 292 part 1 and 2  
DIN EN 60204 part 1  
DIN VDE 0740 T**



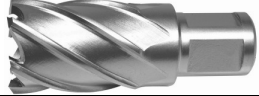


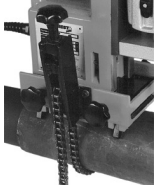


**The proof of an electromagnetic compatibility took place according the appropriate EC-Specification 89/336/EWG after the following norms:**

**EN 61000-3-2:1995/A1:1998/A2:1998  
EN 61000-3-3:1995  
EN 55014-1:1993/ A1:1997 55014-2:1997**

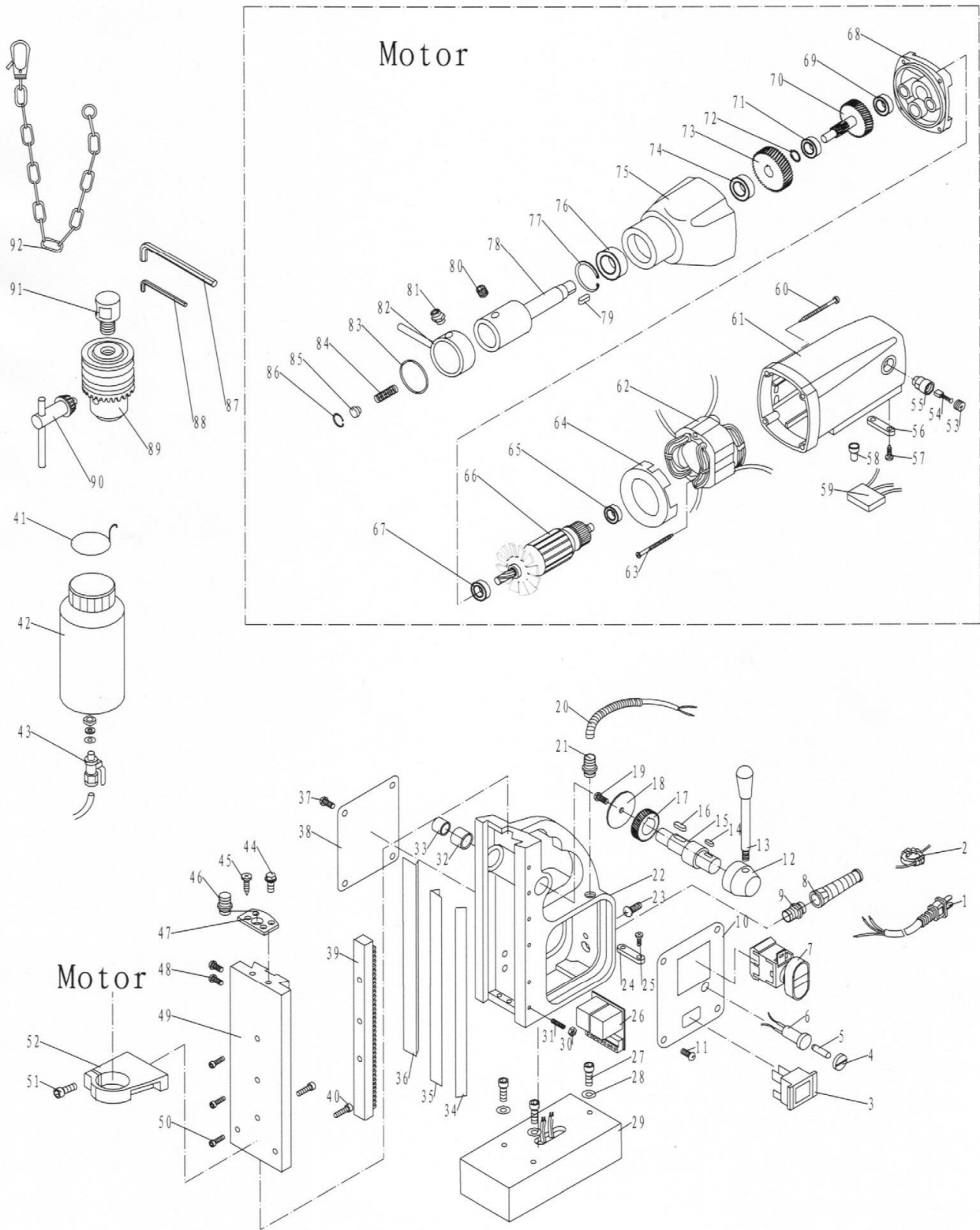
**If the electric tool is modified without our authorization, this declaration will lose its validity and the guarantee expires.**

**The sound pressure level at the work place might exceed 85 dp(A). In case the user must wear hearing protectors.**

## Accessories

	Alfra Rota Quick HSS Co Core Cutter Ø 12 – 35 mm Cutting depth 25 mm Product -No. 1901 0.. 025 / 1902 0.. 025
	Center- and ejector pin Product –No. 1926500
	Alfra Rota Quick HSS Co Core Cutter Ø 12 – 35 mm Cutting depth 35 mm Product -No. 1901 0.. 035
	Center- and ejector pin Product –No. 1935500
	Alfra Rota Quick HSS Co Core Cutter Ø 12 – 35 mm Cutting depth 50 mm Product -No. 1901 0.. 050 / 1902 0.. 050
	Center- and ejector pin Product –No. 1950500
	HSS Countersink and Deburrer Ø 25 mm Product No. 18533 Ø 30 mm Product No. 18536
	Drill Chuck Ø 1-13 mm Product -No. 18107
	Attachment for clamping pipes Product -No. 18019
	Alfra Bio 2000 Cutting Oil Product -No. 21010
	Alfra Magnetic Chip Remover Product -No. 18654

# Spare Parts



Pos.	Pord..-Nr.	
	18948276HO	Fexible cable GB/HO
	189480276GB	Fexible cable GB
2	189311202	Electro induction
3	189311203	Magnetic switch
4	189311204	Fuse cap
5	189311205	Fuse
6	189311206	Fuse holder
7	189311207	Motor starter 230 Volt
	189311207.110	Motor starter 110 Volt
8	189311208	Cable protector
9	189311209	Cable holder
10	189311210	Plate
11	189311211	M4 X 8 screw
12	189311212	Handle holder
13	189311213	Handle
14	189311214	4 X 10 key
15	189311215	Axle
16	189311216	5 X 15 key
17	189311217	Gear
18	189311218	Stop plate
19	189311219	M6 X 10 screw
20	189311220	Cable protector
21	189311221	Cable holder
22	189311222	Machine holder
23	189311223	M5 X 8 screw
24	189311224	Cable fixer
25	189311225	M4 X 10 screw
26	189311226	Controller
	189311226.110	Controller
27	189311227	M6 X 16 screw
28	189311228	Screw plate
29	189311229	Magnetic base
30	189311230	M5 screw unit
31	189311231	M5 X 16 screw
32	189311232	Bearing
33	189311233	Bearing
34	189311234	Internal slide
35	189311235	Slide
36	189311236	Slide
37	189311237	M5 X 8 screw
38	189311238	Plate
39	189311239	Rack
40	189311240	M6 X 20 screw
41	189311241	Hook
42	189311242	Tank
43	189311243	Valve
44	189311244	M6 X 10 screw
45	189311245	M5 X 15 screw

46	189311246	Cable holder
47	189311247	Drill holder plate
48	189311248	M5 X 12 screw
49	189311249	Out slide
50	189311250	M6 X 12 screw
51	189311251	M6 X 30 screw
52	189311252	Drill holder plate
53	189311253	Brush cap
54	189311254	Brush
55	189311255	Brush holder
56	189311256	Cable fixer
57	189311257	M4 X 12 screw
58	189311258	Connect cap
59	189311259	Capacity
60	189311260	M5 X 45 screw
61	189311261	Motor holder
62	189311262	Field core 230 Volt
6	189311262.110	Field core 110 Volt
63	189311263	M5 X 65 screw
64	189311264	Wind catcher
65	189311265	Bearing 6008
66	189311266	Armature 230 Volt
66	189311266.110	Armature 110 Volt
67	189311267	Bearing 6009
68	189311268	Gear box cap
69	189311269	Bearing 627
70	189311270	Gear
71	189311269	Bearing 627
72	189311272	Catch sping
73	189311273	Gear
74	189311274	Bearing 6003
75	189311275	Gear box
76	189311276	Bearing 6004
77	189311277	Catch sping
78	189311278	Spindle
79	189311279	5 X 15 key
80	189621036	M8 X 8 screw
81	189311281	Connect
82	189311282	Oil holder
83	189311283	O ring
84	189311284	Spring
85	189311285	Spring stop
86	189311286	Catch sping
87	DIN911-5	5mm hex wrench
88	DIN911-4	4mm hex wrench
89	189311289	Chuck
90	189311290	Chuck key
91	18105A	Chuck connect
92	189311292	Safty strain