

# Ingenieurbüro für Maschinenbau & Zubehör

# Magnetic filter systems with band filters Series FA- PBMA

### Use

These systems are used for the fully automatic continuous cleaning of cutting fluids with high requirements on the purity level and when machining ferrous, magnetic materials with large quantities of chippings.

### **Construction and operation**

The systems are made up of a welded coolant tank with a magnetic band filter and a feed pump. A dirty water tank is integrated in the coolant tank from which a raising pump transports the cutting fluid returning from the machine back to the magnetic band filter. A separate sludge box is provided to hold the used filter fleece and the impurities removed by the magnetic separator.

# Materials and application conditions

#### **Materials**

Tank: Sheet steel

Band filter: Steel and aluminium

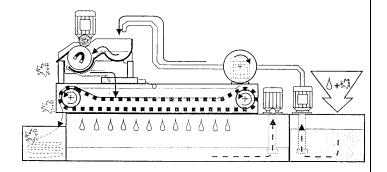
cast

Magnetic separator: Aluminium cast

#### Surface finish

Tank: primed

Band filter: with corrosion protection



## Scope of delivery

Coolant tank, band filter, magnetic separator, feed pump, raising station, sludge box 1 roll of filter fleece (200 m in length)

#### **Accessories:**

- Electrical terminal box instead of the electrical control box
- Electrical box to control the fleece transport
- Fluid level switch
- Belt skimmer
- Other feed pumps
- Filter fleece consumption switch
- Cooling unit
- Chip conveyors

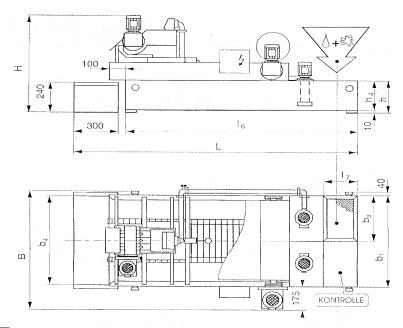
### **Example order**

Filter system for a circulation quantity of 120 l/min with magnetic band filter PBMA 126, coolant tank capacity 380 l,

feed pump: 125 l/min at 0,6 bar Filter system FA-PBMA 126



# Ingenieurbüro für Maschinenbau & Zubehör



FA-PBMA		40	60	120	250
Average outfeed fineness µm	Capacity I / min dependent on the filter fleece density for a viscosity of up to 6 mm²/s				
60-80		60	80	160	320
30-40		40	60	120	250
•		•	•	•	•
Main dimensions  Length  Width  Height	L	1820	1920	2320	3020
	В	715	935	1185	1615
	Н	865	865	865	925
•	Н	250	250	250	310
Fluid infeed	17	300	250	250	350
	b3	250	360	300	350
Tank	16	1500	1600	2000	2700
	b1	500	720	970	1400
	h4	240	240	240	300
Normal capacity in litres	Dirty water	30	35	35	80
		130	200	380	850
	b4	500	700	950	1400
Feed pump (or to meet client-specific requirements)	Delivery rate I/min	40	60	125	250
	Delivery head m	3	3	6	4
	µm 60-80 30-40  Length Width Height	Colient-specific requirements)   Figure 1	Average outfeed fineness μm         Capacity I / min dependent on the filter fleece density for a viscosity of up to 6 mm²/s         60           60-80         40         40           Length         L         1820           Width         B         715           Height         H         865           H         250           17         300           b3         250           I6         1500           b1         500           h4         240           s         Dirty water         30           Clean water         130           b4         500           c client-specific requirements)         Delivery rate I/min         40	Average outfeed fineness	Average outfeed fineness   μm   Capacity I / min   dependent on the filter   fleece density for a   viscosity of up to 6   mm²/s   60   80   160   40   60   120

To order the dimensions and position of the individual components can also be changed. If the machine outfeed height is sufficient the lifting station may not be required. The fluid is then fed direct into the magnetic separator. Details of the magnetic band filters are given in a separate information sheet.

**2003 edition** Technical data and illustrations are non-binding; we reserve the right to modify the design.

Christian Schmidt Str. 3 07545 Gera Tel.: ((0365) 55 11 683 Fax: (0365) 55 11 684 Email: info@imz-online.de