



# Magnetic Sliding Conveyor MAF

#### **Application**

For the automated separation of primarily ferromagnetic particles from liquids at throughput rates from 50 to 5000 ltr/min.

Machines to meet higher throughput rates are available on request.

#### Main fields of application

Cleaning of cooling lubricants (emulsions, grinding and cutting oils) used for the machining of workpieces consisting of ferritic materials (steel, grey cast iron, sintered metals, etc.).

## **Advantages**

- Reliable, automated operation
- No consumption of filtering materials
- Minimum energy requirements
- High separation efficiency even with respect to finest particles
- Discharges also non-ferritic particle deposits
- Operationally reliable and maintenance-free due to simple operating principle

# **Equipment options**

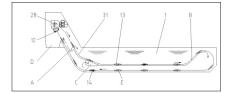
Magnetic systems that, depending on the required degree of separation, are fully or partially equipped with neodymium magnets.

Magnetic separator drum to meet high specific chip loads.

Designing and manufacture of completely custom-tailored machines, including control, pumps, valves, etc. to meet the requirements of individual clients.

#### **Design features**

Highly efficient permanent magnet systems pass through all liquid phases in the coolant container. Spring-borne scraper bars provide for the discharging of non-ferritic particle deposits.



### **Functional description**

The polluted liquid enters into the magnetic sliding conveyor by flowing through a special inflow attenuation facility (A).

Highly efficient magnetic systems (13) mounted between two revolving chains (31) run through the conveyor housing (1) over the stainless steel intermediate plate (B) and, after their deflection, over the stainless steel bottom (E) toward the discharging device (D).

Depending on the construction size of the separator, two or more spring-borne scraper bars (14) are mounted in between the magnetic systems. They convey even the deposited non-magnetisable solids to the discharging device.

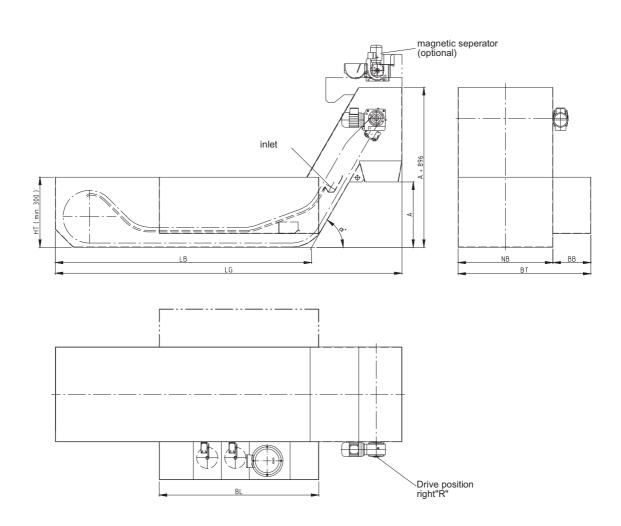
The polluted medium and the magnetic systems flow or pass through the conveyor housing (1) in the same direction, meaning toward the outlet (C) that exists on either one or both sides of the machine. The laminar flow conditions as well as the low difference between the speed at which the magnetic systems convey the collected material and the velocity at which the liquid flows through the machine, ensure the liquid phases stay as long as possible within the permanent magnets' field intensity range

Inside the discharging unit (D), spring-borne wiper strips (12) remove the separated solids from the magnetic systems or scraper bars (12) and discharge them into the sludge trolley.

All chip conveyors made by Bär + Co. comply with the accident prevention regulations enacted with regard to the operation of so-called "continuous conveyors".



# Magnetic sliding conveyor MAF



# Short designation:

Nominal standard width (NB): 500, 700, 900, 1200,

1400, 1480, 1580 mm

magnetic liding conveyor
Width of conveying channel (cm)
Theoretical length before
bending (dm)
drive position right or left

**Standard -** $\alpha$ °: 60°, 75°

magnetic sliding conveyor	measure of aggregate									power KW	motor
	NB	LB	LG	BL	ВТ	HT	Α	ВВ	α°	KVV	L or R
MAF										0,25	
										0,37	

Conveyed material / material	Volume of chips kg/h	Medium Viskosity mm²/sec	Coolant throughput I/min	Coolant p Flow of con- veyed material I/min			Frequence Hz	colour
ST GG								