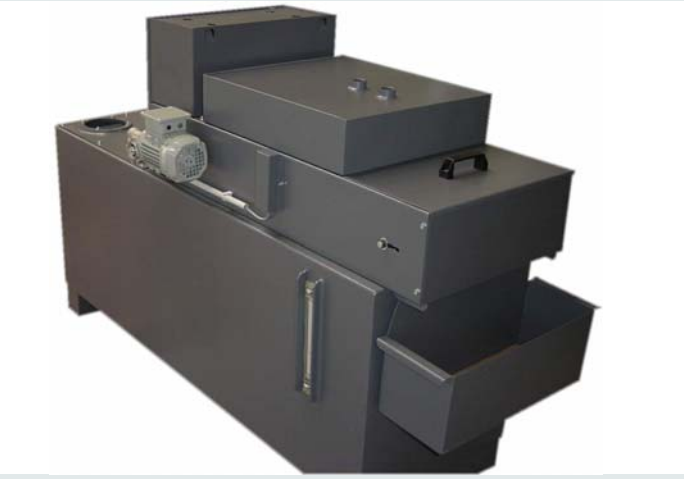
Maschinen und Armaturen

QUALITÄT
NACH MASS

Band Filter Systems

Processing systems for cooling lubricants not only makes sense in terms of environmental protection but they are also a prerequisite for drastically reducing costs. Filtering systems measurably extend the service life of cutting emulsions while also ensuring coolant is always recirculated to the production process in perfect condition. The result is greatly extended tool life and improved surface finish of workpieces. In addition, wear of pumps, guideways and rotary leadthroughs is significantly reduced and your staff are effectively protected from the harmful effects of cooling lubricants.



AXA band filter systems are fully automatic, continuously operating filters for cooling lubricants and oils of low viscosity. They operate without pressure in accordance with the gravity principle and filter solid particles, metal chips and swarf from the medium to be cleaned. They are used throughout the machine tool industry.

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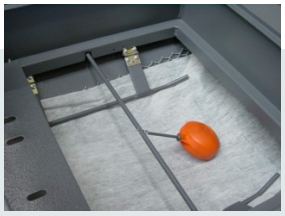
Band Filter Systems

Design

The automatic AXA band filter systems are mounted on a robust, welded steel frame. The geared motor that drives the feed belt in connection with a chain drive mechanism is installed directly on the steel frame. The two support rollers of the continuous feed belt are mounted in two maintenance-free bearings. The feed belt is designed as a braided wire structure which also forms the filter trough. The drive, which is controlled by a float switch, ensures optimum feed of the filter mesh. The fluid inlet is arranged directly above the filter trough. The band filter system is mounted straight on to a tank. Corresponding to customer requirements, the tank can be equipped with pump connections and/or submerged pumps.



Operation

The soiled medium flows via a connection in the cover into the filter trough and passes through the filter mesh which retains the dirt particles contained in the medium. In time a filter cake is formed that acts as an additional filtering element.

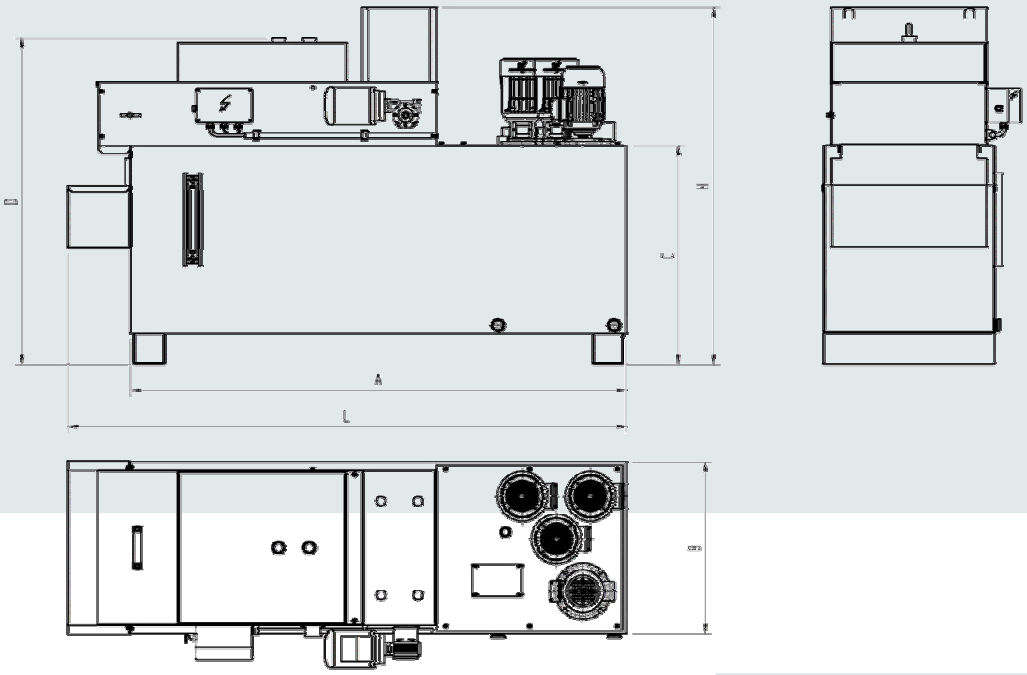
As the filter cake builds up it impedes the flow of medium, thus causing the fluid level in the filter trough to rise until a float switch is actuated. As a result, the float switch activates the feed belt and a new section of filter mesh is drawn in. Due to the now increased permeability, the fluid level drops, consequently switching of the feed belt. The section-by-section feed gradually replaces the filter mesh in the filter trough and the soiled section is moved into the slurry tank. A level switch in the tank ensures sufficient emulsion is always available.

Maintenance

System maintenance is basically restricted to routinely emptying the slurry tank and changing the rolls of fibre mesh.

Options

- Oil band skimmer
- Magnetic separator
- Pump connections and/or submerged pumps
- Tank size according to customer requirement



Technical specification

FA 25 / 400

- 400 — Tank volume in litres
- 25 — Nominal size
- FA — Filter system

	FA	25/400	38/600	100/1200
	A	1600	1800	2700
	B	550	650	800
	C	700	700	700
	D	1046	1046	1155
	L	1800	2000	2900
	H	1144	1144	1144
Throughput		100 dm³	150 dm³	300 dm³