Compact Filter KF-E

KF-E

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Properties / Benefits

Properties	Benefits
Compact design	Space-saving setup
Good price-performance ratio	Short amortization time
Greater hydrostatic pressure as compared to flat-bed filters	Higher delivery rate and better degree of purity
Sweeping strips and scraper	Problem-free discharge of chips, even light metal ones
Endless filter belt	Reduction of consumable and disposal costs
No carrying of cooling lubricant by the filter fleece	Reduction of costs for cooling lubricants

Application

KNOLL compact filters KF-E are belt filters for cleaning cooling lubricants of machining processes

- Use as stand-alone cleaning unit or combined with chip conveyors (e.g. in machining centers)
- Local (for one machine tool) or central (for several machine tools) use possible

Description

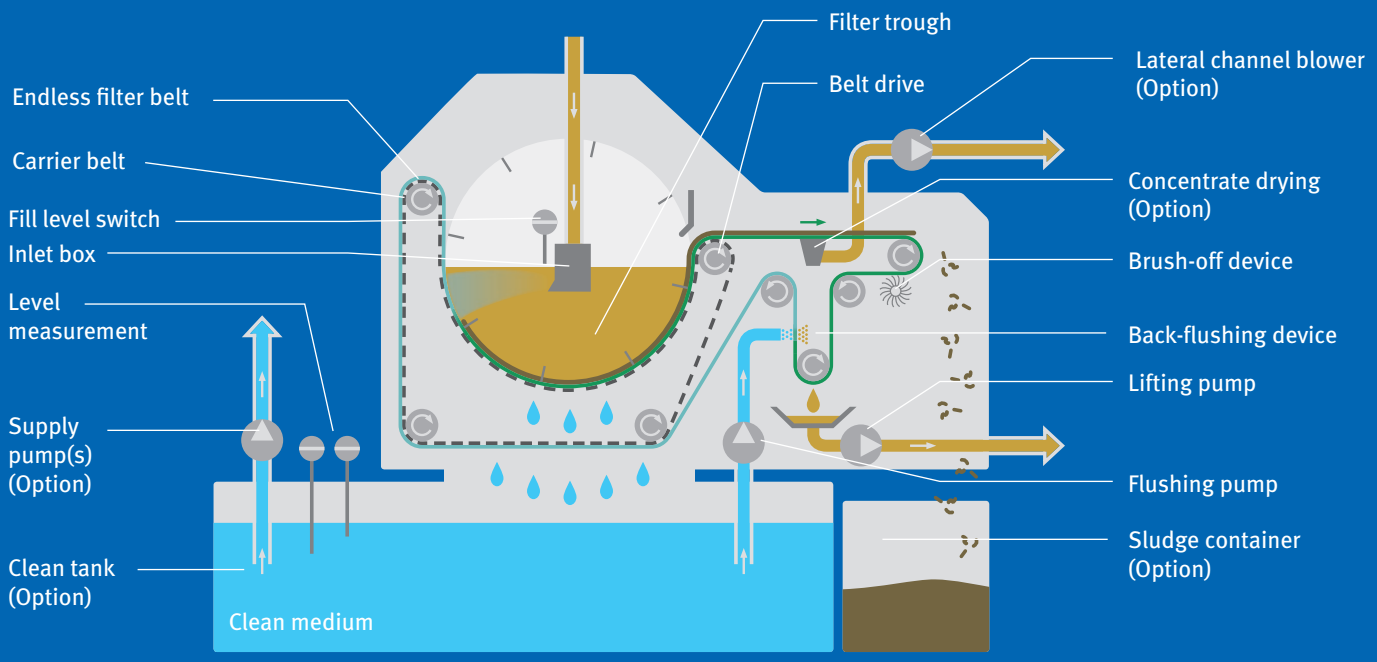
Filtration process

1. Contaminated liquid flows from the side through the inlet box into the filter trough
2. The filter fleece holds back the contaminant particles during streaming
3. The contaminant particles form a filter cake, which separates even tiny dirt particles
4. The filtered fluid collects in the clean tank

Regeneration process

1. The growing filter cakes increase the flow resistance
2. The fluid level in the filter trough increases
3. The belt drive switches on at a defined level (alternatively: time-controlled)
4. The carrier belt transports a piece of clean filter belt to the filter surface
5. The fluid level decreases again
6. A brush and back-flushing device clean the filter belt

Scheme



Equipment

Belt drive	●
Circulating carrier belt	●
Endless filter belt	●
Brush-off device	●
Back flushing device	●
Fill level measuring technology i.a.w. WRA	●
Control system	●
Concentrate drying with lateral channel blower	○
Magnetic roller as pre-separator	○
Cooling lubricant tank system with supply pump(s)	○
Duplex switch filter	○
Tempering (cooling/heating)	○
Sludge container	○

● Standard equipment
○ Option

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Compact filter KF-E

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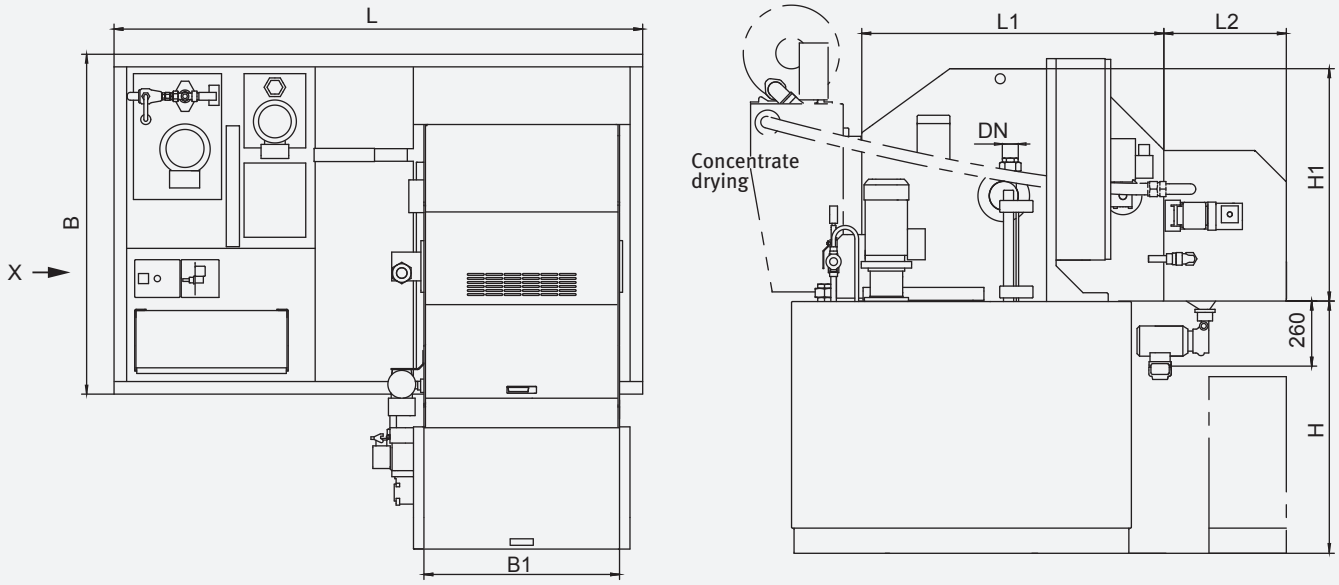
KF-E

Dimensions and technical data



Type	Filter capacity** (l/min) Emulsion[1]	Oil[2]	Solution	Inlet DN	Tank capacity (l)	Fleece width	H	H1	B	B1	L	L1	L2
KF 150-E	150	40	-	25	900	540	700	640	1100	600	1600	780	430
KF 200-E	200	90	-	25	1200	710	800	640	1100	780	1800	780	430
KF 400-E	400	280	-	40	2200	710	1000	945	1350	780	2100	1200	490
KF 600-E	600	400	-	40	3400	1020	1100	945	1500	1100	2500	1200	490
KF 1000-E	1000	720	-	100	6000	1020	1100	1240	1950	1100	3400	1495	460
KF 1500-E	1500	1100	-	100	9000	1520	1100	1240	1950	1605	5000	1495	460
KF 2000-E	2000	1430	-	100	12000	2000	1100	1240	1950[3]	2080	6800	1495	460
KF 150-E-L	-	-	150	25	900	540	700	640	1100	600	1600	780	430
KF 200-E-L	-	-	200	25	1200	710	800	640	1100	780	1800	780	430
KF 400-E-L	-	-	400	40	2200	710	1000	945	1350	780	2100	1200	490
KF 600-E-L	-	-	600	40	3400	1020	1100	945	1350	1100	2500	1200	490

Dimensions without units given in mm.
[1] υ = 1 mm²/s
[2] υ = 10 mm²/s (at operating temperature)
[3] uring longitudinal installation min. 2200 mm

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