



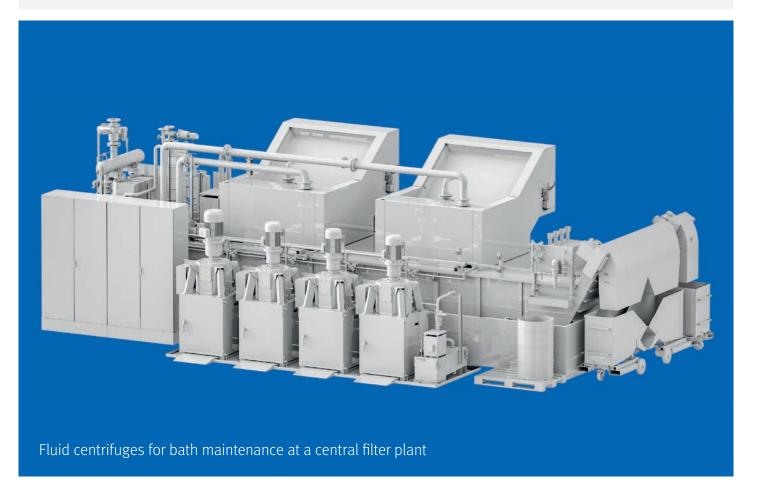
Properties	Benefits
Short regeneration cycle due to mechanical braking system	Fast and dynamic adaptation to the machining processes
Frequency-controlled, wear-free direct drive via coupling	Permanently low operating costs
Sound and oil mist isolation by means of closing flap	Low environmental impact from noise and emissions
Electronic vibration monitoring with automatic stop function	High process reliability
Separate speed monitoring of motor and drum	High process reliability
Automatic flushing of rotor and centrifugal valves	Low maintenance requirement

Application

The CA 100 automatic fluid centrifuge is a centrifugal separator for the continuous fine cleaning of cooling lubricants (CL) and other oils.

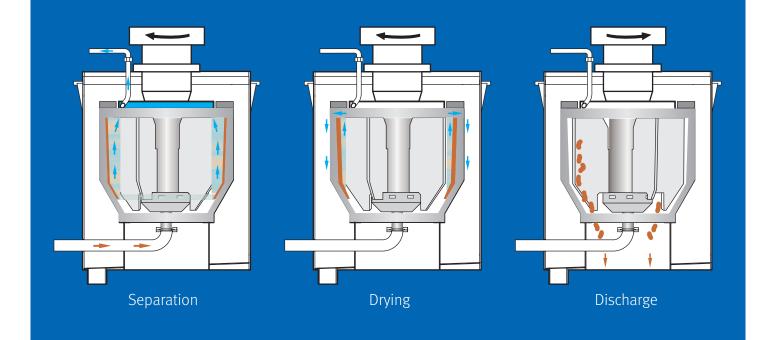
Ideal areas of application are

- Bath maintenance on centralized or decentralized filter systems (prevents the concentration of fine particles of steel, carbide, silicon, ceramic, graphite, etc.)
- Sludge concentration of reverse flow filters
- Full-flow cleaning of smaller fluid volumes from precision machining processes





Function



Function

1. Separation

- The drum accelerates to maximum speed.
- After the fluid to be cleaned enters, it spreads out in a ring on the drum wall due to the centrifugal forces.
- The dirt particles migrate outward due to their greater weight.
- A scraper tube picks up the cleaned fluid and conveys it out of the drum.

2. Drying

- The fluid supply stops.
- At reduced speed, the centrifugal valves open.
- The residual fluid emerges from the drum.

3. Discharge

- The brake stops and blocks the drum.
- The scraper blades rotate in the opposite direction.
- The semi-solid dirt falls down out of the centrifuge.

4. Flushing

- The drum accelerates, fluid flows into the centrifuge again.
- Then the drying and discharge phases start again.



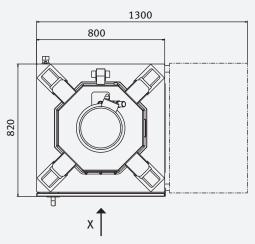


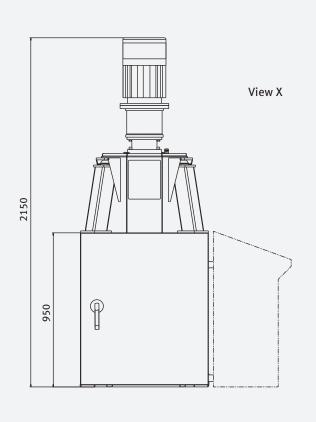
KNOLL Maschinenbau GmbH

Schwarzachstraße 20 DE-88348 Bad Saulgau Tel. +49 7581 2008-0 Fax +49 7581 2008-90140 info.itworks@knoll-mb.de www.knoll-mb.de



Dimensions and technical data





Max. flow rate 80 l/min (emulsion), 60 l/min (oil) Drum volume 31 l Medium capacity 15.5 l Sludge capacity 4.2 kg or 4 l Max. speed 3000 rpm Max. separation factor 1900 g Deceleration time from 1500 rpm approx. 3 s Regeneration time 2 to 4 min Power 7.5 kW Power consumption - at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Drum volume Medium capacity	31 l 15.5 l 4.2 kg or 4 l
Medium capacity 15.5 l Sludge capacity 4.2 kg or 4 l Max. speed 3000 rpm Max. separation factor 1900 g Deceleration time from 1500 rpm approx. 3 s Regeneration time 2 to 4 min Power 7.5 kW Power consumption 1.9 kW - at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Medium capacity	15.5 l 4.2 kg or 4 l
Sludge capacity Max. speed 3000 rpm Max. separation factor 1900 g Deceleration time from 1500 rpm approx. 3 s Regeneration time 2 to 4 min Power 7.5 kW Power consumption - at 20 1/min - at 40 1/min - at 80 1/min 3.4 kW Max. return pressure at the scraper tube Dimensions (LxWxH) Total weight Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10		4.2 kg or 4 l
Max. speed 3000 rpm Max. separation factor 1900 g Deceleration time from 1500 rpm approx. 3 s Regeneration time 2 to 4 min Power 7.5 kW Power consumption 1.9 kW - at 20 l/min 2.2 kW - at 40 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10		
Max. separation factor1900 gDeceleration time from 1500 rpmapprox. 3 sRegeneration time2 to 4 minPower7.5 kWPower consumption- at 20 l/min- at 20 l/min1.9 kW- at 40 l/min2.2 kW- at 80 l/min3.4 kWMax. return pressure at the scraper tube1 barDimensions (LxWxH)1300 x 920 x 2160 mmTotal weight570 kgMax noise emission66 dB(A)Separation phases2pH value6 to 10	Sludge capacity	3000 rnm
Deceleration time from 1500 rpm Regeneration time 2 to 4 min 7.5 kW Power consumption - at 20 l/min - at 40 l/min - at 80 l/min 3.4 kW Max. return pressure at the scraper tube Dimensions (LxWxH) Total weight Max noise emission Separation phases 2 pH value approx. 3 s approx. 3 s 2 to 4 min 1.9 kW 2.2 kW 3.9 kW 4.0 l/min 4.0 l/min 5.70 kW 5.70 kg 6.6 dB(A) Separation phases 2 6 to 10	Max. speed	3000 Ipili
Regeneration time Power 7.5 kW Power consumption - at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Max. separation factor	1900 g
Power consumption - at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Deceleration time from 1500 rpm	approx. 3 s
Power consumption - at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Regeneration time	2 to 4 min
- at 20 l/min 1.9 kW - at 40 l/min 2.2 kW - at 80 l/min 3.4 kW Max. return pressure at the scraper tube 1 bar Dimensions (LxWxH) 1300 x 920 x 2160 mm Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Power	7.5 kW
Dimensions (LxWxH) Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	- at 20 l/min - at 40 l/min	2.2 kW
Total weight 570 kg Max noise emission 66 dB(A) Separation phases 2 pH value 6 to 10	Max. return pressure at the scraper tube	1 bar
Max noise emission66 dB(A)Separation phases2pH value6 to 10	Dimensions (LxWxH)	1300 x 920 x 2160 mm
Separation phases 2 pH value 6 to 10	Total weight	570 kg
pH value 6 to 10	Max noise emission	66 dB(A)
	Separation phases	2
	pH value	6 to 10
Operating temperature 10 to 50 °C	Operating temperature	10 to 50 °C
Standards DIN EN 125/7 CE compliant according to 2006//2/EG	Standards	DIN EN 12547, CE compliant according to 2006/42/EG