



Properties	Benefits
Compact and modular	Space-saving installationFlexible and demand-driven configuration
Plug-and-Play	Fast installationEasy retrofitting
High pressure up to 150 bar with optional flushing pump	 Short-breaking chips Reduced processing times due to higher cutting speeds Extended tool life High flushing performance
Effective filtration via belt filter	 Reduced concentration of ultra-fine particles Long service life of components and the cooling lubricant (CL)
Wear-resistant screw spindle pump	Long service life and process reliability
Demand-driven pump control	Lower energy costsLower heat developmentLonger durability
Attractive price-performance ratio	Short amortization time

Application

The KNOLL high pressure unit LubiCool®-L is a compact high pressure unit for machine tools, particulary for small and medium machining centers and lathes. The system cleans the CL and provides the machine with high pressure.

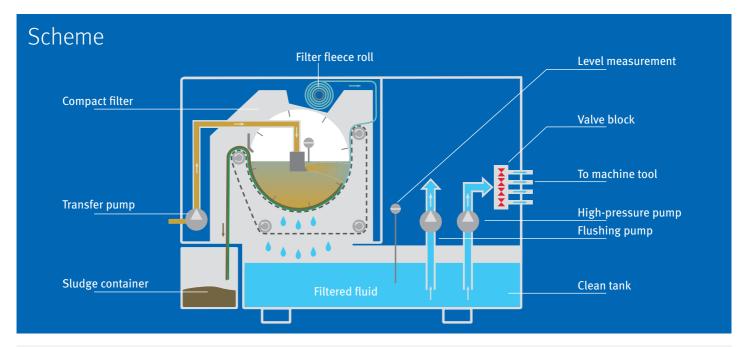
It is suitable for

- Demanding machining processes
- Machining difficult materials (e.g. high-alloy steels, titanium, copper)
- High pressure requirements with increased volume of CL
- Additional flushing requirements
- · Original equipment and retrofitting

Description

- 1. The transfer pump or the lift pump of the chip conveyor conveys the dirt CL from the machine tool into the compact filter.
- 2. The compact filter separates chips and the soiling from the CL, which flows in the clean media tank.
- 3. The dirty fleece is collected in the sludge container.
- 4. The high pressure pump provides the machine tool demand-driven with cleaned CL through switchable outputs.
- 5. The SmartConnect control enables control, monitoring and visualization of the system parameters.



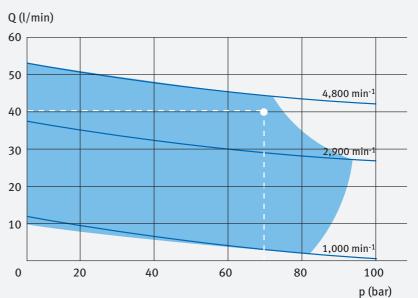


Pump characteristic curve

With the optional frequency control, every point within the diagram in the light blue area is possible.

Layout example

Media: Emulsion
Viscosity: 2 mm²/s
Pressure: 70 bar
Delivery rate: 40 l/min



Equipment

Paneling	•
KNOLL compact filter KF (with filter fleece)	•
KNOLL screw pump KTS	•
KNOLL SmartConnect control incl. touchpad and LED-status light	•
Interface cables (individual)	•
Clean tank	•
Sludge container	•
Fixed high pressure outlet	•
Transfer pump with frequency inverter	0
KNOLL centrifugal pump TG	0
Switchable outputs (1, 4 or 8 pieces)	0
Frequency inverter for all pumps	0
Cooling (continuous flow cooler or plate heat exchanger)	0
Temperature sensor	0
WHG-sensor	0
Hose set	0
Pressure reduction for spindle flushing	0

Standard equipmentOption

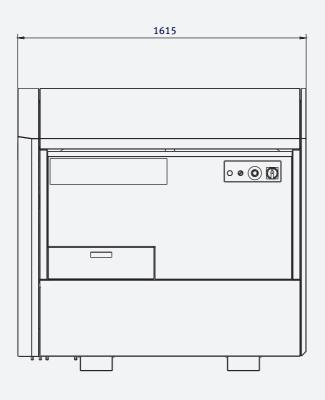


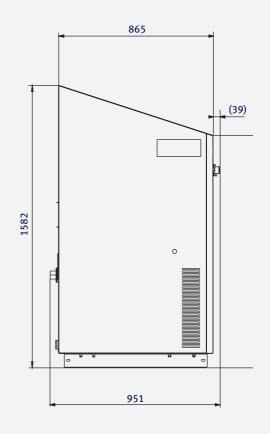
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Dimensions and technical data





Connected load high-pressure pump	7.5 kW
Connected load transfer pump	1.5 kW
Pressure range	Up to 100 bar
Volumetric flow	Up to 150 l/min
Filter fineness	Up to 20 μm
Cooling lubricant	Emulsion, oil
Power supply	400 V
Tank capacity	360 l
Dimensions (L x W x H)	1615 x 865 x 1582 mm