



Mobile Flushing Unit, MFU

Oil filtration and gear flushing for mining applications

Product Sheet

APPLICATION

The CJC® Mobile Flushing Unit (MFU) is used for flushing of gear-boxes in rough environments, especially within the mining sector, such as truck shops, service sites etc. The MFU is equipped with wheels for high mobility and constructed for high viscous gear oils.

BENEFITS

- Maximize fleet availability
- Avoid unexpected and expensive breakdowns
- Reduce maintenance costs - less component wear
- Monitoring of oil cleanliness level
- Efficient maintenance service
- Fast flushing – 30 min. up to a few hours
- User-friendly and easy to operate
- Avoid oil changes and save the environment

FEATURES

- Optimized for gear oils in differential / planetary gears in heavy mobile equipment
- Flushing of the gear without use of MFU tank
- Oil filtration on MFU tank
- Filtration and transferring of new oil to the gear
- CJC® Oil Contamination Monitor (OCM) for monitoring of oil cleanliness before or after the filter
- Automatic flow regulation based on oil viscosity
- Preheaters to maintain an optimal oil temperature
- Large dirt holding capacity
- Cam-Lock couplings for easy mounting
- Removable tool box for storage
- Drain plug at the bottom of the heaters for easy oil change

FUNCTION

The flushing is performed with a pump flow of approx. 800 l/h circulating the gearbox volume several times through the system. The flushing speed depends on the oil temperature / viscosity and is automatically controlled by a pressure transmitter in combination with a frequency inverter. Preheaters maintain an optimal oil temperature, thus making the maximum flushing speed possible. The MFU is hose connected to the gear using Camlock couplings for easy mounting and low pressure loss. Alternatively the gear can be drained directly to the MFU tank using the camlock connection on the tank. A built in CJC® Oil Contamination Monitor, OCM makes it possible to do monitoring of the oil cleanliness, before or after the CJC® Offline Fine Filter, during the flushing process.

THE PUMP

The pump is a gear wheel pump. The electric motor can be supplied for all standard AC voltages and for 50/60 Hz.

FILTER INSERT

The CJC® Filter Inserts consist of several discs bonded together. The material is either cellulose or cotton linters depending on the fluid to be filtered.

FILTRATION ABILITY

- **Particle Removal**
All CJC® Filter Inserts have the following filtration degree:
 - **3 µm absolute:** 98.7% of all solid particles > 3 µm
 - **0.8 µm nominal:** 50% of all solid particles > 0.8 µm are retained in each pass.The dirt holding capacity is 16 L of evenly distributed solids.
- **Degradation Products**
Oxidation products, resin/sludge, and varnish are retained by the cellulose material, retaining appr. 16 kgs of oil degr. products.
- **Water Removal**
The water absorption potential is up to 50% (i.e. 2,000-8,000 mL H₂O) of the total contaminant holding capacity.



The CJC® Mobile Flushing Unit, MFU

TECHNICAL DATA

Mobile Flushing Unit		MFU 27/108
Pump flow, 50/60 Hz	ltr/h gal/h	≤ 850 ≤ 225
Pump type		GP 26-8
Pump inlet pressure, max.	bar/psi	1.5 / 22
System outlet pressure, max.	bar/psi	0.5 / 7.3
Gear Flushing Inserts, GFi	pcs.	4
Power consumption, aver.	kW	10.5
Preheater power	kW	2x 4.4
Oil temperature, max.	°C / °F	80 / 176
Dry weight	kg/lb	497 / 1096
Design pressure, filter	bar/psi	7 / 102
Ambient temp. max	°C / °F	40 / 104
Tank volumen	L / gal	250 / 66

*) The standard filters are designed for a max. temp. of 80°C / 176°F. Other conditions, please contact us.



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INSTALLATION PRINCIPLE

