# Mobile Flushing Unit, MFU

**Oil Filtration and Gear Flushing for Mining Applications** 



# **CJC<sup>™</sup>** Product Sheet

### APPLICATION

The CJC<sup>™</sup> Mobile Flushing Unit. MFU is used for flushing of gearboxes 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**

- Efficient filtration
- Prevent premature wear
- Avoid unexpected breakdowns
- Monitoring and logging of oil cleanliness
- Avoid oil changes and save the environment
- High flushing speed
- Efficient maintenance service
- User-friendly and easy to operate
- · Reduced maintenance costs
- Designed for rough environment

# FEATURES

- · Easy Cam-Lock coupling connection Complete drain to MFU tank followed by flushing of the gear
- Flushing of the gear without use of MFU tank
- Oil filtration on MFU tank
- Filtration and transferring of new oil to the gear To protect the MFU a 1000  $\mu m$  strainer is mounted before the pump
- Removable tool box for storage
- Designed for easy cleaning

## FUNCTION

The flushing is performed with a pump flow of approx. 800 I/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 integrated funnel. A built in CJC<sup>™</sup> Oil Contamination Monitor, OCM makes it possible to do monitoring and logging of the oil cleanliness, before or after the CJC<sup>™</sup> 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  $\mathsf{CJC}^{\mathrm{m}}$  Filter Inserts consist of several discs bonded together. The material is either cellulose or cotton linters depending on the fluid to he filtered

#### FILTRATION ABILITY

- Particle Removal
  - All CJC<sup>™</sup> Filter Inserts have the following filtration degree:
  - **3**  $\mu$ m absolute: 98.7% of all solid particles > 3  $\mu$ m - 0.8  $\mu$ m nominal: 50% of all solid particles > 0.8  $\mu$ m
  - are retained in each pass.
- The dirt holding capacity is 16 L of evenlydistributed 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 H<sub>2</sub>O) of the total contaminant holding ca pacity.



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The CJC™ Mobile Flushing Unit, MFU HDU 27/108 GP

#### **TECHNICAL DATA**

		MFU 27/108 GP
Pump flow, 50/60 Hz	ltr/h / gal/h	700/850 / 185/225
Pump type		GP 26-8
Pump inlet pressure, max.	bar/psi	0.5 / 7
Tank capacity	ltr/gal	240 / 63
Filter Inserts 27/27	pcs.	4
Power consumption, aver.	kW	10.7
Pressure drop, max.	bar/psi	1.8 / 26
Oil temperature, max.	°C/°F	80 / 176
Dirt hold. capacity, appr.	ltr/gal	16 / 4.2
Water absorption capacity	ltr/gal	8 / 2.1
Dry weight	kg/lb	470 / 1036
Operating weight, wet		710 / 1565
Design pressure, filter	bar/psi	4 / 58
Ambient temp. max	°C/°F	40 / 104

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

	APPLICABLE FILTER INSERTS
Туре	Application for
В	Higher flow (larger system fluid volumes)



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# COMPONENTS

	••••••
ltem	Part
1	CJC™ Mobile Flushing Unit, MFU
2	Pump type GP 26-8
3	Pressure gauge 0 - 10 bar
4	Drain ball valve 1/2"
5	3 way valve for CJC™ OCM 15x
6	Pump type Marzocchi 0.25 R 18
7	Control box
8	Sampling point
9	Pressure switch
10	Level switch
11	Automatic air vent
12	Inlet 3 way valve
13	Outlet 3 way valve
14	Sight glass
15	Electric immersion heater 4.4 kW
16	Vacuummeter
17	Thermometer
18	Air vent
19	CJC™ OCM 15x
20	Strainer (1000 µm)
21	Position indicator
22	Inlet tank
23	Pressure transmitter
24	Hoses 3m (1½")
25	Strainer (500 µm)
26	Non return valve
Α	Oil inlet 1½"
В	Oil outlet 1½"
С	½" BSP, drain valve
D	Automatic air vent
F	Sampling point

E Sampling point



DIMENSIONS

