



HDU FINE FILTRATION AND CONDITIONING UNIT

Gear and bearing lubrication \leq ISO VG 680 cSt

The lubrication system

- Improved run factor of the equipment
- Improved component life
- Extended oil life and oil change intervals
- Less cleaning and flushing of system
- Reduced maintenance costs
- Fast, simple installation
- High flexibility for retrofits and upgrades

The HDU unit features

- 3 μ m continuous off-line fine filtration
- Very high dirt-holding capacity
- High water absorption capacity
- Capability to absorb oil oxidation products, such as resin, sludge and varnish
- Optional capability to monitor the degree of contamination (ISO 4406 code)

HDU Unit for gear and bearing lubrication \leq ISO VG 680 cSt

The conditioning technology

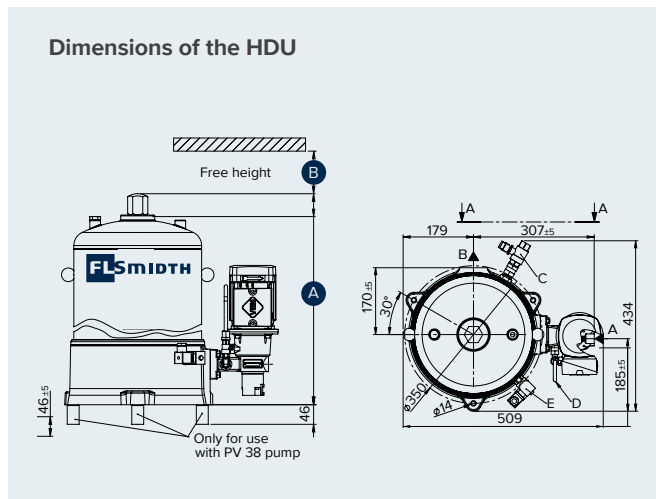
Most gear units and many roller bearing systems operate with medium viscosity grades of mineral or synthetic oils.

Enclosed gear boxes and bearing housings are normally considered as a sealed system where the contamination from the surrounding is limited. The capacity of the existing filter elements is limited to the expected internal wear developing over decades of operation.

For gear units operating in combination with a mill girth gear, the challenge is to maintain the oil guard dust-proof. In such applications, the contamination can be extremely high, reducing the lifetime of the components.

The desired level of cleanness according to ISO 4406 depends on the application, but is often limited to 19/17/14 or lower.

The efficiency of the HDU unit can normally reduce the contamination level to ISO4406 code 16/14/11 or better.



Type	HDU 27/81 PV	HDU 27/108 PV	HDU 427/54 MZ	HDU 427/108 MZ	HDU 427/108 MZ+
System volume, ltr	<600	<1000	<3000	<6000	<8000
Flow, ltr/hour	150	250	590	785	1260
HDU pump motor, VAC	3x400 V 50 Hz	3x400 V 50 Hz	3x400 V 50 Hz	3x400 V 50 Hz	3x400 V 50 Hz
ISO VG, cst	150-680	150-680	150-680	150-680	150-680
Pipe connection, mm/inch	3/4" BSP	3/4" BSP	Ø 18	Ø 22	Ø 22
Drip pan / tank	drip pan	tank	tank	tank	tank
HDU filter inserts	3 off BM 27/27	4 off BM 27/27	8 off BM 27/27	16 off BM 27/27	16 off BM 27/27
HDU filter insert arrangement					

Efficiency

Dirt capacity, ltr	12	16	32	64	64
Water capacity, ltr	6	8	16	32	32
Oxidation products, kg	12	16	32	64	64

Weight & dimensions

Weight, net, kg	106	155	375	455	455
Height A mm	1285	1659	1370	1910	1910
Free height B mm	872	602	685	1220	1220
Max. width mm	800	810	1240	1240	1240

Optional

Preheating ¹ incl. control box ²	1 kW	1.65 kW	3 kW	4.4 kW	4.4 kW
OCM15 ISO4406 incl. control box ²	yes	yes	yes	yes	yes
Trolley mounted	yes	yes	n/a	n/a	n/a

1) Mandatory for oil temperature less than 40°C

2) Only one control box is required for systems with both preheating and OCM 15

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