

Separator OSE ..-01-067/OSE ..-91-067

Technical Data | High-performance centrifuge for efficient treatment of fuel oil and lube oil in power plants



The GEA Westfalia Separator **eagle**class separator has been designed for the continuous treatment of fuel oil and lube oil in diesel engine and gas turbine power plants as well as in off-shore installations. The separator easily removes impurities (e.g. sand, rust, water) from the oil providing a clean fluid which meets the quality requirements for safe power plant operation.

Materials of construction

Frame:	Grey cast iron
Hood:	Silumin
Main bowl parts:	Stainless steel

Standard equipment

- · 3-phase AC motor
- Rubber cushions with welding plates

- Flexible feed and discharge lines
- Pressure gauge and transmitter

Additional equipment (at extra cost)

- Motor control
- · Control unit for automatic operation
- Pump
- Pre-heater
- · Automatic steam valve
- Shut-off valve
- · Controls for electric heaters
- · Set of tools and spare parts
- · Vibrocontrol
- Product temperature monitoring
- Flow indicator
- 3/2-way valve
- · Pressure discharge of heavy phase
- All separation systems are available as ready-to-connect modules

Your benefits

- Reduced operating costs resulting from longer engine and component life, fewer oil change intervals and disposal volumes
- · High throughput capacities
- High separation efficiency thanks to GEA Westfalia Separator softstream inlet
- Controlled and rapid solids ejection due to GEA Westfalia Separator hydrostop
- Minimized weight, space requirement and energy consumption
- Easy maintenance and operation
- · Low noise level due to the belt drive



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Operating principles and constructional features



 Dirty oil feed / displacement water feed
Clean oil discharge
Pressure gauge
Pressure transmitter
Dirty water discharge
Centripetal pump, dirty water
Centripetal pump, clean oil
Separating disc
Sludge holding space
Sludge discharge
Operating water feed

The **eagle**class separator is equipped with a self-cleaning disctype bowl which can be optionally used for the clarification and purification of fuel oil and lube oil. The product (1) is fed in through a system of closed lines. The separated light (2) and heavy (5) liquid phases are pressure discharged via centripetal pumps (6,7). The centrifuge operates with regulating rings for the heavy phase.

Technical data	OSE 5	OSE 10	OSE 20	OSE 40	OSE 80	OSE 120	
3-phase AC motor							
Rating (50 Hz)	up to 4 kW	up to 4 kW	up to 7.5 kW	up to 18.5 kW	up to 45 kW	45-75 kW	
Rating (60 Hz)	up to 4.6 kW	up to 4.6 kW	up to 8.6 kW	up to 21 kW	up to 46 kW	45-75 kW	
Speed at 50 Hz	3000 rpm	3000 rpm	3000 rpm	3000 rpm	1500 rpm	1800 rpm	
Speed at 60 Hz	3600 rpm	3600 rpm	3600 rpm	3600 rpm	1800 rpm	1800 rpm	
Design	IM V1	IM V1	IM V1	IM V1	IM V1	IM V1	
Enclosure	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55	
Weight and shipping data							
Separator weight	150 kg (331 lb)	205 kg (452 lb)	320 kg (705 lb)	1060 kg (2337 lb)	1620 kg (3571 lb)	3000 kg (6614 lb)	
Case dimensions	1100 x 600 x 1000 mm	1280x700x1030 mm	1300x870x1030 mm	1800x1000x1400 mm	1800x1050x1600 mm	2000x1500x2100 mm	
(LxWxH)	40x24x39 in	50x23x41 in	51x34x41 in	71x39x55 in	71x41x63 in	79x59x83 in	
Shipping volume	0.66 m³	0.92 m³	1.17 m ³	2.5 m ³	3.0 m ³	6.0 m ³	
Dimensions							
АхВхС	760x401x759 mm 30x16x30 in	846x544x880 mm 33x21x35 in	1005x550x1009 mm 40x22x40 in	1283x737x1288 mm 51x29x51 in	1611 x 867 x 1503 mm 63 x 34 x 59 in	1778x1190x1942 mm 69x46x76 in	



Frame, hood and drive

The separator of enclosed design is driven by a 3-phase AC motor. Power is transferred to the bowl spindle via a centrifugal clutch and a flat belt. All bearings are splash-lubricated from a central oil bath.

GEA Mechanical Equipment

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