



Technical Data

Westfalia Separator D-Type Mineral Oil Separators

Type

OSD 6-01-007/-037

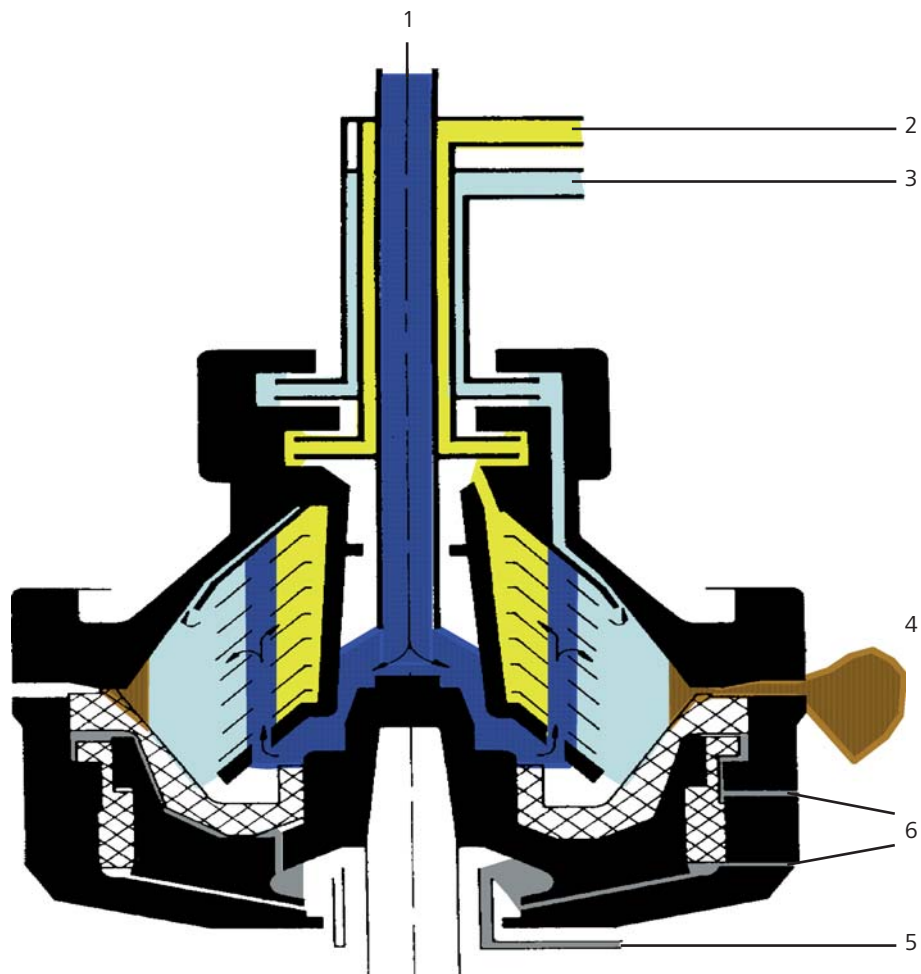
OSD 18-01-007/-037

OSD 35-01-007/-037

OSD 60-01-007/-037

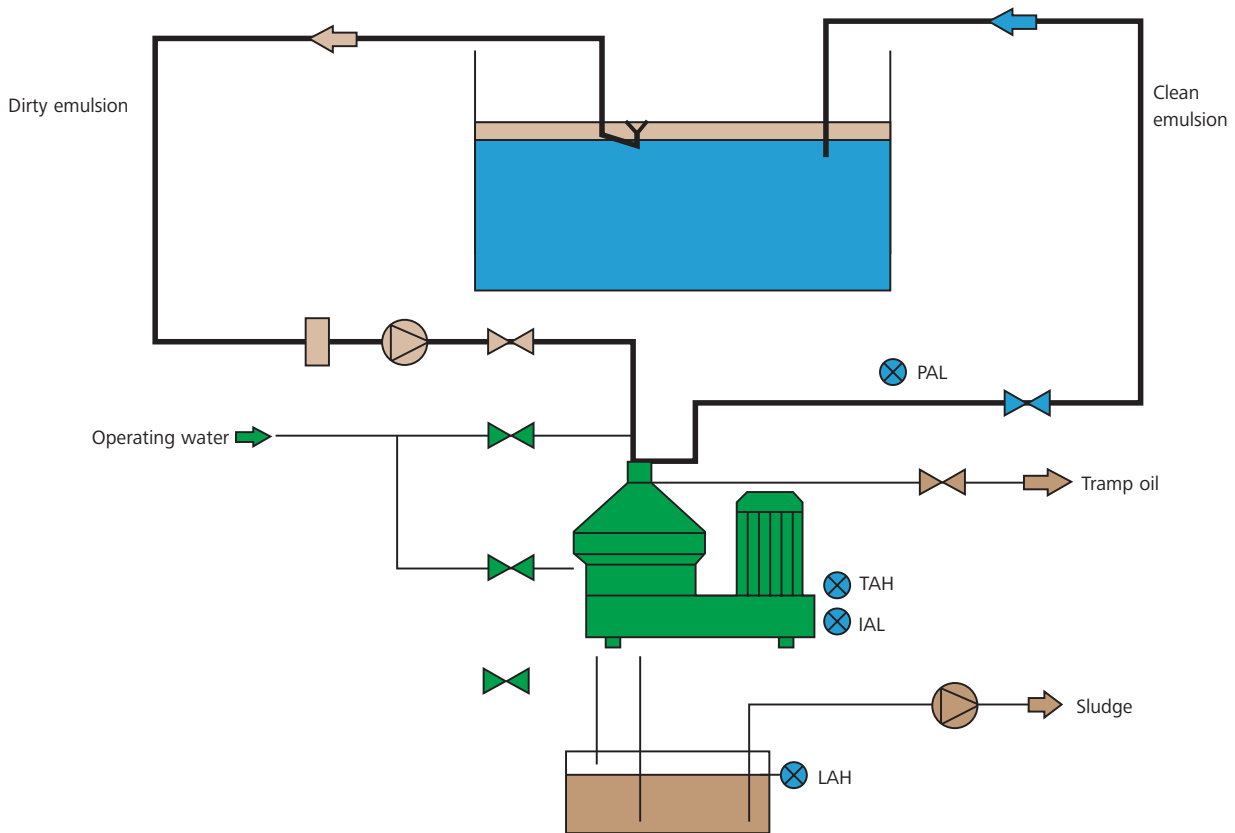
Operating principles and constructional features

The Westfalia Separator D-type separators are equipped with a SoftStream inlet system for gentle product treatment. This results in optimum separating efficiency and higher specific capacities. The patented Westfalia Separator HydroStop system of the D-Type separators enables controlled bowl ejections to be carried out at full operating speed.



- 1 Product feed
- 2 Discharge for light liquid phase
- 3 Discharge for heavy liquid phase
- 4 Sludge discharge
- 5 Operating water feed
- 6 Operating water discharge

Installation diagram



Complete system-based solutions

With the separators of the OSD generation, Westfalia Separator Mineraloil Systems is offering customer-oriented centrifugal separators which ensure economic and efficient treatment.

The self-cleaning separators can also be delivered as ready-to-connect compact units. They are pre-assembled on a base frame together with the corresponding high-quality components. The new compact construction additionally results in significant savings in terms of weight and space.

The system is equipped with instrumentation for automatic operation.

Maximum separation – minimum effort

The product is fed by a feed pump through the strainer and via the feed valve to the centrifuge. The centrifuge equipped with a self-cleaning three phase bowl is used for the separation of liquid mixtures (e.g. oil and water) and solids in bypass.

Within the rotating bowl, the product is separated from the impurities and fine particles. Both liquid phases (oil and water) are discharged under pressure by the centripetal pumps. The separated solids accumulated in the sludge space are discharged into the sludge tank at periodical intervals, automatically.

Result: a continuous treatment of the liquid with the aid of separators increases the lifetime of the product significantly and ensures a constant quality of the product.

Frame, hood and drive

The centrifuge is of enclosed design. The hood is removable.

The centrifuge is driven by a 3 phase AC motor.

Power is transmitted to the bowl spindle via a centrifugal clutch and flat belt.

All bearings are splashed-lubricated from a central oil bath.

Materials of construction

Frame:	Grey cast iron
Hood:	Grey cast iron (-037) or Stainless steel (-007)
Bowl parts:	Stainless steel
Centripetal pump:	Stainless steel
Gaskets:	NBR

Features

- Consistent use of flat belt drive instead of a gear
- SoftStream inlet
- Easier maintenance
- Less susceptibility to vibrations
- Low noise level
- Westfalia Separator HydroStop system
- Improved separation efficiency
- Less fresh water consumption
- Reduced weight
- Extended servicing intervals

Standard equipment

- Standard 3 phase AC motor
- Rubber cushions with anchor bolts
- Flexible feed and discharge lines
- Pressure gauges for both liquid phases
- Set of regulating rings
- Valve block for operating water
- Set of commissioning parts
- Motor temperature monitoring
- Hood made of grey cast iron
- Technical documentation

Additional equipment (available at extra cost)

- Motor control
- Control Unit for automatic operation
incl. motor monitoring
- Vibration monitoring
- Strainer
- Nitrogen blanketing equipment*
- EEx version*

Benefits

- Easy installation
- Simple maintenance
- Less space requirement
- Low life cycle cost
- High separating efficiency
- Simple operation
- Low weight
- Modular design
- Low noise level
- Flexible line connections
- Service intervals up to 16,000 h

All parts coming into contact with the product are made of stainless steel.

Separator unit

A complete, self contained separator (package unit) incorporating all accessories necessary for operation can be supplied on demand.

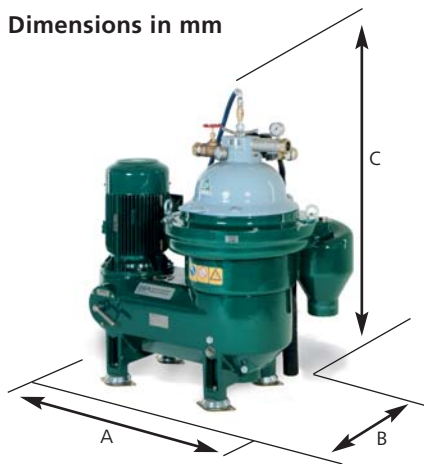
* For the supply of a complete unit

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Westfalia Separator D-Type

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Bowl				
Speed	12,000 rpm	11,500 rpm	8200 rpm	6800 rpm
Volume	1.5 l	3 l	8 l	21 l
Solids holding space	0.9 l	1.5 l	4 l	11 l
Electric motor				
Power	3 – 4 kW	5.5 – 7.5 kW	11 – 15 kW	18 – 30 kW
Speed at 50 Hz	3000 rpm	3000 rpm	3000 rpm	1500 rpm
Speed at 60 Hz	3600 rpm	3600 rpm	3600 rpm	1800 rpm
Type	IMV1	IMV1	IMV1	IMV1
Type of enclosure	IP55	IP55	IP55	IP55
Centripedal pump				
Pressure head light phase	1 bar	1 – 2 bar	2 bar	2 bar
Pressure head heavy phase	1 bar	1 – 2 bar	2 bar	2 bar
Weights and shipping data				
Separator complete	200 kg	310 kg	1050 kg	1600 kg
Bowl	42 kg	72 kg	190 kg	360 kg
Case dimensions (L x B x H)	1280x700x1030 mm	1300x870x1030 mm	1800x1000x1400 mm	1800x1050x1600 mm
Shipping volume	0.92 m ³	1.17 m ³	2.5 m ³	3.0 m ³
Dimensions				
A	753 mm	908 mm	1185 mm	1515 mm
B	540 mm	583 mm	752 mm	865 mm
C	990 mm	1097 mm	1382 mm	1606 mm

Dimensions in mm



Function

Continuous treatment of coolant emulsions, washing lye, water-oil-mixtures, fuel oil, crude oil, drain water, produced water, etc.

Application

Automotive industry, metal working industry, rolling mills, power stations, oilfield industry, disposal plants, etc.

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