



LXF Series Mineral Oil Centrifugal Unit

Application:

LXF series Mineral Oil Centrifugal Separators are mainly applied to marine mineral oil and land mineral oil purification. At present, the main application of that includes the treatment of marine diesel oil, marine heavy fuel oil, marine lubricating oil, land power plant lubricating oil, engine testing oil, gas turbine oil and crude oil etc. LXF machine can separate water and solid particles from oil. The purified oil and separated oil will be continuously pumped out while the sludge separated will be drained out regularly. The machine is composed of inlet and outlet device, frame of machine, rotary drum, vertical shaft, shaft coupling and water distribution device.

Working Principle:

The mixed liquid will be separated to different layers as the immiscible light liquid, heavy liquid and solid will get different forces for their different densities under the gravitational field or centrifugal force field. The separation under gravitational field is called gravitational separation while under centrifugal force field called centrifugal separation.

The untreated oil come into rotary drum through oil pipe then the distributor will guide the oil to peripheral region and when it reaches to distributor hole it will be arise from channel formed from arc-hole of disc set and be distributed evenly to disc set. During flow back to the center of rotary drum, oil will be continuously separated with water and sludge. After the separated oil leaves the disc set, it will come into chamber of centripetal pump and then be pumped out of rotary drum. The separated water and sludge are removed

to peripheral region of separating cartridge. During the separation process, the separated water arises along with the outside disc side across the channel above the upper cap of disc and rotary drum hole then come into heavy phase pump chamber and be pumped out by heavy phase pump. The heavy residues are gathered in oil sludge space outside disc set and then be discharged regularly from drainage port. Through above procedure to finish one cycle of separation process. After several passes of treatment, the machine can efficiently remove water and impurities in the oil to meet the clients' requirements.



Technical Specification

Model	Dimension (L×W×H)	Diesel Treatment Capacity (L/h)	Turbine Oil Treatment Capacity 50°C(L/h)	Import and export	Operation Mode	Sludge Removal Mode	Standard Control Model
LSLXF1218Z	1450×1200×1600	3500	2000	Dn25	Automatic	Automatically Sludge Removing	PLC Control, touch screen operation. Temperature and pressure automatic control and alarm
LSLXF1217Z	1450×1200×1600	5000	3000	DN25			
LSLXF1317Z	1650×1500×1800	8000	4500	DN32			
LSLXF1417Z	1650×1500×1800	14000	8000	DN40			

Remark: ① If there are any special requirements such as heating or special components, we can customize design the machine to meet the requirements.

② The inlet and outlet are all flange type connections.