

Specification of Disc Separator Model PDSD14000



3 sets on 1 skid (for reference only)

Brief introduction:

Model PDSD14000 separator is mainly used to remove water and mechanical impurities from diesel oil, lubricating oil and other mineral oil in marine diesel engine unit and land-used diesel generator unit of power station so as to reduce wear of the diesel engine and other machine, and prolong engine life. The model is also used to separate two unsolvable liquids with different specific gravity or remove small amount of solid particle from liquid.

The machine adopts automatic control, and has the advantages of high efficiency, low oil consumption, convenient operation and economic maintenance cost.

The clear oil and dirty water are pumped out by centripetal pump, the sludge is discharged automatically and fully.

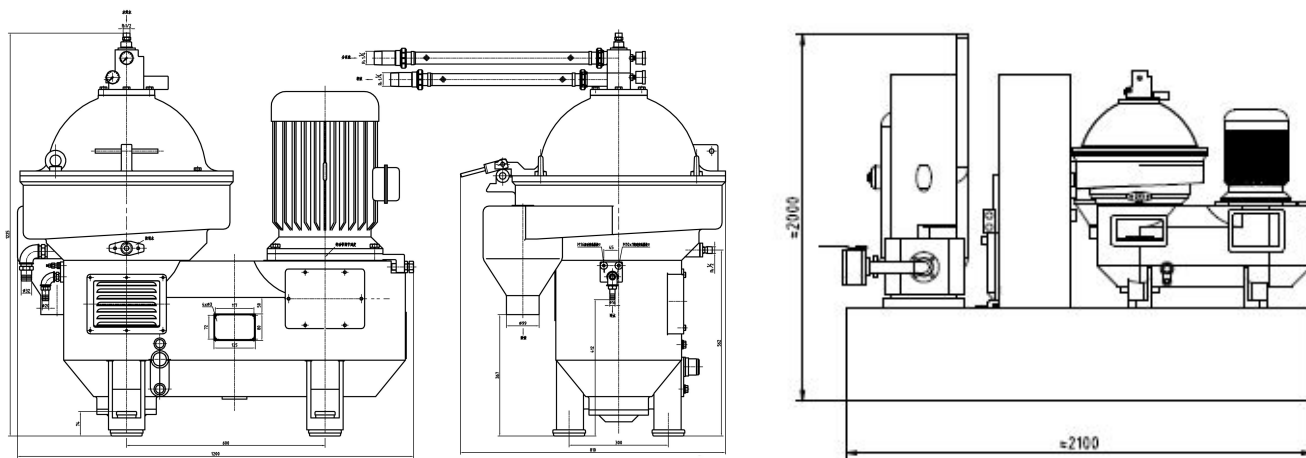
The machine is one kind of rotary machine with high speed. After accurate dynamic balancing, it can run for long time with low vibration, safety and security.

The design, product and acceptance are conformed to the standard of GB/T5745 "Marine Disc Separator".

Advantage:

1. Moisture sensor(No-gravity ring) technology is adopted to ensure the quality of the oil after separation.
2. Bowl with full hydraulic structure brings more thorough sludge discharge, more stable and reliable performance.
3. The new type seamless belt drive(No second tensioning required) brings more reliable structure and more simplified mechanical structure.
4. High rotating speed ensure the best separation effect.
5. Our separator is with low power consumption and light weight, which is in accordance with the requirements of the national industry.

Outline drawing :



Main Technical Parameter:

1. Separator single machine

Model	PDS14000	
Rated capacity	L/h	14000 (0# diesel)
Bowl rotating speed	rpm	7800
Output pressure of clear oil	Mpa	≤0.2
Output pressure of sewage	Mpa	≤0.3
Motor power	kW	11-15
Weight(special tools included)	kg	730
Full volume of the slag cavity	L	2
Discharge Type	Variable discharge	
Type of output	Centripetal pump	
Dimension of single machine	L × W × H (mm)	1200*810*1225

2. Oil supply pump

Model	ACG045N7NTBP	
Flow rate	L/h	11000
Bowl rotating speed	rpm	7800
Output pressure	Mpa	0.5
Motor power	kW	4kw

3. Electrical control cabinet

Model: ASD-W

4. Other parts and components

NO.	Name	Quantity	Remark
1	Separator KYDB207SD-21	1	Ex-proof motor
2	Electric control box ASD-W	1	Two-in-one
3	Ex-proof junction box BF28158	1	
4	Oil supply pump ACG045N7NTBP 4KW	1	Ex-proof motor
5	Check valve DN32 1.6Mpa	1	
6	Temperature sensor B401	1	
7	Pneumatic Three-way valve BURKTER 2002 DN32	1	
8	Slag pump 25YW-8-22 1.1Kw	1	Ex-proof motor
9	Liquid level switch UQK-01-C	1	
10	Vacuum gauge ZC-60N (-0.1-0MPa)	1	
11	Pressure gauge YC-60N (0-0.6MPa)	1	
12	Air pressure- reducing valve YSC YAW-20	1	
13	3/2 solenoid valve Germany Burkert 6014 24VDC	1	Ex-proof
14	Ball valve Q11F-20T DN15	2	
15	Brass filter ball valve Q11F-20T DN25	1	
16	Pressure-reducing valve Y12X-16T DN25	1	
17	2/2 solenoid valve Germany Burkert 5281 24VDC	2	Ex-proof
18	Moisture sensor	1	
19	Skid(slag box contained)	1	

Condition for mineral oil separation and actual capacity(refer to the chart)

Oil types	Fuel oil					Lubrication oil		Steam turbine oil
	Fuel oil		Heavy fuel oil			SAE30, 40	Detergence oil	
Kinematical viscosity (mm ² /s)	1.9-5.5	5.5-24	120	180	380	100-120		61.2-74.8
	40°C		50°C			40°C		40°C
Density (kg/m ³)(20°C)	< 900		900-991			880-900		< 900
Separating temperature (°C)	Normal temperature, 40-60 best		90-98			80-95		
Recommended capacity (L/h)	17500	14000	7700-8400	6300-7000	4900-5600	7000-8400	3500-4200	11200-11900

If you have special requirement, please connect with us.