



**IOW** Group

# Centrifugal Oil Separators

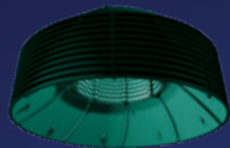
With bowl disc technology and external  
monitoring for greater efficiency



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# The highest performing and only self monitoring bypass oil filtration spinner type separators in the world.

The IOW Group have spent five years completely re-designing how the traditional centrifuge worked to create a completely new range of Centrifugal Oil Separators. **So what makes it so different?**



## Bowl discs

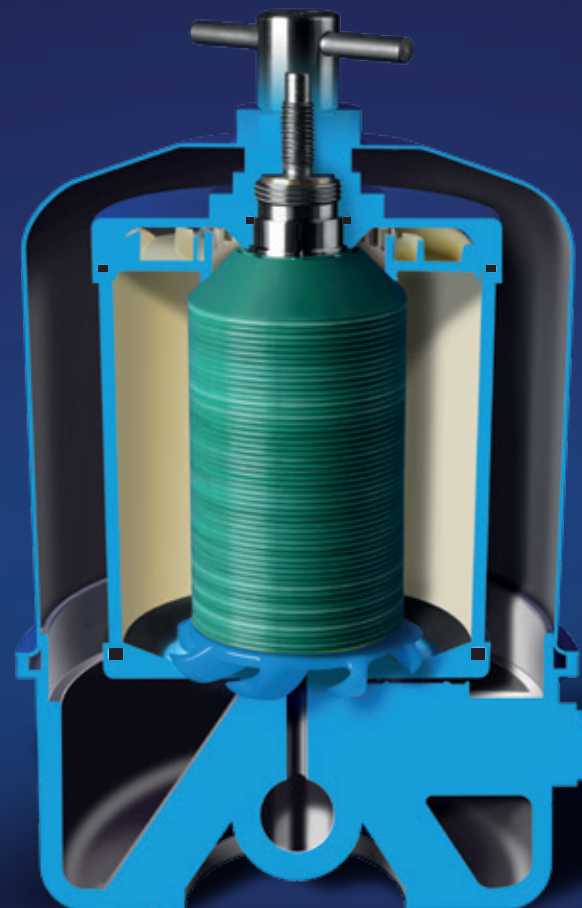
**Increasing efficiency, by removing even more contaminants.**

The only centrifuges of their size to use bowl discs - usually associated with much larger units - allows our centrifuges to remove significantly more small particles than other centrifuges.

## Fully sealed unit

**Reduced risk of cross contamination between cleaned and dirty oil.**

Unlike other leading centrifuges our oil sealed centrifuge significantly reduces the risk of cleaned oil being contaminated.



## Remote monitoring

**Provides operators and systems with valuable insight into its speed, cleaning and service requirements.**

Our Centrifuges are the only product on the market to provide operators with a choice of remote monitors helping to make sure the unit is running optimally - reducing servicing man hours and increasing efficiency.

## Distributor impeller

**Eliminates back pressure by drawing in contaminated oil.**

Oil enters the centrifuge at the base of the unit and, once spinning, is drawn into the centrifuge by the distributor impeller reducing the risk of back pressure causing cross contamination and increasing rotor speeds.

**At 4 bar pressure  
all MP centrifuges...**

**spin 15-30% faster than the  
current market leaders**

# The new standard for performance in oil separation

The IOW Group's latest series of Centrifugal Oil Separators represent the next generation in commercial separation technology.

IOW Group separators clean oil using centrifugal force 2000 times greater than gravity. They remove contaminants that cause damage to engines and they also greatly extend the life of lubricating oil in both engines and gearboxes.

This new product is not only suitable for the marine and offshore industry but also for applications within the power generation, industrial manufacturing, mining and automotive sectors.

## Markets

- ◆ Marine
- ◆ Power generation
- ◆ Trains, trucks and buses
- ◆ Agriculture
- ◆ Mining
- ◆ Construction
- ◆ Defence
- ◆ Oil and gas

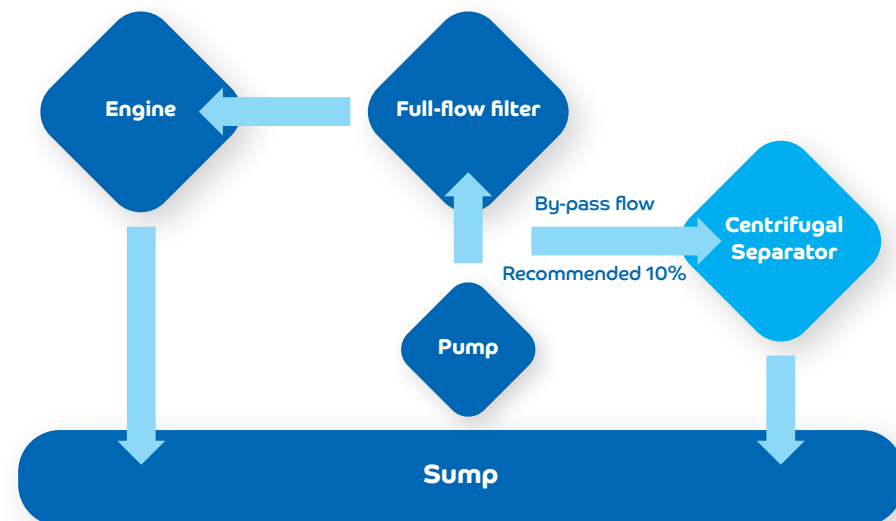
## Advantages

- ◆ Reduction in engine wear
- ◆ Reduction in use of lubricating oil
- ◆ Aids clean combustion for reduced exhaust emissions
- ◆ Saves man hours in cleaning
- ◆ Reduced waste disposal costs
- ◆ Simple to operate and maintain
- ◆ Same day dispatch available on all spares
- ◆ Extends service intervals
- ◆ Extends life of full-flow filters
- ◆ Capital cost investment returned quickly
- ◆ Environmentally friendly
- ◆ Bolt-on/bolt-off for existing installations



# Why is a Centrifugal Oil Separator so important in today's modern high performance diesel engines?

Nearly all full-flow oil filters are designed to clean the lubricating oil which lubricates the moving parts of engines. They are designed for a certain flow rate and pressure drop. However, to get the necessary flow rates and pressure drops required there is a trade-off in performance.

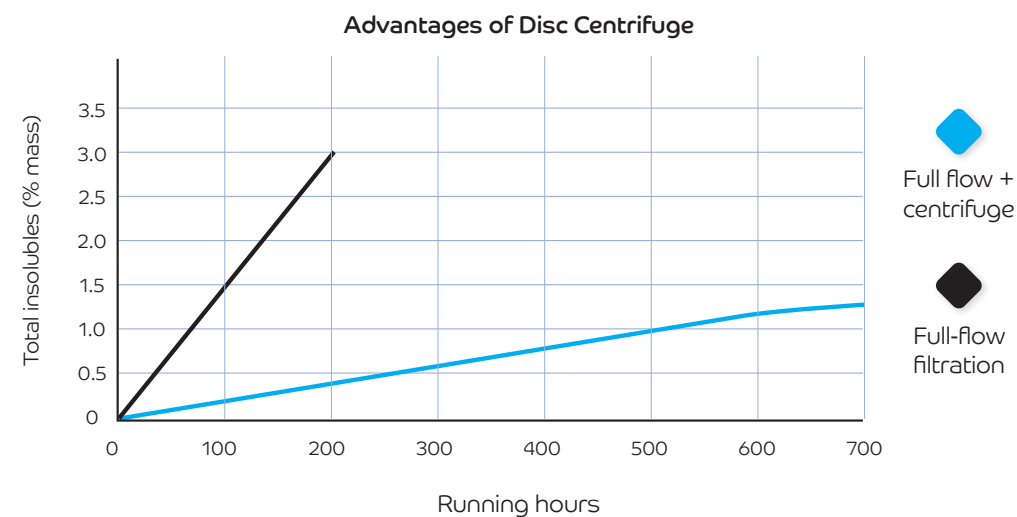


Smaller sub micron particles pass through the filter media continuously.

These particles build up in the lubricating oil, causing unnecessary wear and damage to the engine, which in turn leads to lower engine performance and increased engine emissions.

They also shorten the life of the lubricating oil as the level of contaminants increases.

With today's emission controls getting tighter and tighter, it is increasingly important to remove these contaminants before they cause any damage to both the engine and the lubricating oil.



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## Why use our centrifuge?

IOW Group Centrifugal Oil Separators have been designed to remedy this problem. The separator inlet should be placed between the engine's oil pump and the full-flow filter; we recommend that 10% of the dirty oil flow is diverted through the separator. The cleaned oil is then returned directly to the oil sump.

### Unique solution

Oil is introduced into the separator bowl at engine oil pressure through holes drilled in the vertical spindle and via the accelerator channels in the bearing distributor.

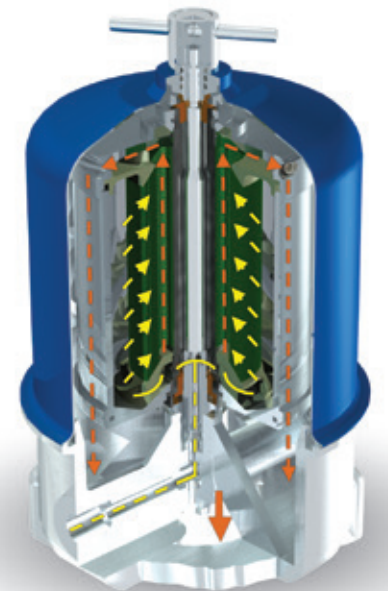
The bowl then fills up and oil overflows into the top turbine where it exits the bowl via the four speed turbine channels and then out via the nozzles. This in turn rotates the bowl, generating the centrifugal force required to remove the contaminants from the oil.

The contaminants migrate towards the outside of the bowl where they are deposited on a removable oil resistant insert. The cleaned oil migrates towards the centre of the bowl, where it is expelled by the nozzles in the top turbine, thus perpetuating the cycle.

### Increased efficiency with bowl disc technology

Unlike conventional centrifugal spinners/separators, IOW Group separators use bowl discs to increase the efficiency of separation, dramatically reducing the time that contaminants can stay in the oil.

We have also improved the sealing between the dirty oil inlet and the cleaned oil outlet. This ensures that there is minimal cross-contamination between the two.



Dirty oil ● Clean oil ●

### Save valuable man hours with remote monitoring

IOW Group Centrifugal Oil Separators also have dirt/sludge monitoring technology, which informs the operator when the separator needs cleaning, saving valuable personnel time on otherwise unnecessary cleaning.

The system is both MODBUS and CANBUS compatible and can be easily connected to your existing alarm systems.

 **Find out more...**

**visit** [www.IOWGroup.com](http://www.IOWGroup.com)



The IOW Group is an international company providing separation and filtration solutions for businesses around the world.

We are a customer-focused business dedicated to creating products that will enable our clients to become more productive and effective within their own business sectors.

As a successful original equipment manufacturer, our innovative designs mean we are able to provide the most appropriate complete solution for all our customers' needs.

Two manufacturing facilities, five worldwide sales offices and over fifty years' combined experience within the centrifuge industry make us global leaders in this field.



for more information contact one  
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