

THE ULTRASPIN SEPARATOR



The heart of the Ultraspin Oily Water Separation System is the Ultraspin Separator itself.

The Ultraspin separator has been specially designed to treat industrial water contaminated with oils, fats, grease, hydrocarbons and suspended solids.

HOW DOES IT WORK?

Oily water is pumped into the Ultraspin separator through tangential inlets in the head of the separator. This causes the flow to spin, thus creating a powerful vortex which accelerates as the flow moves down the tapered section of the separator.

The vortex creates a powerful centripetal force that acts on the lighter oil droplets in the water and causes them to be pushed to the centre of the vortex. Once in the centre, backpressure from the water outlet causes the oil droplets to flow out of an orifice at the end face of the separator.

Treated water flows out of the narrow end section of the separator and is discharged.

WHY IS IT SO POWERFUL?

Separation Force 1000 x Gravity

Unlike most other oily water separators, the Ultraspin separator does not rely on weak gravity forces for separation. The centripetal force generated inside the vortex of the Ultraspin separator is approximately 1,000 times the force of gravity. A force as strong as this means that even small emulsified oil droplets under 10 microns in diameter can be treated.

Coalescence Not Needed

Many oily water separators, like coalescing Plate Separators (CPS) do not work unless the oil droplets coalesce. However in many industrial oily water applications, oil droplets cannot coalesce because of interference caused by suspended solids, detergents or other chemicals in the water.

The good news is that the Ultraspin separator does not rely or need any oil droplet coalescence to work at full separation efficiency.

