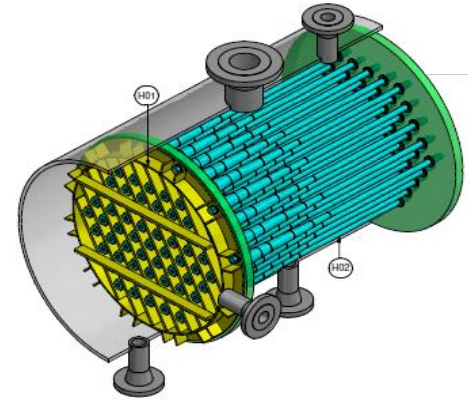


# MAXSWIRL® Hydrocyclone

# Liquid-Liquid Separation



The AMACS' MAXSWIRL® Hydrocyclone is an axial flow hydrocyclone to remove small quantities of oil from water. The AMACS MAXSWIRL® Hydrocyclone uses a static swirl element to generate the g-forces (up to 1000 g) that separate fine oil droplets from water. By using a static swirl element instead of a tangential inlet (as conventional hydrocyclones have), the flow pattern inside the cyclone is much more controlled resulting in a very high efficiency at a moderate pressure drop.

Multiple cyclones are packed together in a pressure vessel to get the required throughput. Compartments inside the vessel can be used to make the design very flexible towards changes in the incoming flowrate.

For upgrading of conventional hydrocyclone systems, the dimensions of the AMACS' MAXSWIRL® Hydrocyclone can be adjusted to fit existing tubesheets and housings without affecting the efficiency.

### Applications:

- Produced water cleaning
  - Offshore and onshore
- Waste water cleaning
- Greenfield oil production projects
- Brownfield upgrading of existing produced water facilities

AMACS MAXSWIRL® Hydrocyclone	Conventional Hydrocyclone
Axial swirl generation	Tangential swirl generation
Big inlet openings	One or a few small inlet openings (shear droplets)
Swirl element controls g-forces	Uncontrolled swirl
High turndown	Limited turndown
Medium pressure drop	High pressure drop
Can replace existing liners	-

