



Oil dehydration package designed for rough weather conditions at the Ichthys field.

Located about 220 km offshore Western Australia and 820 km southwest of Darwin, the Ichthys field covers an area of around 800 km². Ichthys represents the largest discovery of hydrocarbon liquids in Australia in 40 years, with estimated reserves of more than 12 trillion cubic feet of gas and 500 million barrels of condensate. INPEX announced the departure of its first shipment of condensate from the FPSO October 1st 2018. The Ichthys LNG project is ranked among the most significant oil and gas projects in the world.

Our team successfully delivered two electrostatic coalescer packages in the beginning of 2015 for condensate dehydration on the FPSO. Each electrostatic coalescer is equipped with a candlebra-type feed distributor, sloshing mitigation baffles, and double levels of electrical grids, connected to two power units. The design mitigates the impact of rough weather conditions on FPSO operation and offers 100% redundancy for keeping electrical grids powered.

Project details

Design production rate: 236 000 kg/h condensate, 18 000 kg/h rich MEG

Operating conditions: 72 to 89°C, 7.3 to 10.7 barg

Export condensate specifications: Maximum 0.3% volume water, Maximum 30 ppm salt

Scope of work

- Two condensate electrostatic dehydrator packages with assembled internals, process, and mechanical design
- Four transformers
- Two local control panels
- Two mixing valves

Key facts

- End user: INPEX
- Location: Ichthys field, Australia
- Client: DSME