

2018

Galata Gas Field, Bulgaria

Inland Technologies supplied a glycol recycling system to the Galata Gas Field in the Black Sea. The field is located 25 kilometers offshore with a requirement for hydrate inhibition to prevent the pipeline from being blocked by natural gas hydrates.

The hydrate inhibitor chosen for this field was Mono-Ethylene Glycol (MEG), which is injected into the subsea pipeline bringing the gas onshore.

Production managers used Inland's MEG Concentrator to recycle the wet glycol product coming onshore, allowing the reclaimed glycol to be re-injected.

Environment

In order to meet the environmental regulations set out by the European Union for the operation, a COD limit of 25 mg/L for all process water had to be followed. To reach this objective,



Recycling Mono-ethylene glycol used in hydrate inhibition

the cleaned water produced from the MEG Concentrator was sent to a custom-designed reverse osmosis system for polishing.

Features

The standard design of the MEG Concentrator results in a distillate water stream with approximately 1000 mg/L of MEG. Since this level was over the EU regulation for storm water release, this stream was polished using a three-stage reverse

osmosis unit to bring glycol (and COD) readings to compliance levels.

Inland's MEG Concentrator uses a thermodynamic cycle known as mechanical vapour recompression. The unit is highly energy-efficient and studies have shown in to be an economical alternative to conventional re-boiler and overhead condenser systems for small fields.

Depending on gas composition and seabed temperatures (typically 4 to 10 degrees Celsius), the unit is best suited to fields with production rates varying from 50 to 150 MMSCFD.

Use of the MEG Concentrator system at Galata resulted in lower overall capital and operating costs.

For additional information, contact Inland at marketing@inlandgroup.ca.

