

Precise IsoFraction Sampling System for Indonesian LNG Tank Farm

JISKOOT IsoFraction LNG Sampling System



Key Challenges

- + System Control for the complete system was completed using a Sensia Safe Area InSpec Controller.
- + Gas Booster Pump was installed due to low operating pressure, including a pump regulator valve and a contactor on the safe area interface rail which allowed the pump to be switched on and off from the InSpec Controller when the system required it. This allowed the sample loop flow regulation to be adjusted more precisely.
- + Continuous Gas Feed to a single or dual Gas Chromatograph(s).
- + Intermittent Sampling Design in accordance with ISO 8943, specifically.

Customer Benefits

- + Provides a continuous method of sampling LNG from the line at cryogenic temperatures.
- + Meets the sampling standards; ISO 8943, API 14.1, ISO 12838:2001 and GPA 2166 Successful completion and sign-off of a customer witnessed Factory Acceptance Test.

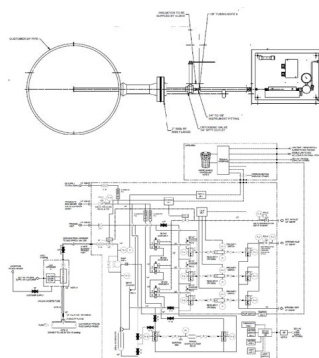
The Jiskoot IsoFraction System enabled the LNG facility in Indonesia to safely and accurately sample ultra-cold LNG (-160°C) while meeting strict global standards. By automating the process with advanced controls and a gas booster pump, it solved low-pressure challenges, reduced manual work, and ensured reliable results for fair custody transfers. Its robust, low-maintenance design cut operational costs, while a validated Factory Acceptance Test guaranteed seamless integration. This system not only modernized the operations but also strengthened Indonesia's LNG infrastructure, supporting long-term energy security and positioning the country as a competitive player in global energy markets.

The Jiskoot IsoFraction LNG sampling system comprises of a single fixed take-off probe / cryogenic valve, 300mm vacuum jacketed tube and a Jiskoot 500W vapouriser designed to control the regasification. The vapourising process raises the temperature from -160°C to approximately +20°C.

The LNG Gas is then sampled within a bespoke cabinet with three separate sampling vessels and a gas booster pump due to low pressure and flow.

The whole sampling process being controlled via a Sensia InSpec Sampling Controller.

Supplied for an LNG expansion project in Indonesia.



Results Achieved

The Jiskoot IsoFraction System delivered critical outcomes for LNG Hub Expansion:

- **Precise Sampling** - Gas booster pump and Sensia InSpec Controller ensured reliable LNG sample accuracy under low-pressure conditions.
- **Regulatory Compliance** - Met ISO 8943, API 14.1, and GPA 2166 standards, with audits confirming alignment for custody transfer.
- **Streamlined Operations** - Automation via the InSpec Controller minimized manual tasks and enabled real-time data analysis for faster decision-making.
- **Validated Performance** - Successful Factory Acceptance Test ensured seamless commissioning and on-schedule project completion.
- **Strategic Infrastructure Growth** - Supported LNG expansion, boosting Indonesia's energy security.
- **Reduced Maintenance** - Vacuum-jacketed tubing and cryogenic design lowered maintenance frequency and operational costs.

The system reinforced operational reliability, compliance, and scalability for LNG operations.