

# Regasification Facility Increases Accuracy of Payables with Flo-Tap Annubar<sup>®</sup> Flowmeter

## RESULTS

- Increased accuracy of payables
- Improved product quality assurance
- Minimized capital costs

## APPLICATION

Liquefied Natural Gas (LNG) flow from an off-loading vessel

**Application Characteristic:** -160 °C (-260 °F)

## CUSTOMER

LNG regasification facility in Asia Pacific

## CHALLENGE

Operations personnel had difficulty getting a reliable sample to determine the quality of LNG being off-loaded from marine tankers into its facility. LNG can age during transportation, which changes the physical composition. A reliable sample is needed to check volume, density, BTU energy value, and gross calorific value.

The challenge was to obtain a reliable sample without a flow measurement to determine if there was steady state flow. Steady state flow ensures an accurate sample of LNG, and consequently the precise characteristics of its physical composition.

Not having a flow measurement to confirm steady flow resulted in several negative business impacts. Unreliable sample collections led to paying more for a lower quality of LNG. This resulted in billing disputes between the customer and supplier. The instrumentation engineers also faced high capital costs to obtain a flow measurement solution. Capital costs included those associated with installation such as labor and material, and the impact piping changes have on these costs.

## SOLUTION

The Rosemount 485 Annubar allowed reliable LNG samples by confirming steady state flow. The 485 Annubar enabled the flowmeter to be easily installed without significant piping changes.

Because the 485 Annubar was manufactured with 316 stainless steel for this application, it is compatible with the cryogenic liquid. The Flo-Tap Annubar mounting style enabled maintenance staff to easily retract the Annubar for pigging operations.



*The Flo-Tap Annubar design enabled their instrumentation staff to easily install the flowmeter without significant piping changes.*



*The Rosemount 485 Flo-Tap Annubar assembled to a 3051S Pressure Transmitter*

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This customer easily implemented the right technology to positively impact their business. By ensuring steady state flow, the Rosemount 485 Annubar helped provide confidence in product quality and increased accuracy of their payables with suppliers. Finally, the Rosemount 485 Annubar with Flo-Tap mounting minimized capital costs in labor and materials due to a reduction in the number of piping changes.

## RESOURCES

### Rosemount Flow Solutions

<http://www.emersonprocess.com/rosemount/products/flow/index.html>

### Rosemount 485 Annubar Primary Element

<http://www.emersonprocess.com/rosemount/products/flow/m485ann.html>

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