

LNG, LPG & NGL

Product Overview

The Sigmafine App for LNG (Liquefied Natural Gas), LPG (Liquefied Petroleum Gases) and NGL (Natural Gas Liquids) enables the transformation of inventory and custody transfer information from actual conditions to standard conditions using the appropriate volume correction factors specified by international standards and best practices. This App implements accurate temperature and pressure corrections for LNG, LPG and NGL.

With this server App, there is no need to create and maintain complex Excel spreadsheets or to use standalone engineering tools since all logic and computation is performed within the Asset Framework (AF) of the OSIsoft® PI System®. A combination of equations of state and correlations used by the App addresses the reporting and monitoring needs for liquefied gases in the oil and gas industry.

Features

The App handles multicomponent mixtures and evaluates coefficients as recommended by the Manual of Petroleum Standards to compute standard volumes (Chapter 11 – ASTM [Stock No. PETROLTBL-TP27]:GPA TP-27).

In the case of the LNG industry, the App estimates gross calorific values (GCV) and the theoretical LNG density values using the revised Klosek McKinley equation of state.

Benefits

This Sigmafine App enables the creation of real time inventory reports using the same standard across the company, facilitating benchmarking between sites. Engineers and plant managers have now actionable inventory information and material transfer information.

This results in better tracking on inventory and transfers in real time, regardless of changes of operating conditions, enabling optimized planning and scheduling.

System Requirements

- Asset Framework 2016 and above
- PI System Access (PSA) license

Ordering Information

- Product ID: SA-EXT-LXG (for use with OSIsoft PI System)

