Sigmafine in the Liquified NaturalGas Industry

Domains

Across LNG Process Chain
Areas — Export and Import Terminals
Processes — Liquefaction, Regasification

Key Benefits

- Accurate and timely Production and Inventory Accounting for financials

- Monitoring, identification and reduction of losses

- Improve data accuracy and KPIs by reconciling and validating process information

- Compliance both commercial and regulatory

- Increase Fiscal measurement for allocation, verify custody transfers and to identify lower quality or out of spec products in receipts and distribution

- Reduce measurement maintenance by prioritizing maintenance on instruments that are identified by Sigmafine to have bias or calibration drift

- Resolve production allocation issues by properly assigning the correct energy / volume owned by each provider

The LNG remains one of the fastest-growing segments in the global energy industry and is projected to continue to grow.
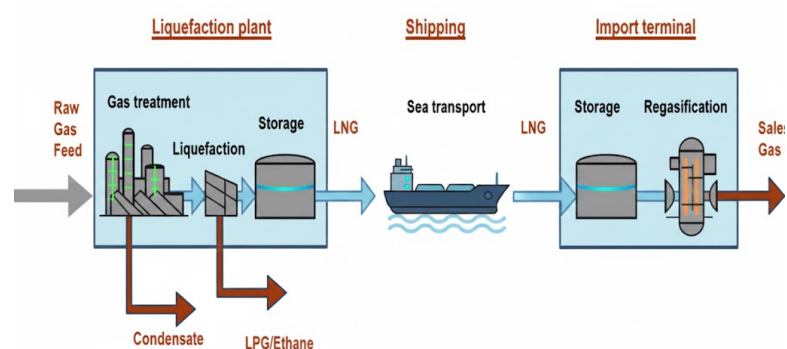
The Business Challange

Process data validation and accuracy of the data is the basis for proper management of information and accurate business decisions. In the LNG industry price volatility, complex product allocation, gas interchangeability and material composition, regulatory & ESG (Environmental, Social, and Governance) are only some of the major challenges.

Sigmafine Overview

Improve the consistency, quality, and traceability of production data with Pimsoft's Sigmafine data reconciliation software.

Sigmafine provides a validation checkpoint between a facility's raw process data and its information personnel. Sigmafine uses a robust data reconciliation engine to reconcile and validate raw plant measurements, which can then be compared to baseline parameters and predetermined business plans.

Example of LNG Process Model

Uses

Data reconciliation
Validate the quality of your process data and optimize your meters accuracy by identifying and reducing measurements bias and drifts.

Energy contents balance
Apply mathematical constraints to increase energy efficiencies.

Natural gas composition measurement
Track liquid/natural gas composition in your facilities and monitor the quality and energy content of your outputs.
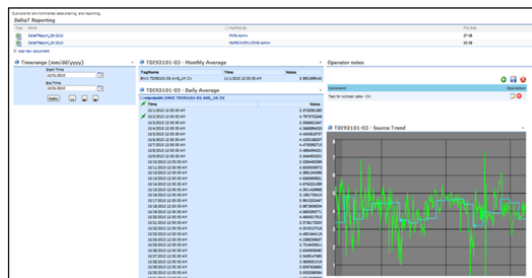
Tank management and delivery planning
Introduce solutions for tanks management and delivery planning to minimize moorages and delay.

Production allocation
In production facilities, use Sigmafine to properly allocate volumes and energy according to their specific owners.
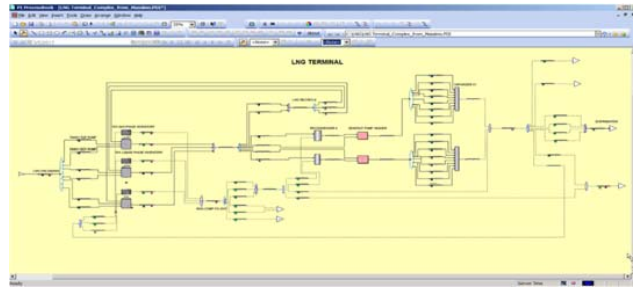
Environmental data validation
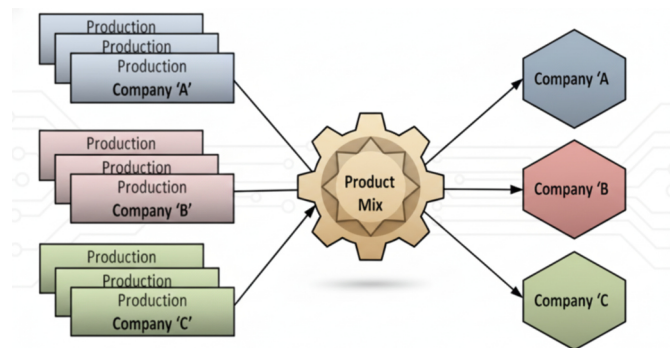Monitor and validate your environmental measurements for accurate and reliable regulatory reporting.

A MODEL BASED SOLUTION

Energy Content Balance

Inventory Management and Delivery Planning

Environmental Data Validation

Application: Production Allocation