

# Expertise in process and manufacturing know-how applied to data curation and governance

Pimsoft brings innovative software solutions, engineering skills, and domain expertise to industries where data quality and usability is mission critical in shaping information for action and decision.

Process and manufacturing operations produce an ever increasing amount of data. Poor data quality affects critical decision-making and, ultimately, an organization's bottom line. At Pimsoft, we are in the business of generating value for all our customers by ensuring consistent accuracy and usability of their process and manufacturing data. Allowing our customers to fully trust their data for action.

We bring the expertise and services required to implement and maintain a complete data governance framework for complex process and manufacturing operations.





Enabling companies to condition process and manufacturing data for digital transformation

Pimsoft's Sigmafine solution is an enterprise-wide software platform that improves and sustains data quality for process and manufacturing industries. Giving insight into the plant through a singular view of the industrial plant dataset to help support digital transformation initiatives as well as advanced manufacturing strategies.

### Plant-wide and Unit Balances.

Sigmafine data reconciliation is used for mass, volume, and energy balances on a unit or plant-wide basis. Gross error detection precedes the balance.

### Unmeasured Flow Calculation.

Users can accurately calculate unmeasured flows based on reconciled measurements.

### Production/Yield Accounting.

Sigmafine incorporates receipts, shipments, inventory, and process data into the plant's production numbers. Yield reports can be generated using almost any metric and interval of your choice, such as measuring by shift, day, month, or year.

### Composition Tracking.

Liquids and solids bulk storage composition tracking is provided by Sigmafine. Composition tracking is based on receipts to storage tanks, feeds to the process plant and operations within the off sites and storage units.

### **Component Balance**

This module balances material quantities and their individual components satisfying conservation principles. This analysis rule is needed to balance processes where a mass balance is not enough to determine the amounts of concentrated and purified components. Industries such as metallurgical, chemical, gas plants, and refining can benefit from the use of this functionality.

### Energy Balance.

The Energy Balance module balances process networks that contain heat exchangers and process units where a simultaneous balance of mass and energy is required. This tool has the ability to calculate mass flow rates and thermal efficiency.



**Oil & Gas Downstream** 



**Oil & Gas Upstream** 



LNG



Chemicals



Fertilizers

**Pharmaceuticals** 

Sigmafine users benefit from significantly improved data quality and usability. Business risk is reduced, resulting in improved outcomes in operations management, day-to-day and strategic decision-making, innovation, and business process reliability and performance.

## **Production and Yield Accounting**

 $\boldsymbol{\cdot}$  Perform mass, volume, and energy balance showing entire site in a single view

## Validate & Reconcile Process Data Quality

- Giving you a trust-able dataset
- Improved consistency and confidence level of production figures

### **Improve Plant Operation**

- Up-to-date material composition and quality tracking
- Improved production planning and logistics
- Monitoring both plant and equipment performance



**Mines & Metallurgy** 



**Power Generation** 



Food & Beverage



Water & Utilities

## **Asset & Site-Wide Performance Monitoring**

- Estimate, monitor, and control site losses
- Early detection of process deviations and measurement errors
- Gross error detection

### **Near Real-Time Energy Management**

- Apply constraints to balance energy contents and assess gains and losses
- Emissions monitoring

### **Compliance Reporting**

- Single source of truth
- Automatically transfer data to business systems and databases

### **Optimize Meter Accuracy**

· Identifying and reduce measurement bias and drifts

### **Complex Production Allocation Management**

• Allocating volume and energy according to even the most complicated ownership structures

#### 1993

 Sigmafine launched by KBC Advanced Technologies (UK and US)

#### 1999

• Sigmafine Acquired by OSIsoft LLC (PI System)

#### 2002

- Pimsoft becomes a distributorship of OSIsoft
- Pimsoft designated a Sigmafine System Integrator

#### 2005

 Pimsoft's expertise in Refinery data reconciliation receives worldwide recognition at the OSIsoft annual user's conference.

#### 2010

- Sigmafine acquired from OSIsoft by Pimsoft
- SQL Access for Sigmafine released to streamline report building and direct access to case data

#### 2011

IMM (Intelligent Movement Management) released to monitor and manage material movements

#### 2012

 ADA an advanced diagnostic tool released to simplify and accelerate the data reconciliation process

#### 2013

IF (Integration Framework) introduced in order to broker data exchanges between Sigmafine and source or destination systems across the enterprise

#### 2018

- Sigmafine 4.7 (AF 2.x) released
- Pimsoft achieves OSIsoft Select
   Partner status
- Sigmafine Apps introduced for Thermodynamics and for LNG, LPG and NGL to run natively with PI AF
- Pimsoft India LLP being founded
- APAC Sales & Support center
- Pimsoft acquires Omicron Development LLP expanding their PI services capabilities

#### 2019

SigmafineHub<sup>™</sup>, Sigmafine-Admin<sup>™</sup>, SigmafineVisualizer<sup>™</sup> and SigmafineView<sup>™</sup> released to beta preparing for the future





# Actively collaborating with OSIsoft has a proven track record of delivering value to customers

Pimsoft brings with it a rich history with the OSIsoft PI system as an OEM, System Integrator, and Application (ISV) provider with deep knowledge and expertise that positions our services delivery team for successful implementations of the PI System. Pimsoft is also a Value Added Reseller of the OSIsoft PI System in India through their offices in Pune.





Pimsoft has recently acquired Omicron Development LLC to help extend its PI services capabilities in North America.





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