

DATASHEET

AVEVA™ Production Accounting

Unlock the potential of accurate data

In the fast-paced world of industrial operations, every decision counts. The key to unlocking untapped potential lies in one crucial element – data.

AVEVA Production Accounting, will empower you to collect, categorize, and reconcile data like never before.

By harnessing the capabilities of flow measurements, material movement, and laboratory data, you'll pave the way for precise balance, enhanced yields, and an optimized plant like you've never seen before.

Embark on your plant's transformation with AVEVA Production Accounting, and unlock the full potential of accurate data.

- Collect more accurate data on flow measurements and material movement to balance your plant's inputs with its outputs.
- Categorize and reconcile discrepancies so process engineers and yield accountants have the best possible data sets to balance your plant. With better data, they can identify and account for any true loss.
- Balance mass and volume using raw flow measurements, material movement, or laboratory data. Mathematically detect missing movements or gross errors and automatically generate reconciled data.

Robust and accurate data reconciliation

There will always be slight inaccuracies and disagreements between measured values in a plant. In some cases, however, the data may truly be incorrect. Knowing when to accept slight inaccuracies and when to reject and act on measurement errors is important to both process engineers and production accountants. It is also important to apportion discrepancies within tolerable limits to various data streams within the plant.

The hydrocarbon, chemical, metal and mining processing industries are complex, and manually finding errors is impractical. Maintaining reliable material movement data has traditionally been costly and time-consuming, and many companies do not question and validate daily production data—to their own financial detriment.

AVEVA Production Accounting streamlines the process so companies produce much more accurate balance reports.

AVEVA Production Accounting uses an advanced interface to present complex process models, key performance indicators (KPIs), and other dashboards and generates reconciled data for production accounting and performance monitoring.

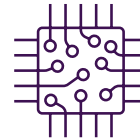
AVEVA Production Accounting reconciles data using a rigorous mathematical approach based on the sparse matrix method. This method uses all available measurement data and takes full advantage of measurement redundancy. Solve thousands of flows in seconds. You can also track feedstocks and products, as well as components.

Business benefits



Improve the decision making process

Have confidence in your production data. Focus on areas where imbalances occur to respond quickly and turn errors into profit.



Improve measurement system performance

Detect instrumentation that requires maintenance or periodic calibration.



Flexible data collection process

Configure methods for accessing plant data, including process data, movement data, and LIMS data.



Control of losses

Locate and quantify losses by comparing fiscal and engineering data.

Feature overview

Mass and volume balance

Reconcile mass and volume simultaneously, using different tolerances for each variable.

Automatic gross error detection

Find and exclude erroneous meters before balancing to see useful results on the first run. Automate the process of detecting and removing faulty measurements so results are consistent, even between different users.

AI-enabled debugging feature

Track the current reconciliation performance using this state-of-the-art, AI-enabled feature. Identify anomalies and let users review the target areas and data to fix and close the reconciliation successfully in no time.

Intuitive graphical user interface

Create a comprehensive, object-oriented graphical user interface (GUI) with drag-and-drop functionality to build and view your plant model.

Self-service dashboard

Empower users with self-service dashboards. Users can create their own dashboard themes and KPIs for easy monitoring on a day-to-day basis, check the current performance against the past performance, and can take corrective measures quickly.

Modular plant modeling

Break pictures of your plant into multiple interconnected screens that balance the entire plant as one model.

Validated stream categorization

During the plant reconciliation, streams are analyzed and validated so you can include them in the finalized reconciled data. Color-code streams within the model to quickly identify problem areas.

Composition tracking

Follow feedstocks such as crude or naphtha through the plant to the process unit. Integrate automatic movement detection with your data reconciliation. Accurately track tank compositions as they change, so you always know the composition of your flowing materials.

Emissions monitoring and reporting

Capture the emission sources of oil and gas assets and share the data in reports for day-to-day monitoring. Built-in self-service dashboards let users track emission monitoring at plant level and unit level, as well as monitor emissions against plant capacities. Track asset-specific emissions against equipment efficiency and other metrics.

Smart constraints

Incorporate “smart constraints” to force your balance to respect overall mass balance, component and enthalpy balances, and stoichiometric relationships.

Automatic movement detection

Use tank level changes to infer movements between tanks and eliminate tank movement data entry.

Flexible period definition

Define your period length and end time with fully customizable settings.

Data access and inclusive third-party support

AVEVA Production Accounting supports multi-user access and includes native pre-built connectors for most real-time data historians.

Automated Report Generation through APA-WEB

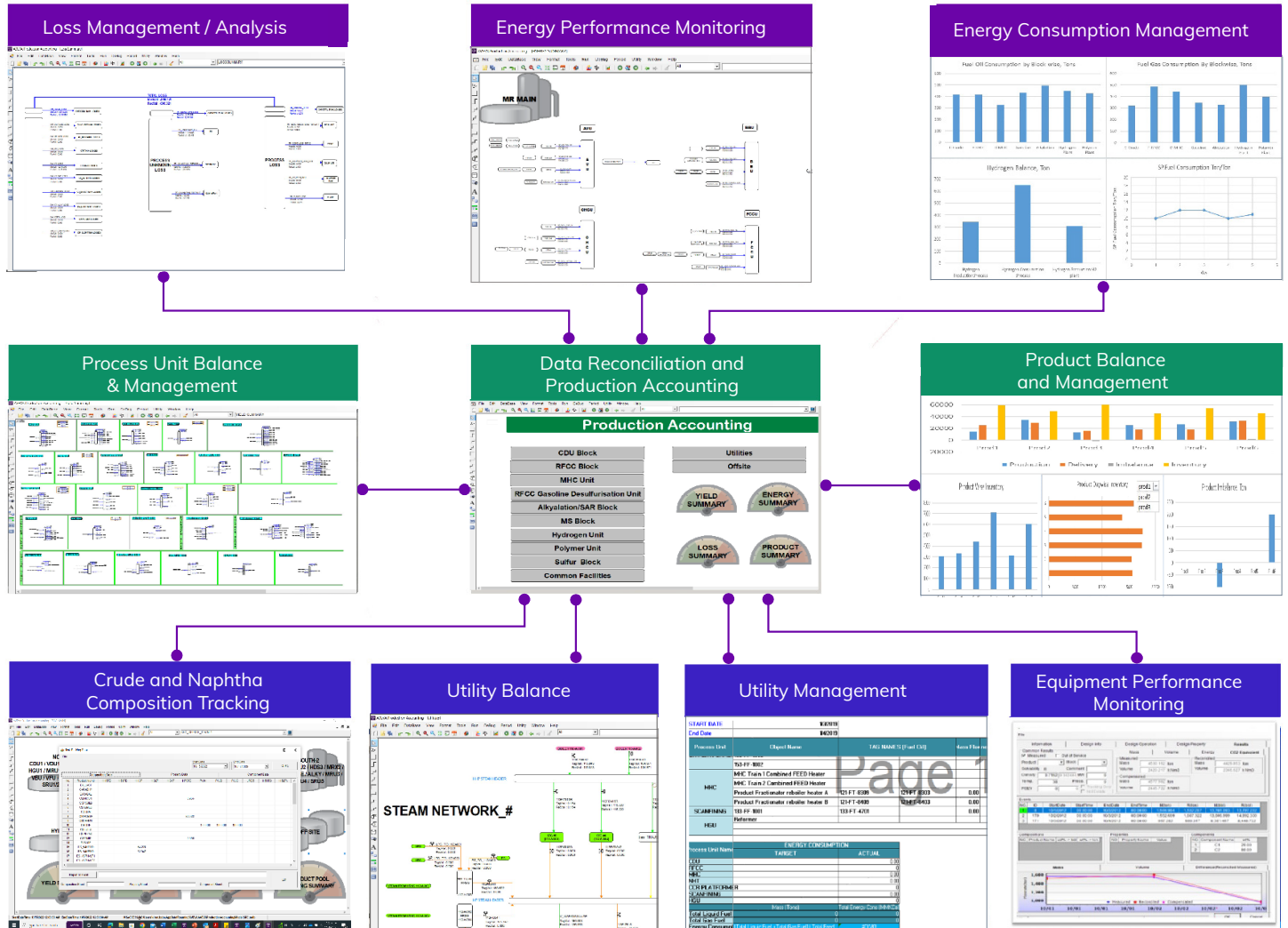
APA Web allows the user to browse the 11 standard reports and its associated analytics seamlessly on web browser and also can download reports in Excel /PDF for daily, monthly, quarterly and yearly.

Trust AVEVA Production Accounting for data reconciliation

Share plant-wide and process material balances across departments for monthly material and financial balances.

Give process engineers and yield accountants trustworthy process data so they can act on true measurement errors outside of tolerable discrepancy limits.

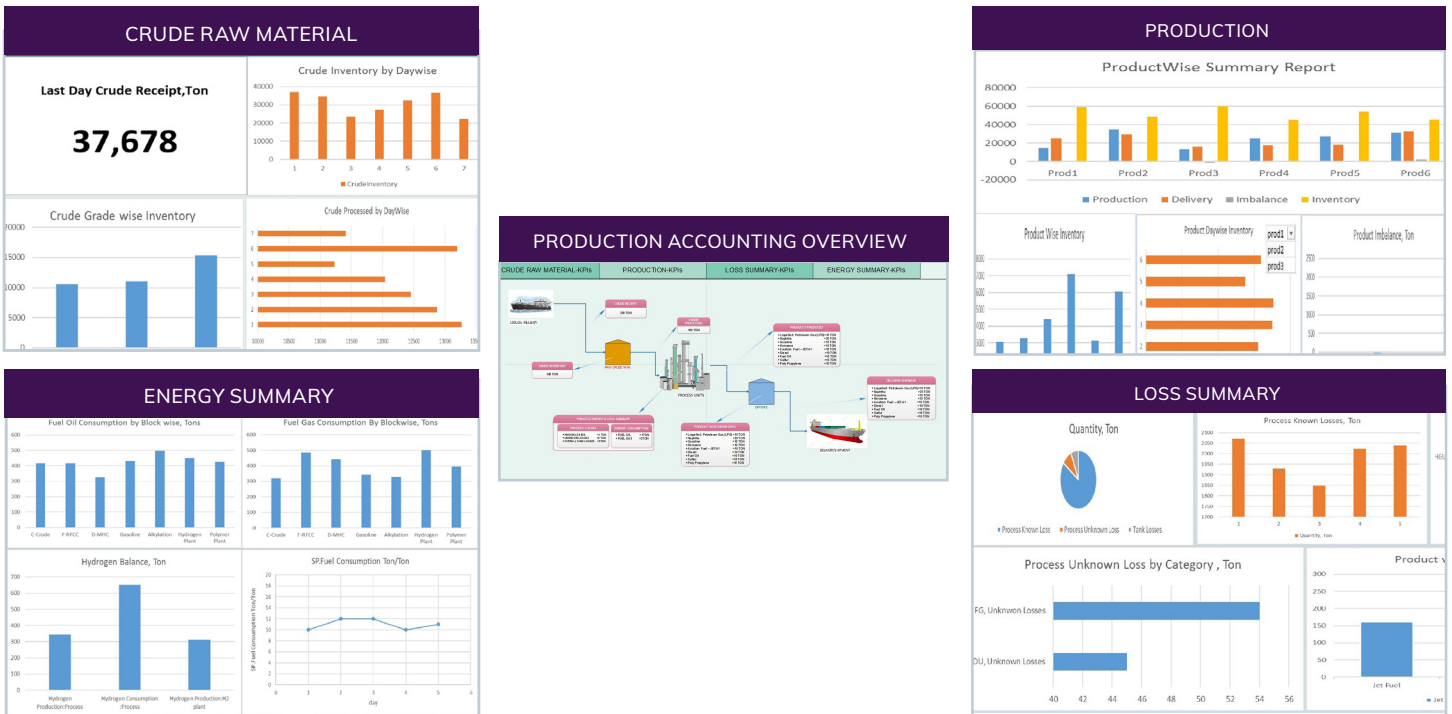
Improve production management, energy management, inventory management, loss management and meter accuracy control.



Improve visualization and analytics

AVEVA Production Accounting automates extraction, transformation, and storage of operational KPIs and related contextual information. Decision makers across the organization can rely on user-friendly analytics and dashboards to make informed assessments quickly and confidently.

Increase visualization and discover new insights by viewing metrics in a wider context.



For more information please visit:
aveva.com/en/products/production-accounting

