

Ventyx Intelligent Mining Solution

Ventyx Production Accounting



Ventyx Production Accounting provides the complete production accounting solution, delivering comprehensive, timely and validated information to support decision-making, reduce risk and maximise profitability.

The Industry Challenges

Improving access to critical information

Mining, mineral processing, smelting and refining companies are required to accurately report the true state of the organisation's financial health. This requires accurate calculation and reporting of final product valuation, throughput, in-process inventories and the financial impact of the change in metal grade for any defined period of time. To achieve this, data on in-process inventories needs to be continuously available. This is a key requirement for reporting as specified by the Sarbanes-Oxley Act.

Production accounting provides the vital link between Production and Finance areas of the business. The process manager, responsible for continuously reporting production figures and maximising throughput and recovery, requires rapid access to validated production information for reporting, planning and monitoring productivity and profitability improvement initiatives.

Obtaining validated and timely information requires a consistent and efficient information management process. To date, however, the industry norm has been to manage this key information in a series of spreadsheets and disparate systems. This approach has arisen due to the wide variety of data types that are not covered by generic plant management systems.

The result is a lack of repeatability in capturing raw data and an excessive amount of time spent by professional staff in calculating derived data. Accuracy, auditability and currency are compromised, risks are increased and the approach does not meet Sarbanes-Oxley requirements. In addition, spreadsheet based data storage does not facilitate long-term trending or analysis of the outcomes of performance optimization initiatives.

The Solution

The Complete Solution for Production Accounting

The Ventyx Production Accounting solution is an off-the-shelf, web-based production accounting solution designed for mining, mineral processing, smelting and refining operations.

The solution addresses key production accounting challenges by providing the ability to take-on production data from various sources such as assay data and moisture content from Laboratory Information Management systems (LIMS) and mass from the weightometers and weighbridges.

The solution includes manual data capture from web-based electronic log sheets, provides validation routines for identifying data with low integrity and has the ability to quarantine data for review. Ventyx Production Accounting features a range of data

Ventyx Production Accounting:

- Facilitates a change in business philosophy from past accounting for mass to future accounting for metal content.
- Supports proactive risk management.
- Enables timely and accurate recognition of revenue.
- Enhances production performance measurement.
- Provides a key input for bonus scheme calculation.
- Enables improved production planning and forecasting.
- Produces timely and relevant production information to finalise the monthly financial reporting cycle.
- Increases accuracy in matching production costs to the various parts of the production process.
- Assists in the calculation of royalty payments.

The Ventyx Production Accounting solution is a single product that meets the complex requirements of mining, mineral processing, smelting and refining operations.

analysis processes including a flexible calculation engine, batch tracking engine and an industry-leading multiphase statistical mass-balancing algorithm, which transforms data and delivers more accurate and comprehensive information.

The solution has been designed to provide a high level of flexibility to cater for diverse site and business requirements while enabling the organisation to utilise a single solution across its operations. It provides a complete production accounting business system that enables the organisation to configure the production flowsheet, collect and validate the required data from multiple sources, perform the mass-balancing calculations and sign-off the results in an auditable fashion. This eliminates the lack of control associated with a multi-spreadsheet, multi-system environment and enables sharing of data across the organisation from a single, reputable source.

The Benefits

Improved decision-making and increased profitability

The Ventyx Production Accounting solution is a single product that meets the complex requirements of mining, mineral processing, smelting and refining operations.

As the only solution purpose-built for the mining industry, Ventyx Production Accounting manages the validation of data from the mine through the processing plants to sales and produces a consistent network of inventory and stream data (such as mass and assay). The result is a powerful tool to support understanding and decision-making across the business.

All mass and assay data can be included in the statistical balancing process, which produces self-consistent data and assists with the identification of erroneous data. The use of redundant data also provides continuous validation, enabling measurement problems to be detected sooner.

The automated balancing capability enables results to be available soon after the assays are reported, providing rapid access to validated information. The solution includes diagnostic tools that enable the identification of data problems.

Balances can also be run at any time and for any defined time period, providing improved visibility and flexibility (e.g. enabling the month balance to be run prior to end-of-month to check for, and rectify, any data problems ahead of time, or run automatic balances every 15 minutes to monitor flotation plant performance).

Other benefits include the ability to:

- Measure plant performance by shift for each process type.
- Provide end-of-shift, end-of-day, end-of-week and end-of-month production reporting for each stream in the processing operation (mass, volume, assay and metal content).
- Provide a technical capability to carry out process troubleshooting.
- Align to AMIRA P754 proposed metallurgical accounting guidelines.
- Provide a single view of production and eliminate spreadsheets and islands of information.
- Reconcile tonnage and quality of the plant feed for validation of geological models.
- Reconcile proportion of each material type fed to the processing facilities at the end-of-month, which can be used to crosscheck with the expected proportions of material types.
- Provide the best estimate of quality of product stockpiles, remnants and dead zones.



The ability to integrate with Ventyx MineMarket provides detailed inventory management with 2D and 3D model capabilities and the ability to apply reconciled adjustments to individual transactions (such as truck movements).

Ventyx Production Accounting validates data and produces information to help maximise the value of the resource. The solution complies with Sarbanes-Oxley financial reporting requirements and provides reliable accounting for Materials in Process (MIP) and stock levels on a per shift, day, week and month basis.

Ventyx Production Accounting provides the complete production accounting solution - delivering comprehensive, timely and validated information to support decision-making, reduce risk and maximise profitability.



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Some of the world's largest private and public enterprises rely on Ventyx solutions to minimize risk, enhance operational and financial performance, and execute the right strategies for the future.

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