

## Precision data redefines inventory control

The need for tighter inventory control in challenging market conditions drives greater emphasis on the frequency, accuracy and visibility of reporting practices.



Reliability and repeatability are the two factors at the heart of the most successful reporting and forecasting models.

Uncertainty in these areas impacts the entire organisation, from surveyor to CEO. All stakeholders must seek better ways to reduce costs without affecting services and supply.

Maptek<sup>™</sup> I-Site<sup>™</sup> laser scanning technology delivers streamlined 3D spatial solutions to tackle issues of accuracy, timeliness and integrity of reporting data.

I-Site provides smart tools to model on-hand stockpile volumes, generate production reports and develop demand forecasting estimates.

Reliable and repeatable workflows ensure models can be trusted for ongoing business intelligence. Repeatability & reliability

Demand forecasting requires precise, current data for planning the most efficient business activities. That data is drawn upon for key decisions in resource allocation to maintain the desired inventory levels.

In any industry, inventory occupies a strategic position in the structure of working capital. As the largest component of current assets, effective management is vital.

Imagine sending product to the mill without knowing what capacity is available. If the stockpile makeup is unknown then you cannot accurately forecast demand for the plant, creating a risk for regulatory compliance.

Airborne methods for collecting stockpile measurements are limited by weather and reflectivity of material, and cannot be applied in enclosed spaces.

Dozer-mounted GPS survey uses staggered points to determine monthend volumes. Comparison with the laser scanning method reveals gaps in data, including missing edges that cannot be safely reached by dozers.

I-Site laser scanners handle all survey tasks, with custom accessories and inbuilt workflows for unique environments and site-specific challenges.

I-Site software can handle point cloud data collected by all terrestrial and aerial systems. Seamless processing and reporting produces the most efficient, accurate and cost-effective results for stockpile modelling.

High-precision volumetric calculation is a Maptek core competency. Focusing on ease of use and high rate of data turnover, I-Site technology offers the best possible data and near real time field-to-finish results for ports, refineries, manufacturing facilities and mine sites.

I-Site users work comfortably and confidently, knowing their data can be relied upon for seamless, efficient stock and inventory management.



## INVENTORY CONTROL / SOLUTION





## Auditability

Benefits of the Maptek laser scanning solution include transparent evaluation of the inventory for financial reporting and export duty, compliance with regulations and improved planning across the operation.

Mobile scanning delivers quick and accurate inventory measurements. I-Site laser scanners can be mounted on standard site vehicles to collect 3D data as the stockpiles are circumnavigated.

For outdoor stockpiles the I-Site Drive system uses a GPS receiver and inertial navigational system (INS) to georeference data to an exact location, standardising to the same coordinate system each time. This is a key benefit for auditing.

Scan data can also be collected at the same time for updating the status of pit surfaces and highwalls without slowing production.

Maptek solutions reduce the time for stockpile survey, enhance the safety of workers and deliver an incomparable level of surface detail.

Timely data allows decision makers to settle on targets, create plans and account for fluctuations in product.

A tighter turnaround for reporting and projection models flows through groundlevel operations to quarterly statements and stock performances.

Demand forecasting can be a compelling driver for identifying the best ways to increase efficiency without decreasing value.

## Inventory control and demand forecasting

Effective inventory control and demand forecasting provide strategic opportunities to lower costs across the production period.

The twin aims of demand forecasting are to minimise disruption in the production schedule for lack of raw materials and to keep down capital investment in inventory.

Excessive inventory levels consume business funds, which then cannot be used for other purposes.

Operational costs, such as the cost of product shortage, handling fees, recording and inspection increase with volume.

Low levels of inventory may result in frequent interruption to the production schedule, leading to under-utilisation of capacity and negative impact on delivering product to customers.