ICONPRO

More Measurement Stability & Efficiency

APOLLO SOFTWARE

Intelligent Condition Monitoring for Metrology. In-Cloud or On-Premise. Made Simple.

Compatibility with HEXAGON, LEITZ, ZEISS, OGP, WENZEL + OPC-UA & MQTT.

WHICH BENEFITS DOES APOLLO PROVIDE FOR MEASUREMENT MACHINES?

25% MORE
Machine Utilization
& Operator Efficiency

50% LESS
Calibrations
& Maintenance Effort

100% REAL-TIME
Measurement Stability
& Quality Monitoring

0% RISK
Through Collisions,
Temperatures & Wear

ARE ALL MACHINES IN A GOOD OPERATION STATUS?

PROBLEM

Machine downtimes or faulty operating conditions are often detected too late and lead to production losses or incorrect measurements.

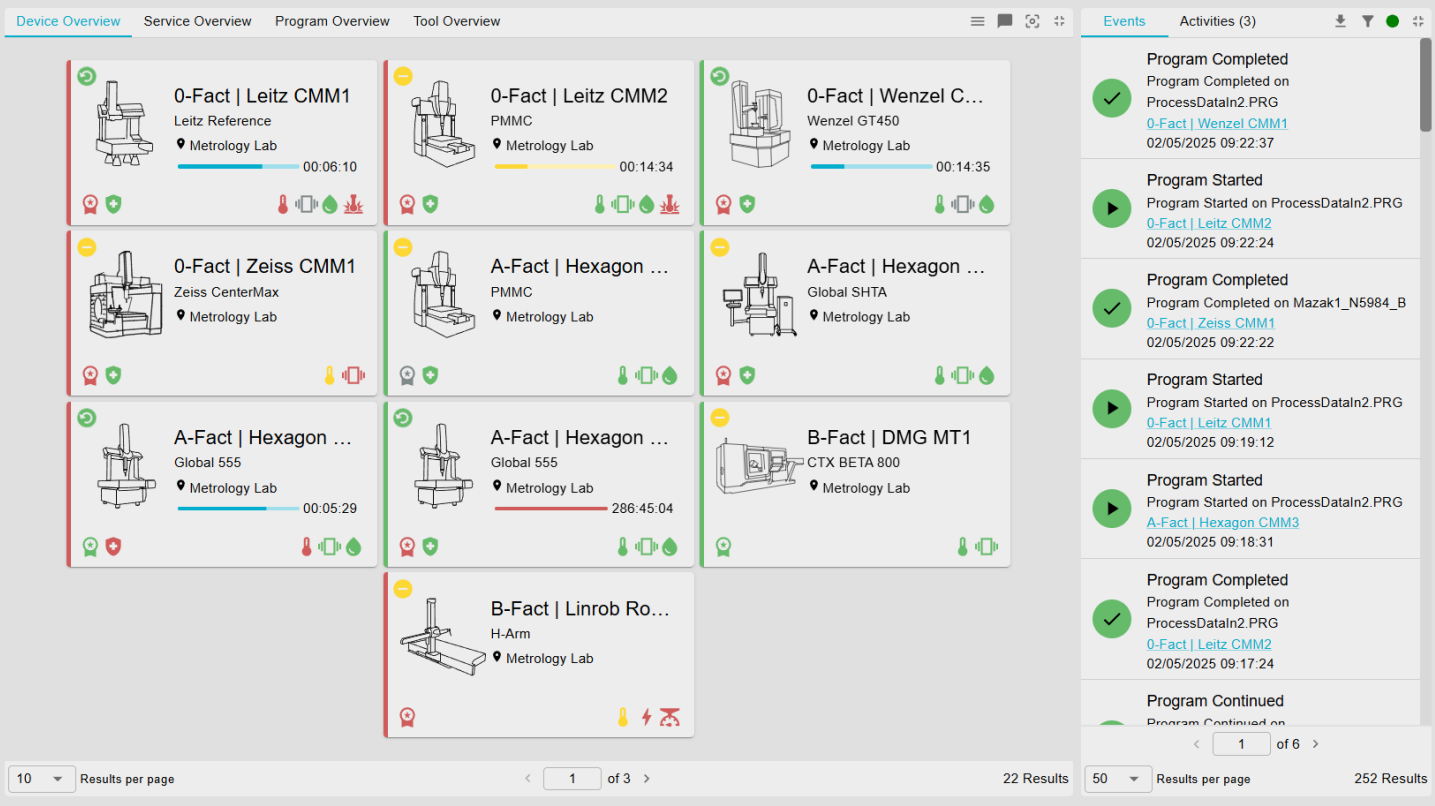
SOLUTION

Real-time display of machine status and critical operating conditions via APOLLO with remaining runtime display and notification alerts.

ADDED VALUE

Higher utilization and quality of measurements with less operator effort and less susceptibility to errors.

Machine Overview with Machine Statuses and Event Log.



WHEN IS A TOUCH PROBE OR SENSOR WORN OUT?

PROBLEM

Wear or contamination of styluses or sensors can lead to unreliable measurements if they are not changed or cleaned in time.

SOLUTION

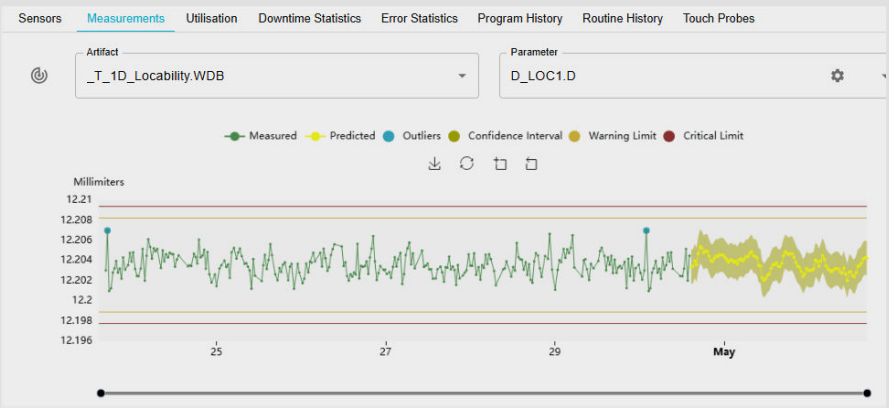
Regular stylus measurements and evaluation of limit value exceedances or critical forecasts. Alternatively, switch stylus based on uptime.

ADDED VALUE

Less unreliable measurements. Timely, cost-effective stylus or sensor change.

Visualization of Regular Stylus or Sensor Measurements over Time. Display of Uptime.

Solution A



Solution B

Probe Name	Probe ID	Number Touches	Total Runtime	Distance travelled
RTP20	75	87.755	521 h	7128 m
MH20i	74	3.870	17 h	1480 m

WHEN DOES A MEASURING DEVICE NEED TO BE CALIBRATED?

PROBLEM

Wear, environmental influences, and collisions can affect measurement stability between calibrations. Calibrations are time-consuming and costly.

SOLUTION

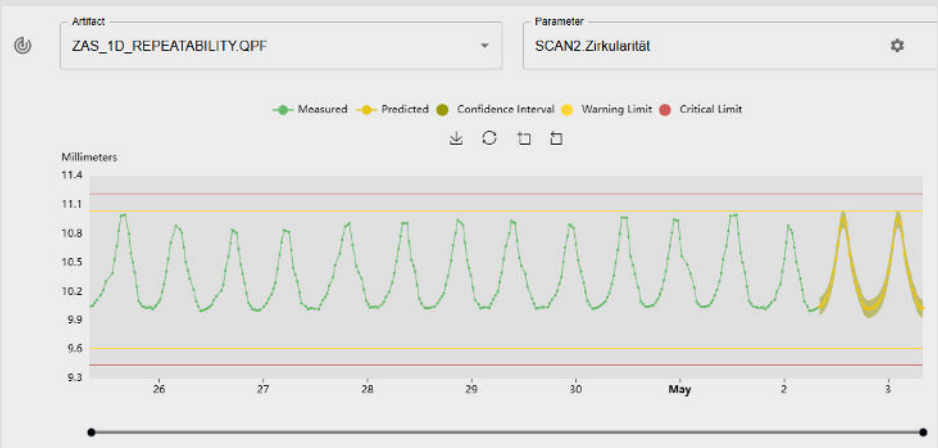
Regular reference part measurement with limit exceedance or forecast evaluation. Alternatively, calibration by operating time.

ADDED VALUE

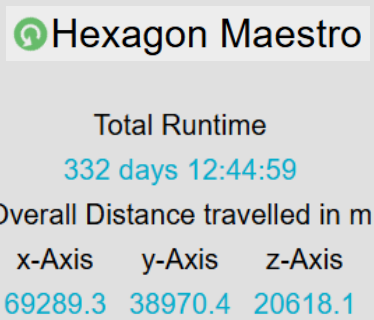
Stable measurement accuracy while maintaining timely and cost-effective calibrations and maintenance.

Visualization of Regular Machine Measurements over Time. Display of Uptime.

Solution A



Solution B



WERE THERE ANY CRITICAL COLLISIONS?

PROBLEM

Collisions may go unnoticed, or their severity may be unclear, leading to unsafe maintenance decisions.

SOLUTION

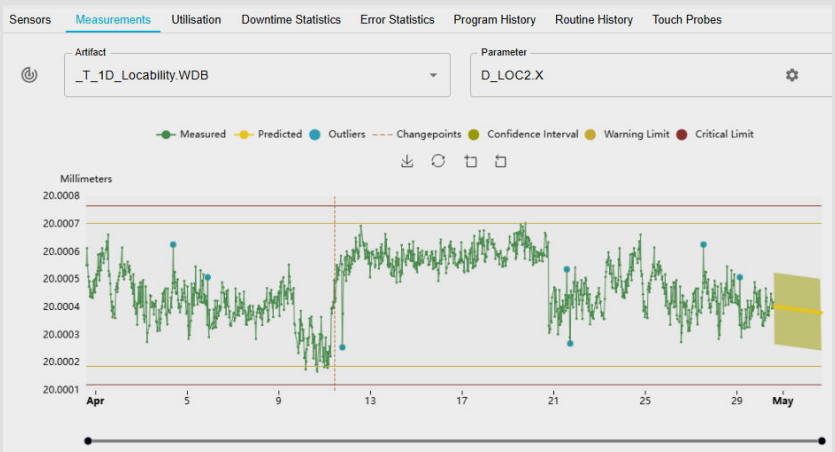
Regularly measure a reference part to monitor measurement stability and detect changes. Automatically get collision messages with criticality info.

ADDED VALUE

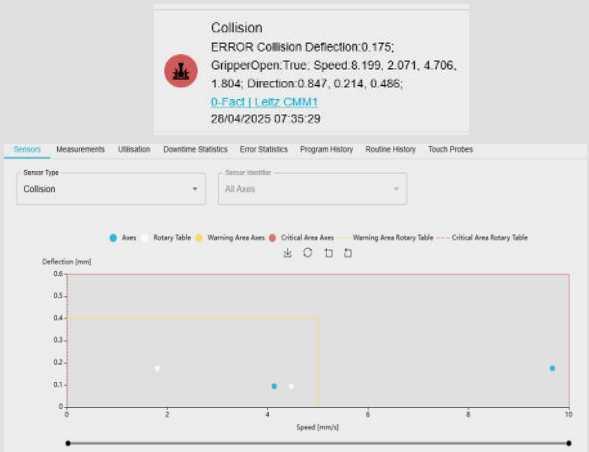
Avoidance of incorrect measurements due to undetected collisions.
Reduction of unnecessary maintenance due to overestimated collisions.

Visualization of Regular Reference Part Measurements over Time. Display of Collision Events.

Solution A



Solution B



CAN MACHINES BE BETTER UTILIZED?

PROBLEM

Machine effectiveness is almost always unclear. Potential improvements in error times, idle times, waiting and set-up times remain hidden.

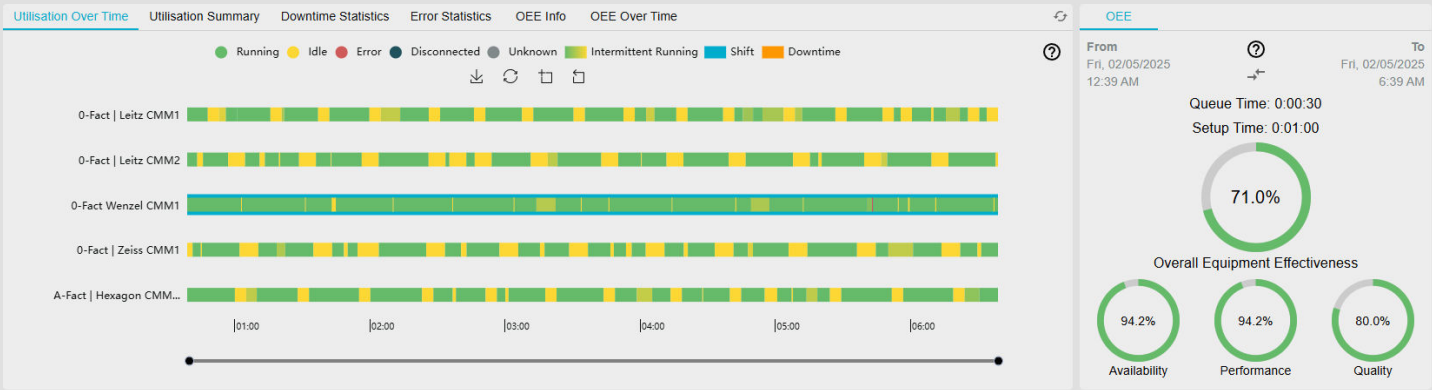
SOLUTION

Condition monitoring and automatic evaluation of OEE key figures. Automatic evaluation of errors, queue and set-up times for improvement analysis.

ADDED VALUE

Continuous insights into overall effectiveness to identify optimization potential and increase machine profitability.

Operating Statuses of Machine over Time. Display of Detailed OEE Metrics.



FOR WHICH MEASUREMENTS WERE THERE ANY QUALITY PROBLEMS?

PROBLEM

Measurement results are often stored in individual files or folders, making it time-consuming to find issues or evaluate rejects.

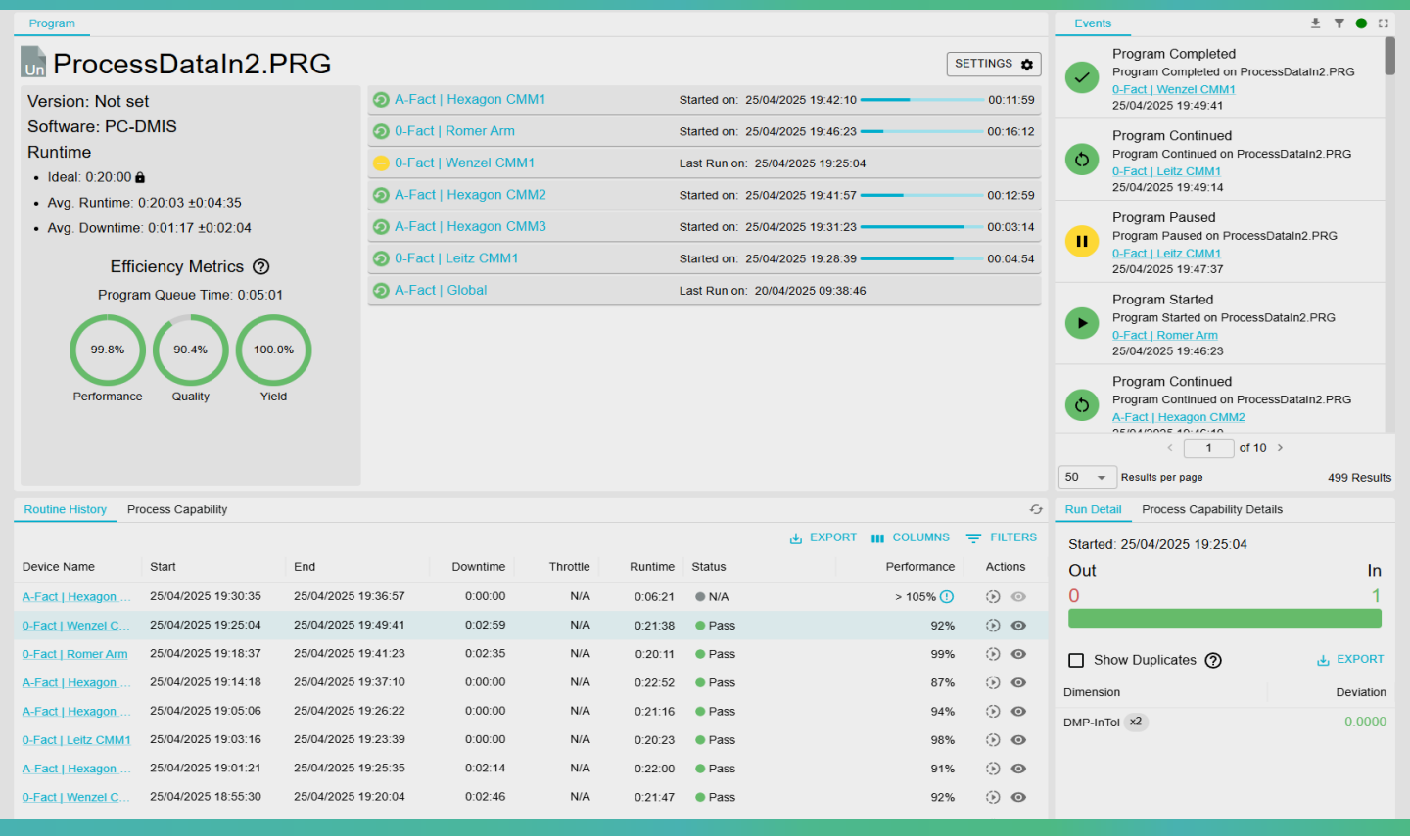
SOLUTION

Central, automatic storage of all measurement results with easy access to individual programs and continuous evaluation of the yield rate.

ADDED VALUE

Simpler, more efficient quality assurance through automated, continuous evaluation. Traceability of historical measurement results and conditions.

Measurement Program Executed on Various Machines Including Metrics and Results.



WHICH MACHINES NEED WHICH SERVICE?

PROBLEM

It’s time-consuming to keep track of necessary service activities. Systematically compiling system, service, and calibration data is effortful.

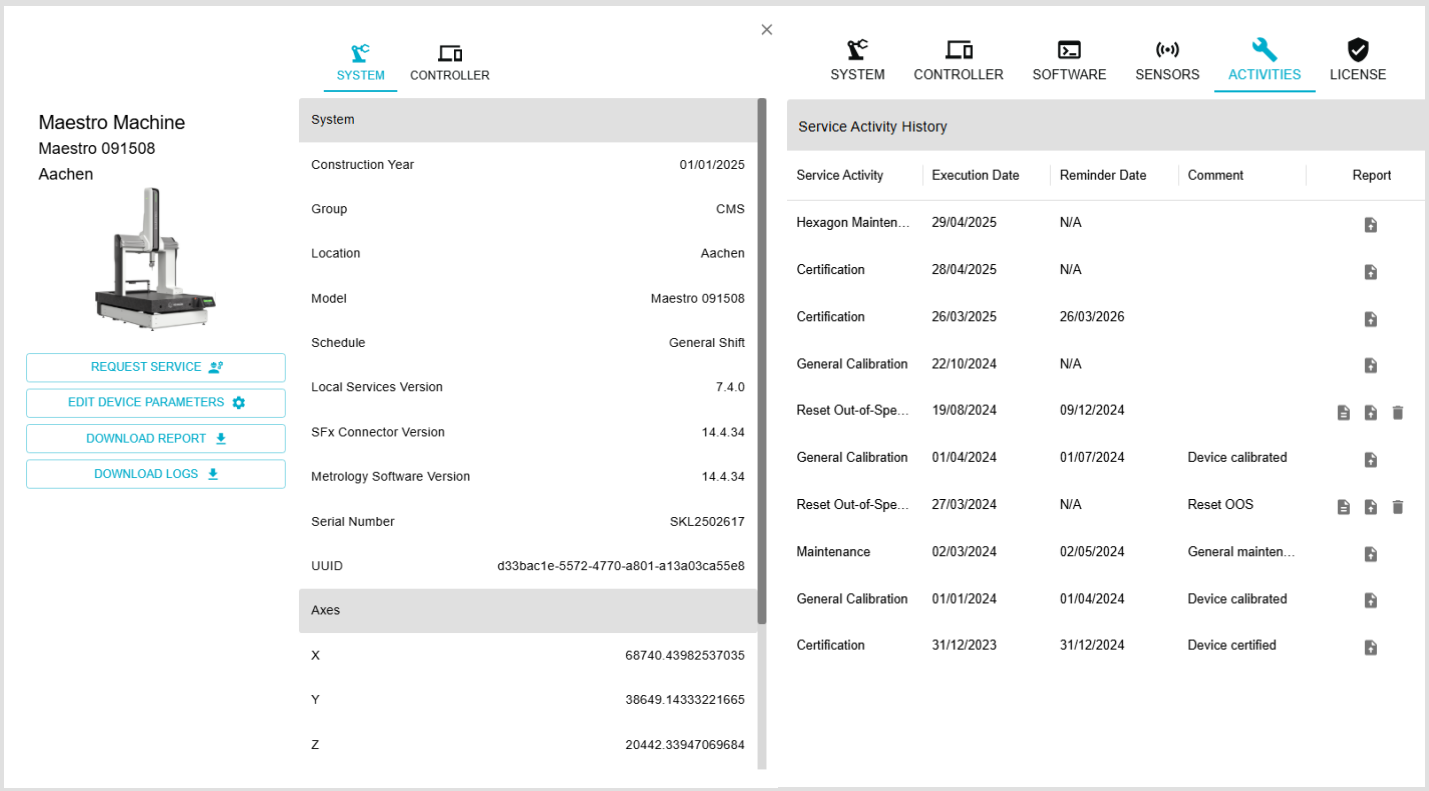
SOLUTION

Create service plans and get reminders in APOLLO. Get structured access to all relevant machine and service data – for all machines from anywhere.

ADDED VALUE

Less effort for service preparation and follow-ups. Less administration through efficient management of the measuring equipment inventory.

Overview of Structured Machine Meta Data. Historical and Upcoming Activities.



ARE MY PRODUCTION PROCESSES CAPABLE?

PROBLEM

Determining measurement, machine, or process capability is complex and usually requires specialized SPC software.

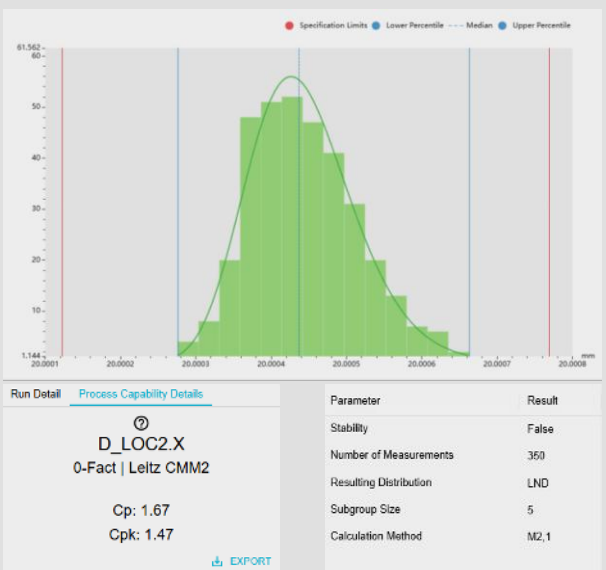
SOLUTION

Benefit from automatic calculation of parameters such as process capability. Get intuitive and ISO-compliant evaluations in APOLLO.

ADDED VALUE

Simple and cost-effective determination of statistical parameters for reports, audits, or customers – without expensive training, additional staff or software.

Quality Control Chart Including Stability Evaluation. Display of Histogram and Process Capability.



WHICH MACHINES CAN BE CONNECTED TO APOLLO?

We Offer a Variety of Existing Interfaces with Standard Protocols or Common Manufacturers.

Machines / Controllers	FANUC Fanuc Oi FOCAS Fanuc 30i / 31 / 32 Fanuc 15 / 16 / 18 / 21	HAAS Classic / Next Gen	HEIDENHAIN 530 / 640 w/DNC option OPC-UA (640)	SIEMENS 840/828 (OPC-UA)	Mazak ...
Generic Protocols	MTConnect	OPC	MQTT		
Metrology Devices	HEXAGON	Leitz	ogp	WENZEL RENISHAW	ZEISS Mahr
Industrial Robots	linrob				

Since 1992 Hi-Tech Metrology has been a leading provider of high-precision measurement and metrology services with a reputation for accuracy, reliability, and innovation. We offer a wide range of solutions designed to meet the needs of our clients across a broad range of industries including defence, automotive, aerospace, mining, medical, and general manufacturing to name just a few.

Hi-Tech Metrology's head office operations are certified ISO 9001:2015 compliant, underscoring our commitment to delivering high-quality services, continuous improvement, and customer satisfaction.

Today Hi-Tech Metrology consists of three integrated business units to help and support clients with all of their measurement needs - Products, Services and Projects. All these business units form part of a unique Australian company, one that strives to provide the best possible outcomes to our existing and future customers.