BLUEWRIST PRECISCAN3D INSPECTION STATION

FLEXIBILITY
FUNCTIONALITY
PERFORMANCE

Work Alongside Not Alone
Safety & Flexible Deployment

- **No safety barrier or custom designed cell required** collaborative robot designed to work alongside quality control staff near the production line
- **Minimal integration and custom configuration** out-of-box plug and play 3D scanning and inspection capabilities
- **Maximum portability and small foot print** can be deployed anywhere within the manufacturing facility for on-site inspection and scanning

DANGER
NO ENTRY
AUTHORISED PERSONS ONLY

ROBOT OPERATING AREA
DO NOT ENTER
AUTHORISED
PERSONS ONLY

Scanning & GD&T Inspection Capabilities
Automated Dimensional Data Control And Reporting

Interchangeable sensors for industry specific needs.

Built-in robot calibration to maintain high accuracy and scanning performance.

Configurable with different collaborative robots to suit every need and budget.

GD&T Inspection Capabilities
- Holes
- Studs
- Slots
- Surface points
- Surface profiles
- Edges
- Clips
- Trim
- Hem Edge
- Max point

Surface Feature Inspection
- Surface defect (colour map)
- Dimensional variation
- Thickness
- Weld Inspection

Data Collection & Reporting For Trend Analysis

SPC Overview
- Process Statistics (Cp, Cpk, Pp, Ppk)
- 3 Sigma Standard Deviation
- Min, Max, Mean

Graphical Overview
- Cycle Measurements
- Positional Data of Features
- Trend Charts

Controls Charts And Histograms
- Pareto Control Charts
- Individual Control Charts
- X-Bar and R Charts

BLUEWRIST
ROBOT & VISION SOLUTIONS

PreciScan3D Inspection Station
From BLUEWRIST

A plug and play metrology-grade non-contact 3D scanning and flexible measurement system is finally within reach for manufacturers of all sizes and industries. Elevate quality control to the next level with the Bluewrist **PreciScan3D Inspection Station**.

With out-of-the box 3D scanning and dimensional measurement capabilities, Bluewrist **PreciScan3D Inspection Station** can be rapidly deployed for in-line, near-line or off-line applications. With a scanning accuracy of up to **0.1mm**, our solution can be used to detect, analyze, and inspect various features on manufactured components that are critical to the final product quality.

Bluewrist **PreciScan3D Inspection Station** combines flexibility, functionality, and performance to help manufacturers conduct thorough inspections to prevent quality defects. The integrated solution is deployed on a rugged cart for maximum mobility within the manufacturing site. Using a high resolution 3D laser scanner mounted on a collaborative robot, the PreciScan3D Inspection Station is designed to work alongside your production staff to gather critical real-time actionable quality control data.

The **PreciScan3D Inspection Station** is a full-fledged mobile quality control station that can be used to check manufactured parts anywhere within the production process with minimal delay or transfer to an off-site lab. The system comes preloaded with industry proven software such as ComXtream, ScanXtream, and SPCWorks, making it possible to conduct on-site part analysis, inspection, and verification against predetermined quality criteria.

With **PreciScan3D Inspection Station**, quality control staff are empowered to make rapid datadriven decisions to improve product quality and eliminate potential downstream defects.
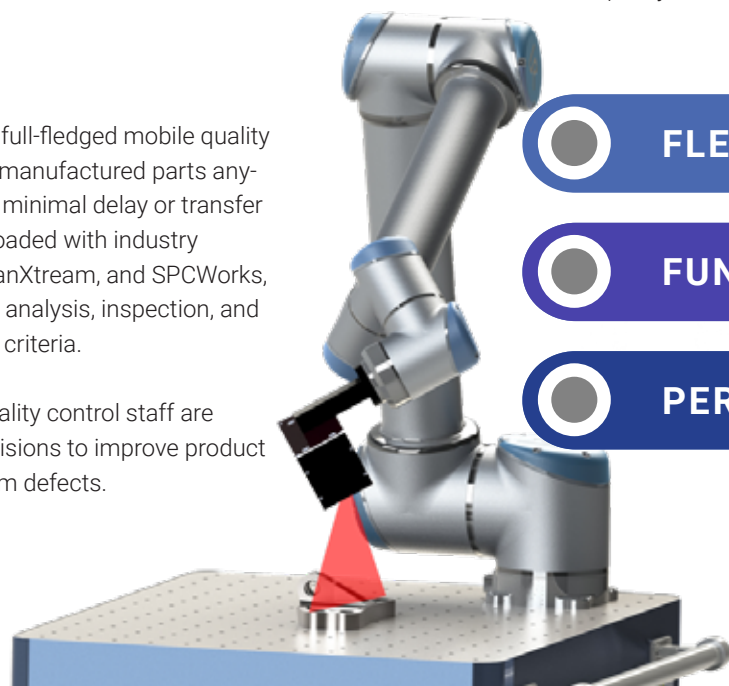
- **FLEXIBILITY**
- **FUNCTIONALITY**
- **PERFORMANCE**

Reduce Defects And Improve Quality
Flexible Non-Contact Inspection & High Resolution 3D Laser Scanning

- **High resolution 0.1mm scanning accuracy** captures highly accurate 3D surface features for comparison against CAD models or GD&T datum reference frames
- **Inspect and scan complex parts with high accuracy and repeatability** robot mounted 3D laser scanner provides complete coverage of part to generate detailed point cloudmodels for further analysis
- **Part surface defect and dimensional variation detection** automatically alerts users when quality issues are detected
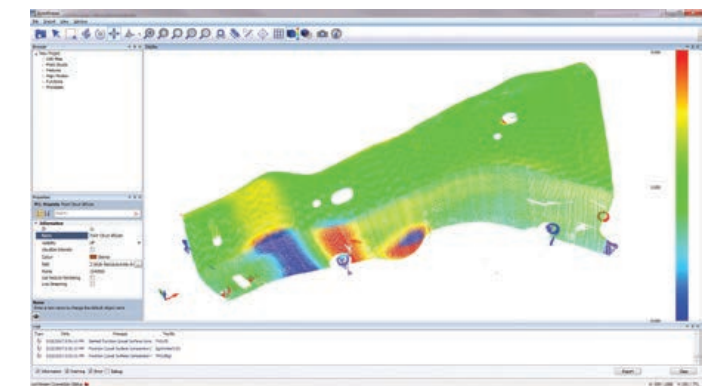
Powered By Industry Proven Software (SPCWorks)
Predictive Analytics For Defect Prevention

- **Prevent defects at the source** detects and reports deviations in dimensional variations and takes preventative action to minimize defects
- **Monitor and analyze trends in the production process** statistically analyzes dimensional data for all scanned parts and automatically notifies users of deviations from predetermined tolerances
- **Real-time quality data to improve traceability** in-line or near-line deployment to gather real-time quality data for rapid decision making