

AccuScan System

Circular geometry inspection and assembly system for mechanical assemblies such as large bearings, industrial gas and steam turbines

AccuScan's capabilities delivers new levels of accuracy, flexibility and performance over a wide range of inspection and assembly applications.

IntelliProbe Corrects For Extreme Setup Errors

Software algorithms address profile distortion due to part misalignment, "intelligent probing" corrects for part off-centering errors of up to 2% of the part radius with negligible error.

Distribute Results Easily

Inspection Templates and Inspection Data Files are easily distributed via email for analysis using the free downloadable viewer or via PDF generated reports and CSV files as standard.

Reduces Inspection Time by up to 90%

AccuScan's ability to measure 1000 data points on up to 2 surfaces simultaneously per revolution will significantly reduce your process times compared with other available methods

Unlimited Number of Surfaces

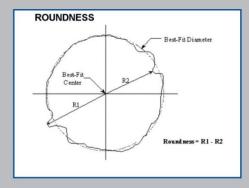
Up to 2 surfaces can be measured simultaneously with the total number of surfaces that can be measured unlimited.

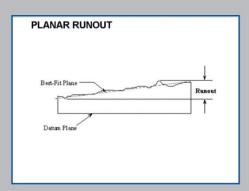
Used To Measure Circular Geometry

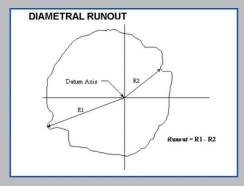
Designed for the collection and analysis of circular geometry inspection data including Roundness, Eccentricity, Diametral Runout, Planar Runout, Circular Flatness and Parallelism.

Probe Types

AccuScan™ can be supplied with probes to best suit your application and can include LVDT, Half Bridge, Laser, Wireless Laser, Eddy Current and Capacitance.







AccuScan's features have been designed to help you get the job done.

Programming Can Be Done Off-Line, On The Fly, Or Both

Inspection templates can be generated at the machine using AccuScan™, independently on any PC anywhere in the world using AccuScan IFE™ or a combination of both.

Fast and Simple

The simple and intuitive full-featured Windows software enables any operator to quickly and easily inspect the type of complicated parts normally associated with gas turbines.

Results Are Recalculated Dynamically

Raw inspection data is collected and stored so datum's, surface definitions and measurement units can be changed at any time with results being recalculated dynamically

Out-Of-Tolerance Flagging

Out-Of-Tolerance Flagging quickly identifies to the operator non-conforming parts.

Process Reference Standard

The sub-micron circular geometry reduces process measurement uncertainty to a level where AccuScan can be considered your measurement reference standard.

Integrated Help

Clicking the Help button located in the top right hand corner of any screen gives the operator instant access to the comprehensive users instruction.

Why RPI?

Over 75 years of engineering heritage underpins our rotary innovation and reputation as a leading supplier of measurement systems for Gas Turbine measurement and assembly, Calibration Laboratories, Coordinate Measurement and for wider inspection and measurement applications where high precision angular accuracy and axis geometry is demanded.















ESTABLISHED IN THE 1940's, RPI is based in the city of Bath, South West England, an area with a very strong Engineering pedigree.





Experts in the supply of challenging and niche measuring solutions.

Extensive global experience.

AccuScan Concept

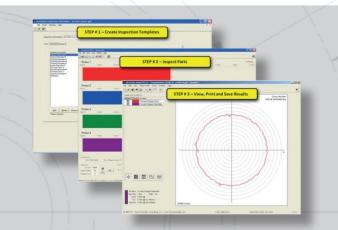


The definitive system for productivity improvement in Turbine Rotor assembly, **AccuScan** is designed to enable our customers to meet the ever changing needs of a fast paced industry





Advanced Stacking software significantly improves rotor assembly rotor quality

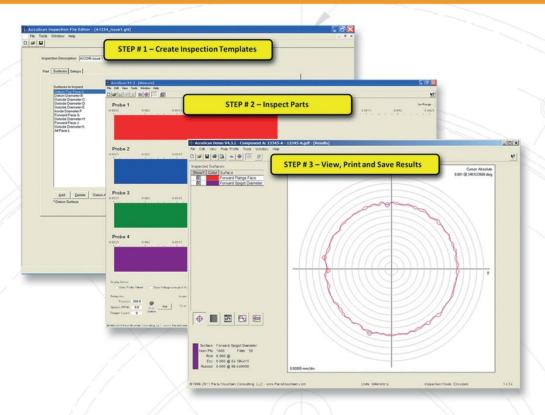


Simple and intuitive data acquisition software



Inspection templates and results can be easily written and displayed on any PC anywhere in the world

Intuitive Software



Complete Your Inspection Process In 3 Easy Steps

Step 1

Select an Inspection Template and Assign color-coded probes to surfaces.

Step 2

Start inspection

Step 3

View results, Print Report or Save As PDF file, Save results in Geometry Data File

Connectivity and Compatibility

- Generate and export inspection reports as PDF and CSV files
- Share data world wide via the free viewer
- Ethernet, Wi-Fi and networkable
- Optional Oracle data base
- Shop floor compatible









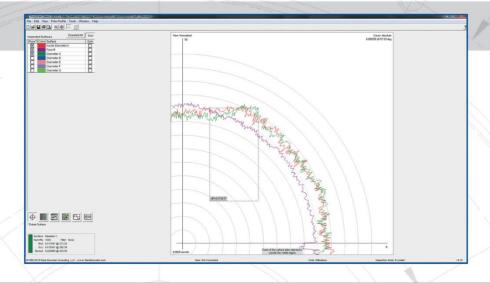


Informative Result Screens

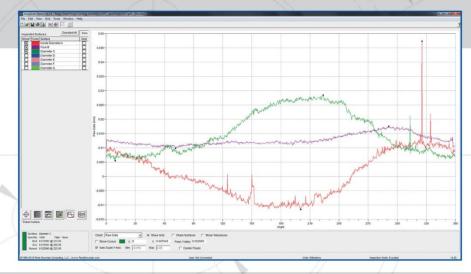
Results Screens Overview

Inspection results can be viewed in one of several formats from the Results screen

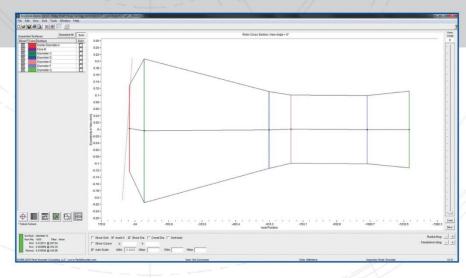
Polar Plot



Strip Chart



Rotor Cross Section



Inspection Modes

There are three basic inspection modes, that is, three different ways that the data acquisition process can be accomplished. They are **Timed**, **Triggered**, and **Encoded**, and each mode has its own merits.

Timed Inspection Mode

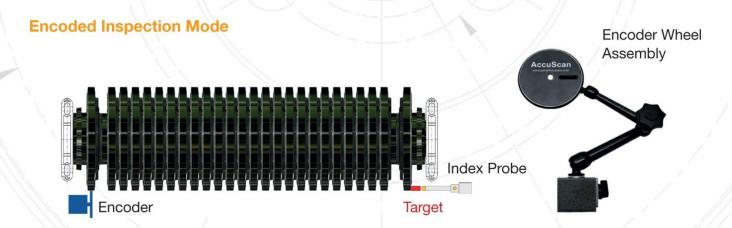


An Index probe and target triggers a once-per-revolution pulse as the part is rotated in a lathe or grinder. The Index probe measures the speed of the part and the data acquisition is automatically timed such that data points are spaced equally about the part.

Triggered Inspection Mode



In a typical Triggered inspection mode, both the Index Probe and the Trigger Probe are used, one to signal each revolution, and one to "trigger" the inspection process. This inspection mode is especially useful for taking measurements where the blades edge triggers the data acquisition.



In the encoded inspection mode, an encoder generates a number of Pulses Per Revolution (PPR) which drives the data acquisition process. The encoder is indirectly coupled to the part using the Encoder Wheel Assembly.

"You can know a company by the companies it keeps"

















Interested to know more about the ground-breaking AccuScanTM range of inspection systems?

Call: +44 (0)1225 426206

Email: sales@rpiuk.com

Visit: www.rpiuk.com

Measurement systems designed, developed and manufactured by

Rotary Precision Instruments UK Ltd

For further information please visit: www.rpiuk.com

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