

WIZblade General Specifications

Performance

- | | |
|---|----------------------------|
| • Typical Automatic Alignment Time: | 50 seconds |
| • Typical Cross-Section Scanning Time (both sides): | 8 seconds |
| • Platform Accuracy: | $E=(3+3.5L^*) \mu\text{m}$ |
| • Total Machine Accuracy: | 14 μm (2 sigma) |
| • Total Machine Repeatability: | 4 μm (2 sigma) |
| • Data Capture Rate: | 50 points per second |

L* = Length in meters

Platforms

Model	Stroke (mm)			Weight (Kg.)
	X	Y	Z	
WIZblade 5-4-4	500	400	400	245
WIZblade 7-7-5	700	650	500	800
WIZblade 10-7-5	1000	650	500	950
WIZblade 12-7-5	1200	650	500	1050
WIZblade 7-7-7	700	700	650	1000
WIZblade 10-7-7	1000	700	650	1150

Larger models are available upon request

- Renishaw PH10 Motorized Head
- Drive: DC - brush
- Feedback: Linear encoder

Utility Requirements

- Power Supply: 110/220 VAC, 16 Amps.
- Air Supply: 17 liter/min @ 5 bar, 0.5 CFM @ 75 PSI

Notes

- Platform Accuracy is verified according to ISO 10360-2 standard
- Total Machine Accuracy verified by scanning a standard ball bar

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WIZblade

The Best Blade
Inspection Solution



NEXTEC
3D Inspection Technologies

Inspects, Analyzes, Reports, Alerts, Improves

The answer for high speed - high precision blade inspection

- Top speed
- Comprehensive Solution
- Automatic Alignment - No expensive fixtures
- Top Accuracy
- Customized Inspection Reports

The Turbine Blade Industry Challenge

The Turbine Blade industry (New production and MRO) challenges a need to enhance the quality control of blades in terms of speed, precision, cost, setup, automation and process control.

The WIZblade Solution

The WIZblade is a turnkey Blade Inspection Solution for rapid high precision measuring of turbine blades, both finished (machined) and unfinished (forged or cast) blades.

The Turbine Blade Inspection Solution features the highly acclaimed WIZprobe™ - laser scanning probe, a state-of-the-art 4 axis motion controller and WIZblade application software.



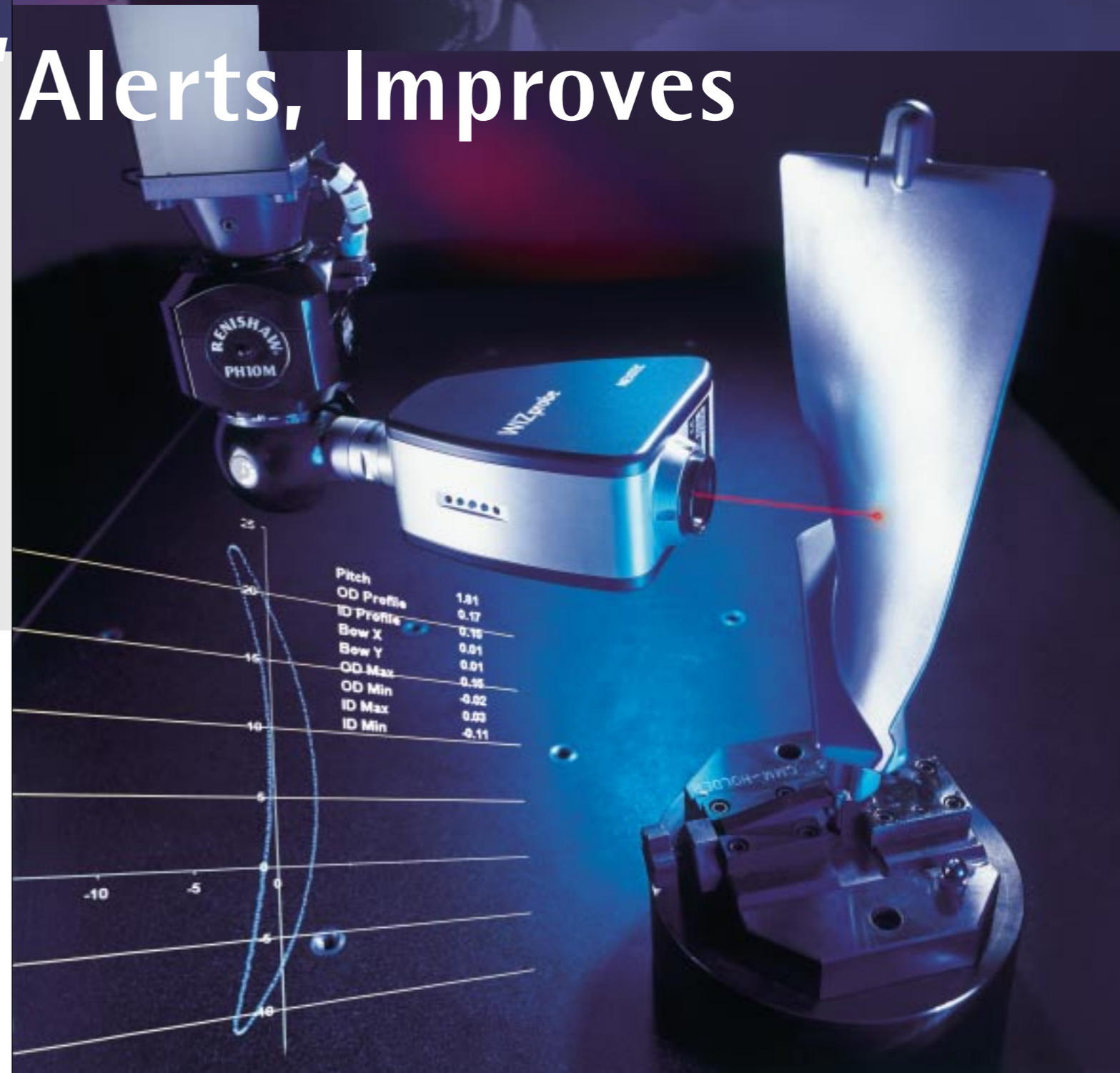
WIZblade

The WIZprobe™

- WIZprobe is an advanced non-contact laser-scanning sensor for fast, accurate and highly reliable geometric measurements
- WIZprobe measurement accuracy is guaranteed over a very wide range of material types, colors, surface finish and laser beam angles
- The WIZprobe is small in size, has a standard PH-10 interface
- Unique adaptive control capabilities enable self-calibration and adaptation to changing conditions during the scanning process

The Blade Inspection Software

- Display of actual and nominal profile plots on the screen at any cross section during "on-the-fly" data acquisition
- Inspection report generation with high-resolution information and all relevant turbine blade numerical dimensions
- Data analysis and automatic comparison to design data and defined tolerances
- High resolution, high density leading and trailing edges measurement
- Multicolor display of the designed and measured profiles, along with the tolerance envelop
- Dynamic zooming of the measured profiles
- Automatic software alignment of blade position
- Hawk Option - The 3D scan data can be exported to any CAD compare software for 3D part analysis and inspection



The Motion Controller

- High performance 4 axis motion controller
- Data acquisition is captured on the fly
- Automatic surface tracking capability

The Platform

- A variety of different Platform sizes are available to accommodate customers' specific applications
- Optional Kit for CMM retrofit

Unprecedented Accuracy

- The WIZprobe™ laser scanning sensor offers a large dynamic range and un-precedent precision
- The WIZprobe™ laser sensor with superior accuracy meeting the most stringent Blade tolerances

Ease of Ownership

- Powerful and user-friendly application software
- Complete turn-key solution

Fast Return on Investment

The combination of exceptional performance and low price ensures a fast Return On Investment with superior process control at reduced manpower.