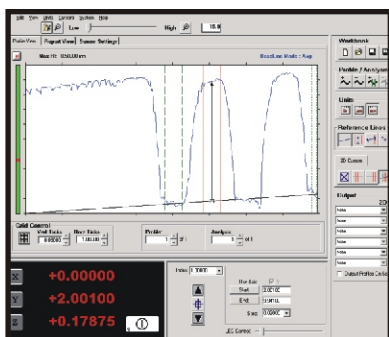


*Ideal for surface contour and profile inspection.
Cobra is flexible and easy to use.*

FEATURES

- High resolution two- and three-dimensional profiles
- Precise measurement with Z axis resolution to 5 microinches
- Scan-X metrology software with easy-to-use graphical interface
- Versatile — use on benchtop, in-line or place directly on the part being scanned
- Non-contact — ideal for fragile or pliable parts



Cobra 2D with optional video camera and LCD video monitor.

LASER PROFILE SCANNER

Fast, Accurate Non-Contact Surface Profiles

Cobra™ is a compact laser scanner that provides accurate surface height information as the laser moves over a surface. Selectable DRS sensors offer a range of resolutions and stand off distances to satisfy a variety of applications.

Increasingly, the surface contour or profile of many parts is critical to how that part fits or functions. Traditional contact methods can damage fragile or sensitive parts, and are subject to variability from operator to operator.

Cobra is simple to set up and its low power laser eliminates any possibility of surface damage.

Improve Part Quality and Productivity

DRS laser/sensor modules emit laser light and collect reflected scattered light on a sensitive sensor. Changes in the position of the laser spot as it moves over the surface cause changes in the sensor output signal. These changes are displayed in Scan-X software as a surface profile with height resolutions to 5 μ inches (0.000005 inches).

Optional Video Camera and 3D Capability

An optional video camera for Cobra 2D and 3D makes positioning of the part

being scanned even easier, further reducing setup time. Add the optional 3D Surfer software and plot XY and Z data points for 3D part mapping.

Flexible and Easy to Use

Simply place the part under the Cobra for open setups or integrate the system into your production line for automated inspections. The Cobra 3D scanner includes a motorized stage that also moves the sample in the X axis, for parallel linear profiles that provide three dimensional area scans. It also includes a rock-solid granite surface plate for added stability.

Cobra is an excellent choice for fast, accurate non-contact surface profiles.

Cobra

Laser Profile Scanner

The Vision is Simplicity

TECHNICAL SPECIFICATIONS

	Cobra 2D		Cobra 3D	
System Configuration	Cobra Laser Profile Scanner; one DRS sensor (see below); Scan-X software			
Weight	23 lbs/10.5 kg		175 lbs/80 kg	
Platform Dimensions, X,Y,Z in.	9 x 17 x 13		20 x 24 x 16	
Scan Length, maximum	X-axis	N/A	4"	
	Y-axis	2"	2"	
Z-axis Adjustment Range	2"		2"	
Z-axis Measuring Range	Varies by DRS Sensor (see below)			
Throat Depth	2.75" to 4.75"			
Step Size, minimum	0.00004"/1/0 μm			
Data Rate	1000 points per second; user configured			
Max. Reading Per Scan	20,000; user configured			
Max Lateral Resolution	0.00004"/1/0 μm			
DRS Sensors (one included)	DRS-300	DRS-500	DRS-2000	DRS-8000
Capture Range	0.012"	0.019"	0.078"	0.315"
Z Accuracy in Capture Range	40 μinches	40 μinches	394 μinches	1575 μinches
Dynamic Resolution	5 μinches	5 μinches	40 μinches	160 μinches
Computer Option	Intel® Processor, 512 MB RAM, 40 GB hard drive, 1.44 MB floppy drive, CD-ROM, parallel, serial and USB ports on board 10/100 LAN			
Operating System	Microsoft® Windows™ 2000			
Metrology Software	32-bit Scan-X Metrology Software by QVI			
Optional Software Packages	Reporting Software MeasureFit™ Plus AutoScan™ Scan-X off-line 3D Surfer			
Hardware Options	Video camera Granite surface plate (2D only) Manual positioning system Steel weldment base Calibration kit			
Straightness of Travel	Y-axis	±1 μm with 25 mm		±1 μm with 25 mm
	X-axis			±1 μm with 25 mm
Temperature				
Safe Operating	54°F - 85°F/18°C - 29°C			
Meet Specifications	68°F ± 4°F/20°C ± 2°C			
Power Requirements	115 - 230 VAC ± 5%, 50/60 Hz, 1Φ			