CyberGage360™
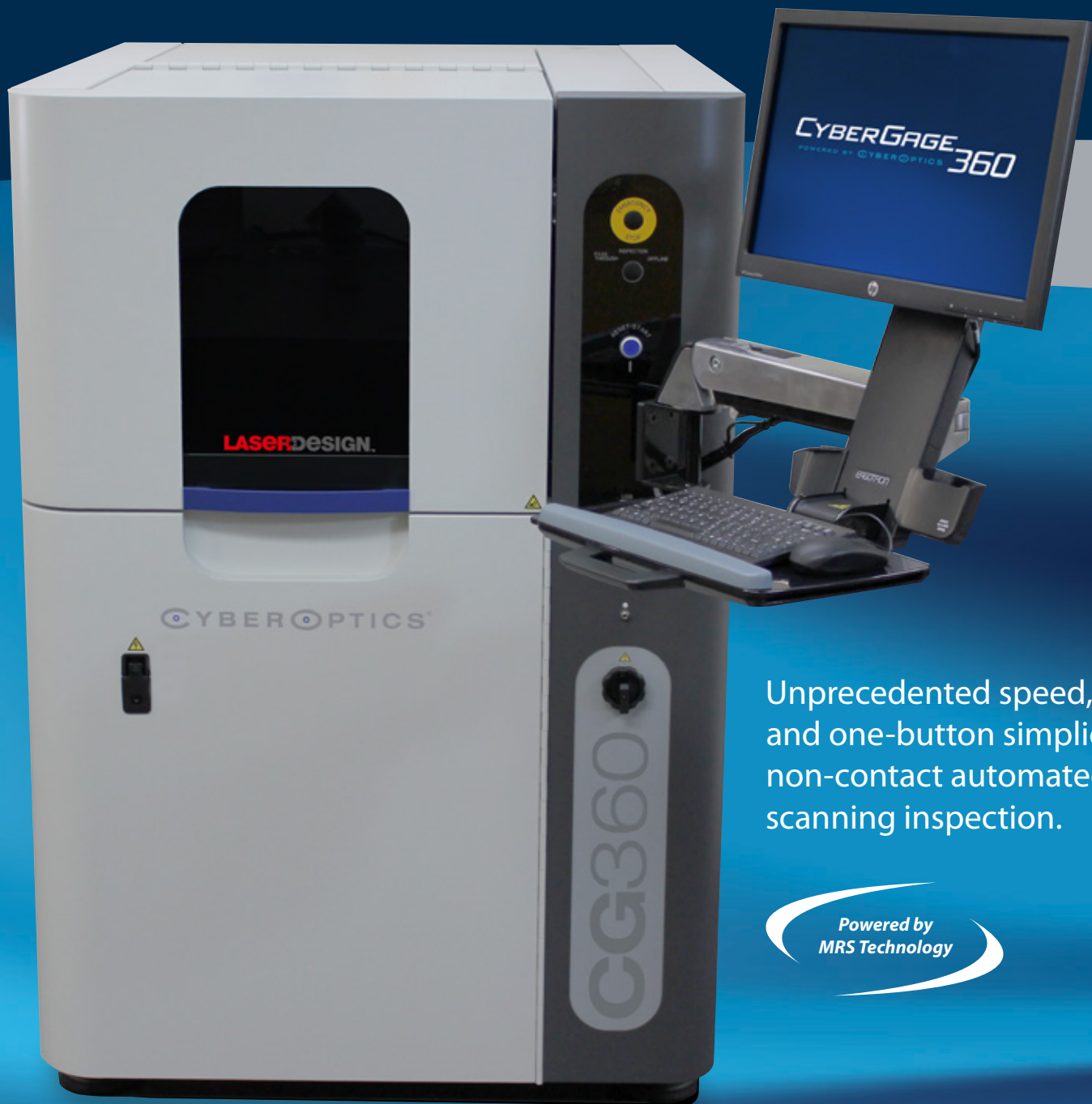
One-Button Automation for 3D Inspection.

Unprecedented speed, accuracy and one-button simplicity for non-contact automated 3D scanning inspection.
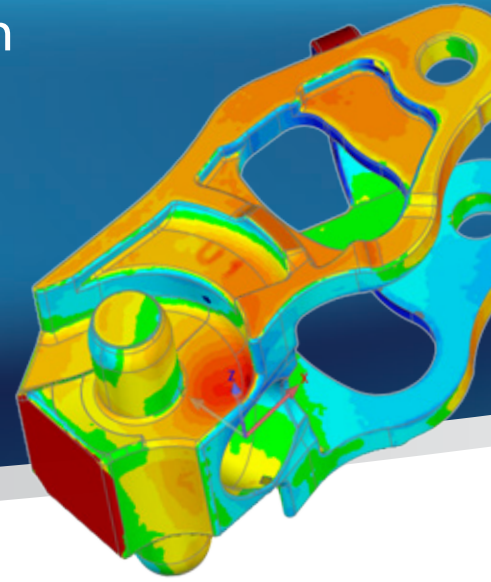
Powered by MRS Technology

CYBEROPTICS®

CyberGage360™

High Precision Accuracy with Multi-Reflection Suppression (MRS) Sensor Technology

The CyberGage360 3D Scanning System is powered by CyberOptics' breakthrough 3D sensing technology that enables metrology-grade accuracy by inhibiting measurement distortions. CyberOptics' unique sensor architecture simultaneously captures and transmits multiple image data in parallel while proprietary fusing algorithms merge the data together. The result is a highly precise 3D scan and inspection report with accuracy NIST traceable to +/- 25µm.
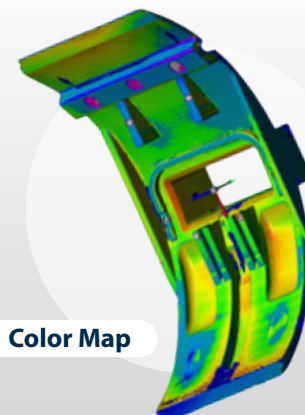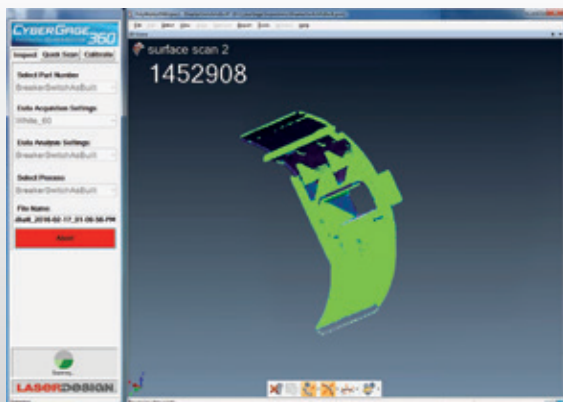
Complete 360° 3D scan and inspection report in less than 3 minutes.

The CyberGage360 greatly speeds In-Process Inspection and Incoming/Outgoing Parts Inspections providing a full 360° surface scan in less than 3 minutes. With just one click, capture up to 8 million points/part pose with 8 part poses (every 45°) for a quick and accurate complete scan. Ideal for near-production line high-volume scanning and high speed throughput.

Easy-to-Use Software with One-Button Automation

The CyberGage360 provides the easiest user experience for 3D scanning inspection. It's as simple as 1, 2, 3. Open the door, place the part and press the button. Anyone can use the system with little to no training for factory-friendly operation, making it the easiest way to achieve metrology-grade accuracy with just one click.

Color Map

CAD

Scan generates high density point cloud data to compare to CAD models or 'golden examples.'
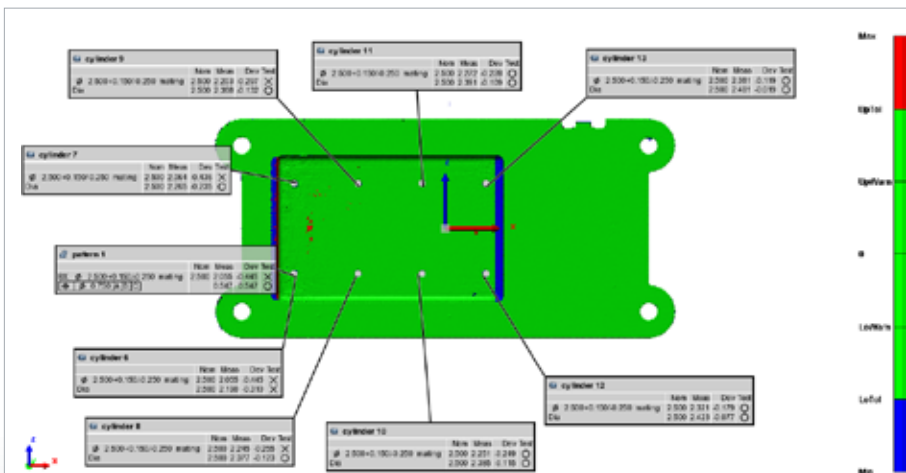
MRS Sensor Technology

MRS suppresses the effects of variations in surface characteristics of parts under inspection, resulting in a highly precise scan

Fixtureless design eliminates the need for costly gages
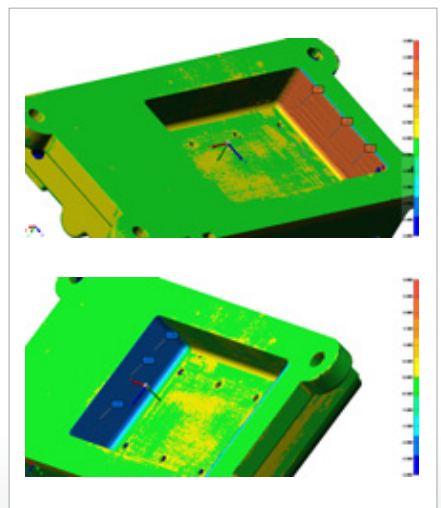
Automatically Generated Report

A full 360° surface scan and inspection report compares scan data to CAD models or 'golden examples.'

Feature Table

Units Millimeters
Coordinate System world
Data Alignments drf - A B C

Name	Control			Nom	Meas	Tol	Dev	Test	Out Tol
cylinder 6	Ø 2.500+0.150/-0.250	mating		2.500	2.055	+0.150/-0.250	-0.445	Fail	-0.195
	Diameter			2.500	2.190	+0.150/-0.250	-0.310	Fail	-0.060
cylinder 7	Ø 2.500+0.150/-0.250	mating		2.500	2.064	+0.150/-0.250	-0.436	Fail	-0.186
	Diameter			2.500	2.265	+0.150/-0.250	-0.235	Pass	
cylinder 8	Ø 2.500+0.150/-0.250	mating		2.500	2.245	+0.150/-0.250	-0.255	Fail	-0.005
	Diameter			2.500	2.377	+0.150/-0.250	-0.123	Pass	
cylinder 9	Ø 2.500+0.150/-0.250	mating		2.500	2.203	+0.150/-0.250	-0.297	Fail	-0.047
	Diameter			2.500	2.368	+0.150/-0.250	-0.132	Pass	
cylinder 10	Ø 2.500+0.150/-0.250	mating		2.500	2.251	+0.150/-0.250	-0.249	Pass	
	Diameter			2.500	2.385	+0.150/-0.250	-0.115	Pass	
cylinder 11	Ø 2.500+0.150/-0.250	mating		2.500	2.272	+0.150/-0.250	-0.228	Pass	
	Diameter			2.500	2.391	+0.150/-0.250	-0.109	Pass	
cylinder 12	Ø 2.500+0.150/-0.250	mating		2.500	2.321	+0.150/-0.250	-0.179	Pass	
	Diameter			2.500	2.423	+0.150/-0.250	-0.077	Pass	
cylinder 13	Ø 2.500+0.150/-0.250	mating		2.500	2.381	+0.150/-0.250	-0.119	Pass	
	Diameter			2.500	2.481	+0.150/-0.250	-0.019	Pass	

Feature Table

Units Millimeters
Coordinate System world
Data Alignments drf - A B C

Name	Control		Nom	Meas	Tol	Dev	Test	Out Tol
pattern 2	4X Ø 10.000±0.250	mating	10.000	9.921	±0.250	-0.079	Pass	
	4X Ø 10.000±0.250	mating	10.000	9.888	±0.250	-0.112	Pass	
	4X Ø 10.000±0.250	mating	10.000	9.943	±0.250	-0.057	Pass	
	4X Ø 10.000±0.250	mating	10.000	9.919	±0.250	-0.081	Pass	
	⊕ Ø 0.800 A B			0.166	0.800	0.166	Pass	
	⊕ Ø 0.800 A B			0.142	0.800	0.142	Pass	
	⊕ Ø 0.800 A B			0.149	0.800	0.149	Pass	
	⊕ Ø 0.800 A B			0.149	0.800	0.149	Pass	
cylinder 16	Ø 10.000±0.250	mating	10.000	9.921	±0.250	-0.079	Pass	
	Diameter		10.000	10.020	±0.250	0.020	Pass	
cylinder 17	Ø 10.000±0.250	mating	10.000	9.888	±0.250	-0.112	Pass	
	Diameter		10.000	10.042	±0.250	0.042	Pass	
cylinder 18	Ø 10.000±0.250	mating	10.000	9.943	±0.250	-0.057	Pass	
	Diameter		10.000	10.037	±0.250	0.037	Pass	
cylinder 19	Ø 10.000±0.250	mating	10.000	9.919	±0.250	-0.081	Pass	
	Diameter		10.000	10.030	±0.250	0.030	Pass	

3D Scans – Simple as...

1 Open the door   **2** Place the part   **3** Press the button

Designed for use in general purpose metrology, the CyberGage360 has a range of potential industrial applications from automotive to aerospace where high accuracy and high speed throughput are important.

Specifications

Work Volume	200mm diameter x 100mm high cylinder (8" diameter x 4" high)
System Accuracy	25µm
Resolution	50µm
Speed	8 million points/part pose, with 8 part poses (every 45°) scanned in < 3 minutes
CDRH Safety	Eye safe - no protection needed
System Controllers Embedded	High-performance PC included
Environmental Temperature	Temperature ambient = 20°C +/- 3°C (68.5°F +/- 5°F) to maintain calibrated performance
Operating Environment	Humidity 50% +/- 30%
Weight of Part	2.0 kg max (4.4 lbs.)
Data Output Formats	STL, PLY, OBJ, ASC
Electrical Requirements	110-120V+/-10% 1 phase/ 50-60hz+/-3.5%
Included with System	PC controller built in, Polyworks Inspector inspection reporting software with: 1 year maintenance/updates/support, operation manual, maintenance manual, and training at factory (Minneapolis or onsite option).
Warranty	1-year warranty (hardware, software, parts, labor, workmanship)
Warranty Notes	Request pricing from CyberOptics sales engineer

CyberGage360 lowers Cost of Quality and shortens Time-to-Market by dramatically speeding up In-Process Inspection and Incoming/Outgoing Parts Inspections.

Save Time. Save Expense. Improve Yields.

CYBEROPTICS®

Contact CyberOptics today for more information
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