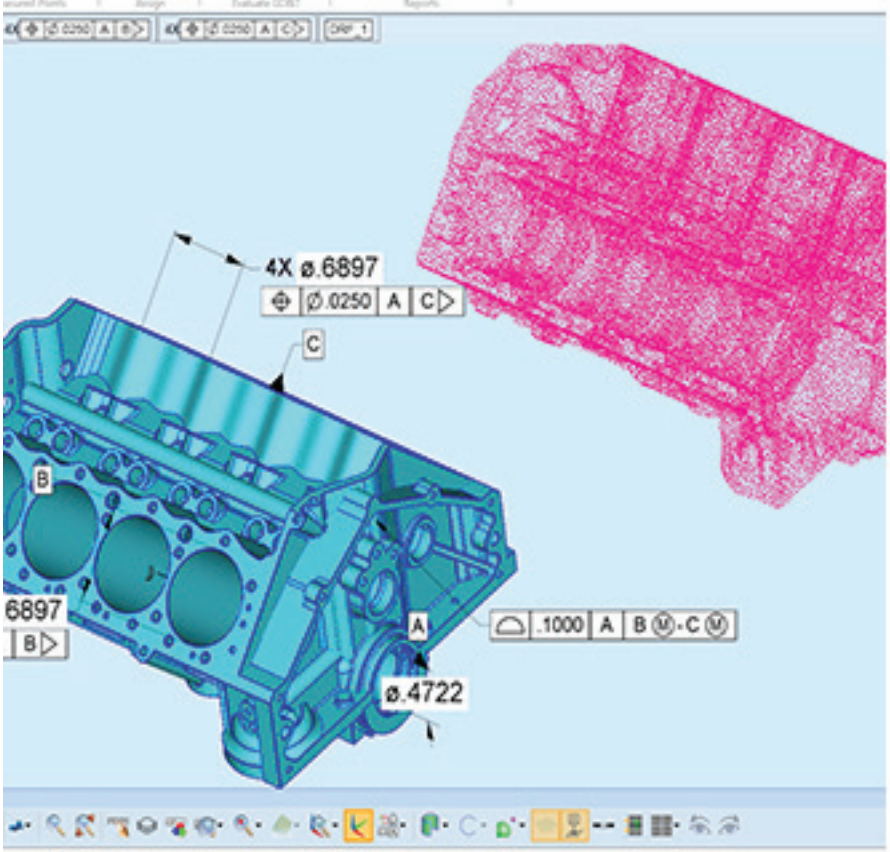



# LUNCH & LEARN

# 3D SCANNING

## WEDNESDAY, MAR 29
## 10:30AM - 1:30PM

### Turning millions of points into a few meaningful answers

Laser scanners, structured light scanners, and CT scanners all deliver millions of points in a matter of minutes or even seconds. That's the easy part. The hard part comes when we need to turn those millions of points into the answers we need to make decisions. Decisions to accept or reject a part (continue, modify, or stop a process). Those decisions most often depend on specific numbers: a diameter, a location, or a profile. Turning millions of points into meaningful answers is the next big breakthrough in dimensional metrology.

In this Lunch & Learn, we will present:

Small group demonstrations using 6 different scanning technologies to gather large point clouds. The afternoon session will demonstrate how to turn those point clouds into the meaningful results we need for dimensional metrology decisions: reverse engineering, CAD-to-part comparisons, traditional plus/minus tolerancing, and Geometric dimensioning & tolerancing.

The meaningful answers for a GD&T callout is most often decided by the single, most outlying point. When that single point is one of 20 million, new challenges are encountered.

Hope to see you on March 29, and be sure to send this to anyone else who wants to attend.

To learn more about what Productivity Quality, Inc has to offer, contact Brenda Bohlinger at **brenda.bohlinger@pqi.net** or call (952) 446-7704.

## AGENDA

10:00 - 10:30: Registration

10:30 - 12:00: Introductions
Overview of PQI
Synopsis of Technology
Demos of Equipment

12:00 - 1:30: Lunch/Networking
CT Scanner Demo
Deliverables & Software

1:30: Stay for more questions & demos

## REGISTER AT

## www.GageSite.com/LNL

15150 25th Avenue North · Suite 200
Plymouth MN 55447
763.249.8130 / 800.772.0620

PRODUCTIVITY QUALITY INC
www.gagesite.com

# FOR LARGE PARTS:

Artec 3D

**EVA**

3D Accuracy: 0.1mm
Working Distance: 0.4 - 1m

**SPIDER**

3D Accuracy: 0.05mm
Working distance: 0.17 - 0.3 m
(+0.03% over 100cm)

ROMER

**ABSOLUTE ARM**
**7-Axis Probing & Scanning**

Model #: 7525SI/SE
Measuring Range: 2.5 m /8.2 ft
Probe Volumetric Accuracy: ±0.038mm
Scanning Volumetric Accuracy: ±0.063mm

INSPECVISION

**STRUCTURED LIGHT**
**Opti-Scan 350.10**

X=350mm (13.8")
Y=215mm (8.5")
Z=215mm (8.5")
Volumetric Accuracy:
15 microns (.006")

# FOR SMALL PARTS:

ShapeGrabber
Industrial 3D Inspection


**CABINET-BASED LASER**
**Ai310**

Accuracy: ~0.025mm
Scan Volume:
Cylinder of 300mm (12 in) in height
by 200 m (8 in) in diameter

SENSOFAR


**MICROPART SCANNING**
**S Neox**

Optical Resolution (µm): 0.17 to 1.87

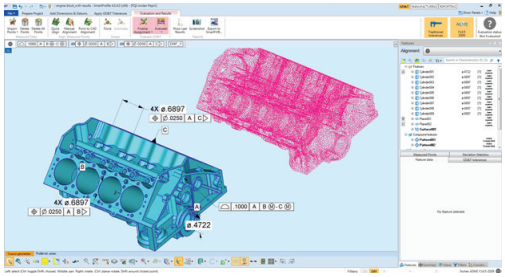
YXLON

**CT SCANNING**
**FF20CT**

Scan Volume: 150mm x 300mm
3.9 µm + L/75 (L=mm)

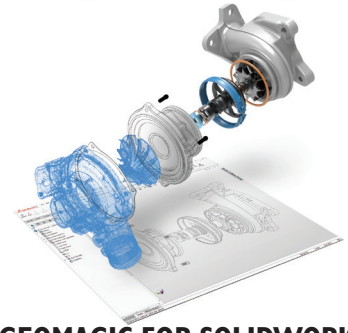
# SOFTWARE:

KOTEM



**SMARTPROFILE**

geomagic®



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