PM-400

Powered by Gocator Sensors from LMI Technologies

Laser Confocal Scanning Platform

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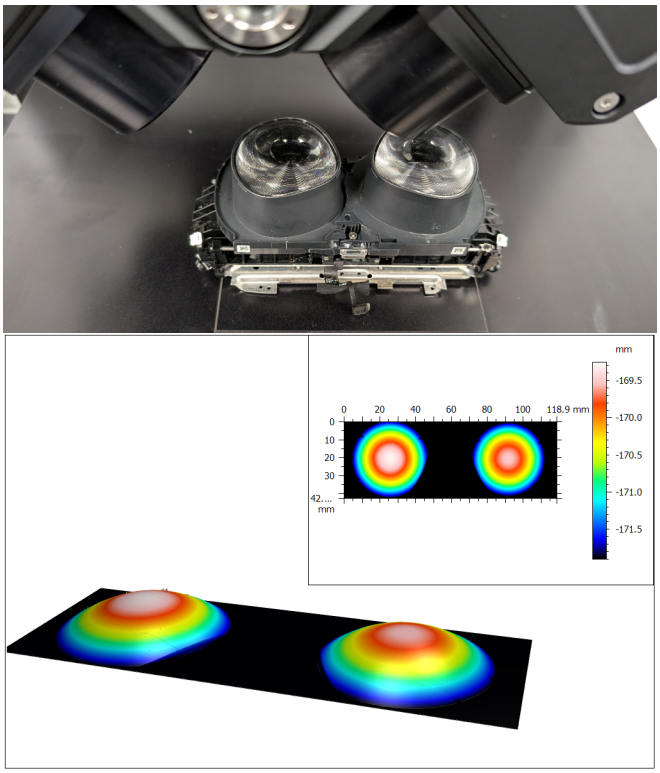
PM-400

Laser Confocal Scanning Platform



Lens inspection from VR goggle assembly

Easy Recipe Creation

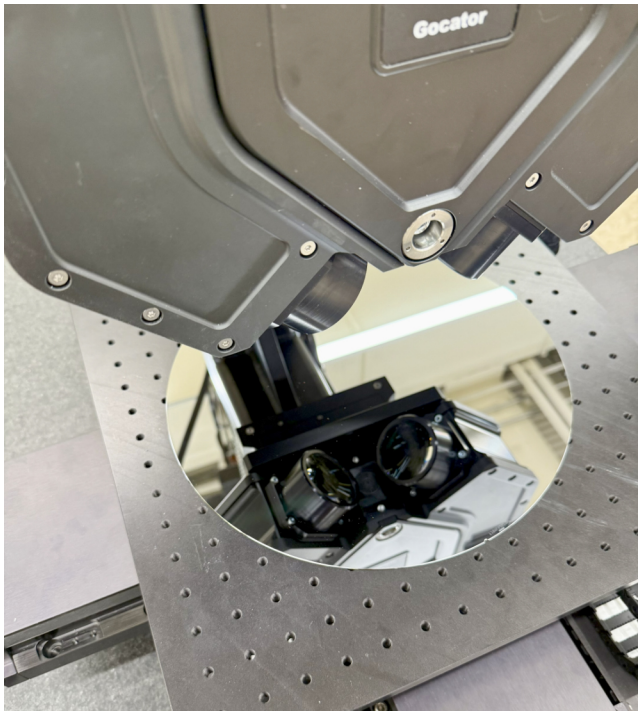
Software tools provided for scan area setup, recipe generation, and analysis:

- Gets scan data quickly
- Stitches data for large area scans (supports scans with over 2 billion points)
- Automates surface analysis

How Does it Work?

Unlock the precision of the Gocator laser confocal line sensors:

- 400x400x200mm measurement volume
- Industry-leading precision motion technology



Wafer scanning with the PM-400

Contact us today to find out more:

e: sales@peakmetrology.com

p: +1.412.406.7880

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Specs

PM-400 Specifications	
Inspection Volume	400 x 400 x 200 mm
Max Data Collection	2.14 billion points
Compatible Sensors	All Gocator 4000 and 5500 Series Sensors
XY Performance	
Accuracy	± 1.5 µm
Repeatability	± 0.5 µm
Encoder Resolution	0.1 µm
Mass Information	
Base System	500 kg
Open Table (-TA5/-TA6)	120 kg
Enclosed Table (-TA7/-TA8)	155 kg
Mechanical Specifications	
Payload Capacity	35 kg
MTBF (Mean Time Before Failure)	20,000 Hours

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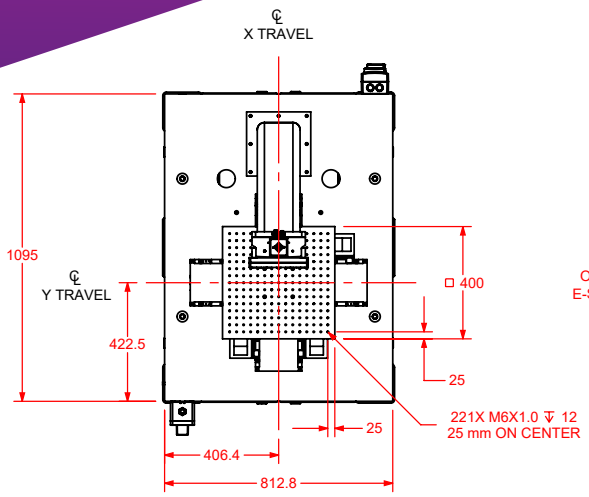
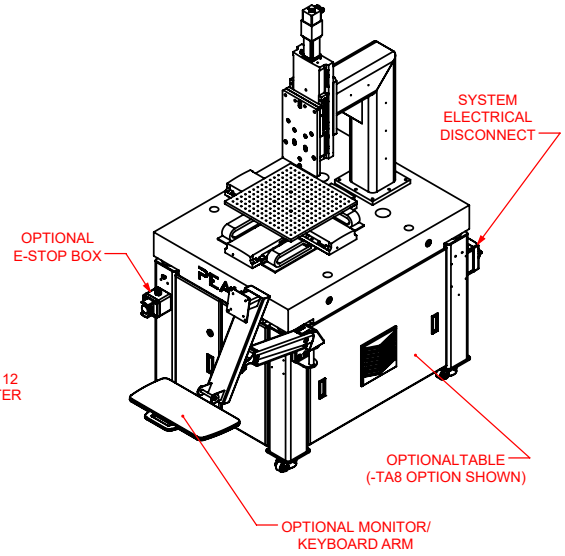
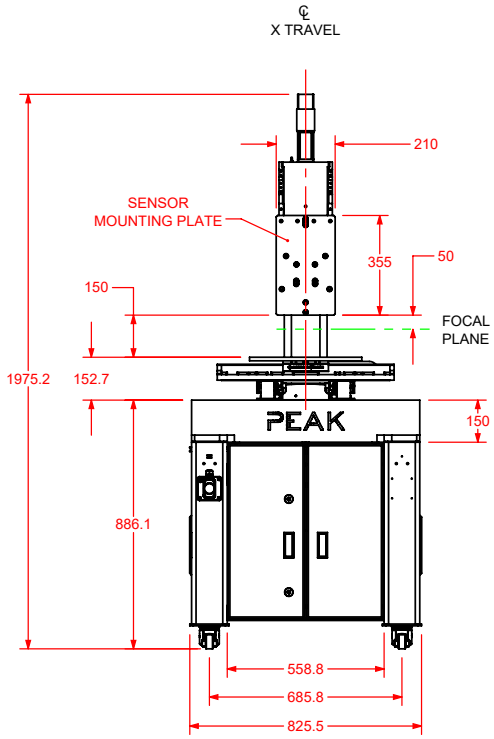
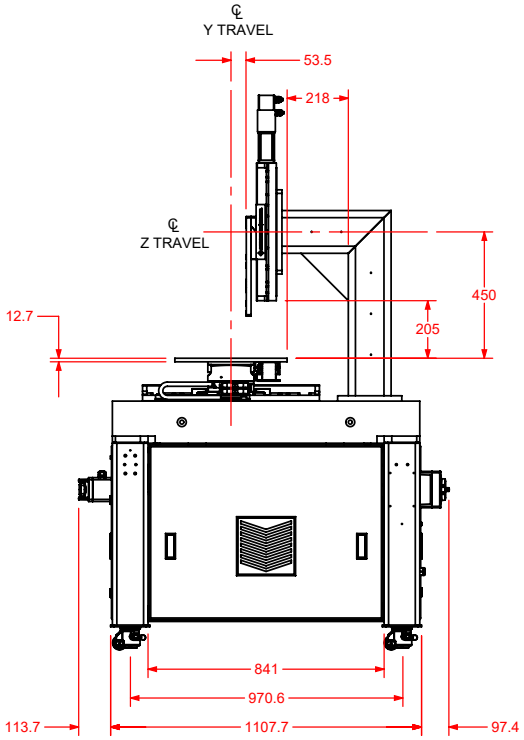
Dimensions







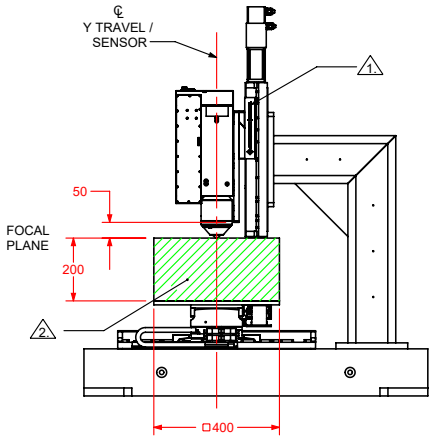


AXIS	NOMINAL TRAVEL
X	400
Y	400
Z	200

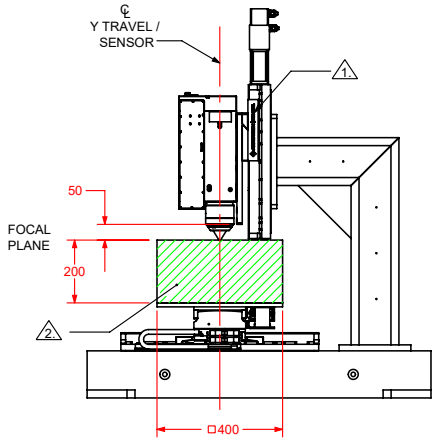
DIMENSIONS: MILLIMETERS

Dimensions

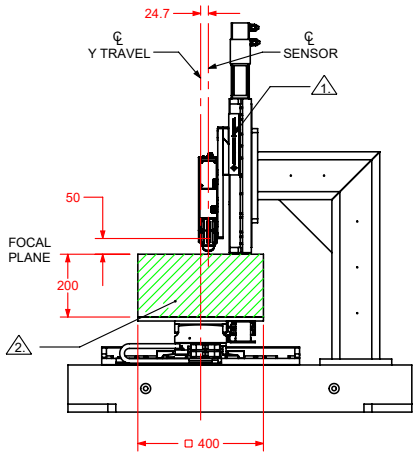
G4010 / G4011



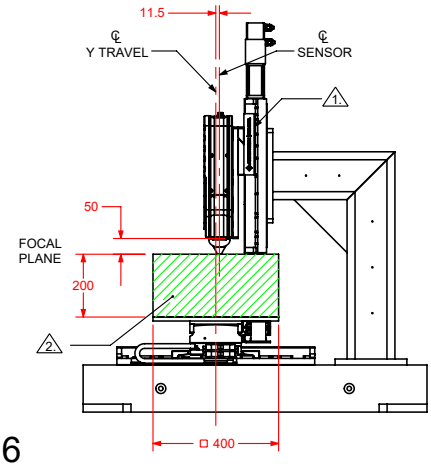
G4020 / G4021



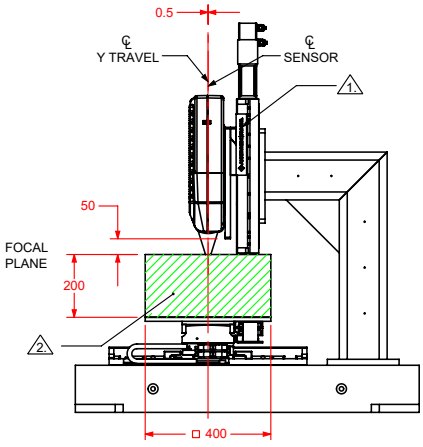
G5504



G5512



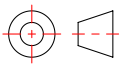
G5516



NOTES:

1. Z-AXIS SHOWN AT THE MAXIMUM TRAVEL
2. MEASUREMENT VOLUME

DIMENSIONS: MILLIMETERS



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Ordering

Required

PM-400 -TA7 -ESTOP -OS -LC1

Product

Table

-TA0: None
-TA5: Rigid Table, Open
-TA6: Air Table, Open
-TA7: Rigid Table, Enclosed
-TA8: Air Table, Enclosed

Emergency Stop*

-ESTOP: Emergency Stop

Monitor Arm*

-OS: Operator Station[1]

Line Cord*

-LC0: Flying Leads
-LC1: US115VAC
-LC2: US230VAC
-LC3: German
-LC4: UK

* Optional - omit if not desired

[1] Requires -TA5-8 options

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Ordering

What's included?

Base Product
- Motorized XYZ stage
- Sensor Mounting Plate
- Controls Box

Table (optional)
- Rigid or Air Isolation options
- Open-frame or Enclosed options
- Emergency Stop button
- Monitor Arm with Keyboard Tray

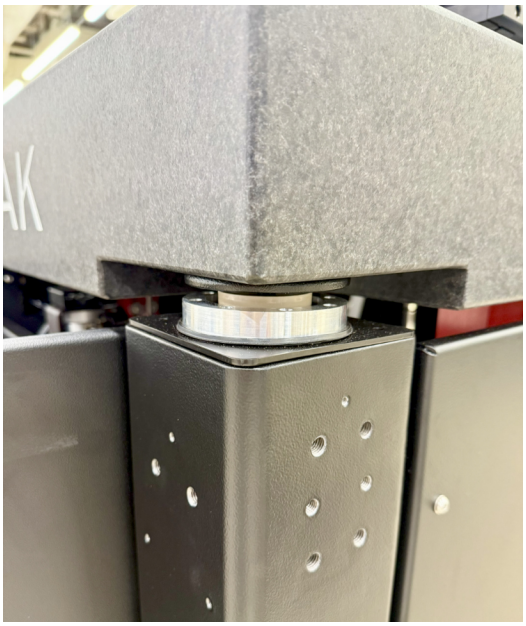
Emergency Stop button

CaptureUI + GoPxL® IIoT VISION INSPECTION SOFTWARE

Powerful software

Leverage Peak's CaptureUI software to quickly capture surface data over large areas with automatic stitching. Data can then be analyzed in LMI Technologies' feature-filled GoPxL software with tools such as defect detection, dimensional analysis, tolerance-based decision making, and more...

Additionally, users can also utilize Peak Analysis Software for advanced surface characterization and metrology reporting capabilities.



Embedded Air Isolator for low-profile vibration control

Control for your environment

We'll work with you to characterize your floor vibrations, offering:

- On-site floor vibration measurements
- Standard air-isolation options, when needed

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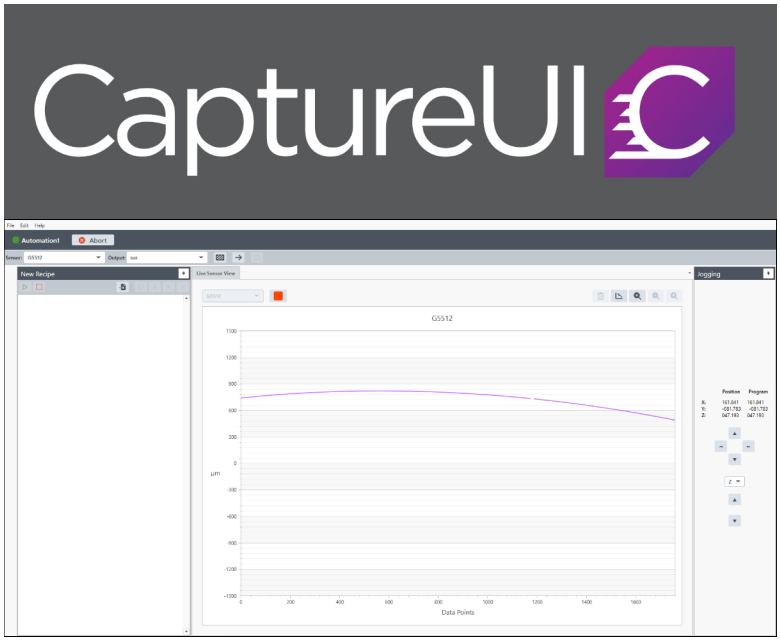
CaptureUI

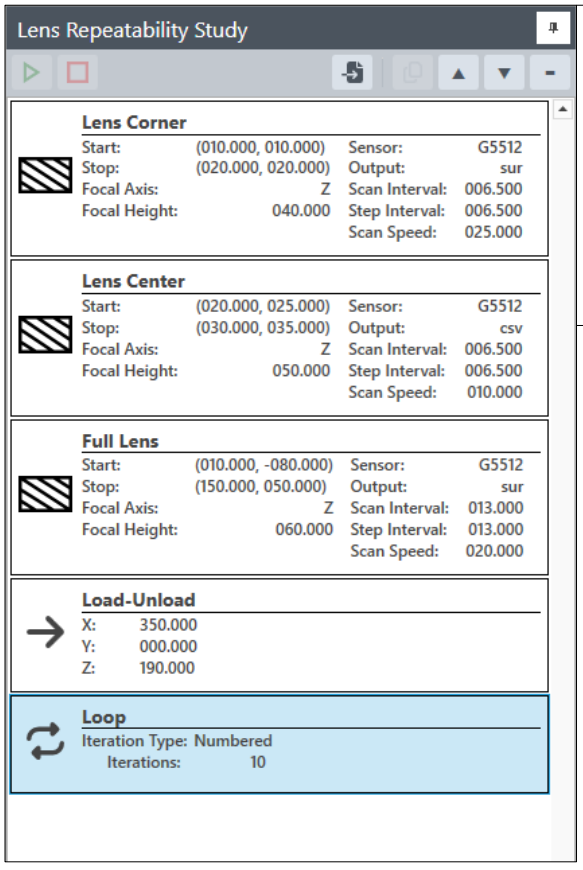
Give me the basics

CaptureUI is a path-planning and data acquisition scanning engine:

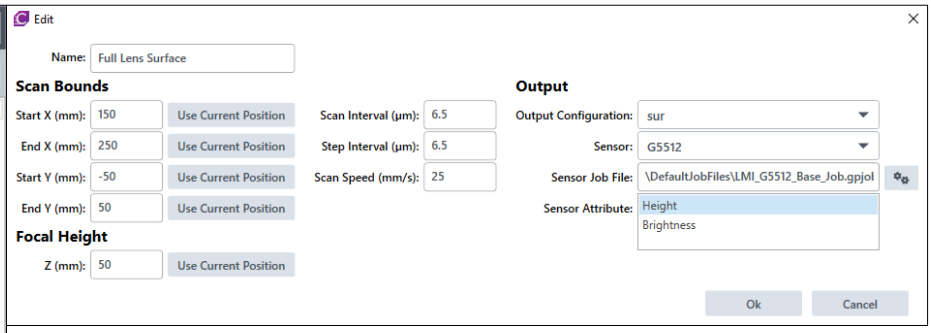
- Quickly define scan bounds using live sensor feedback
- Automatic stitching of large scans
- Built-in sensor alignment (angular corrections)
- Data analysis through GoPxL, Peak Analysis Software (based on MountainsMap), or export raw data



CaptureUI Interface



CaptureUI Recipe Management



CaptureUI Scanning Parameters

Craft your recipes

CaptureUI allows for powerful recipe creation:

- User-defined output directories
- Customizable file-naming schemes
- Utilize different sensor job settings for each scan
- Loop recipes for repeatability studies
- Save recipes to disk for easy re-use

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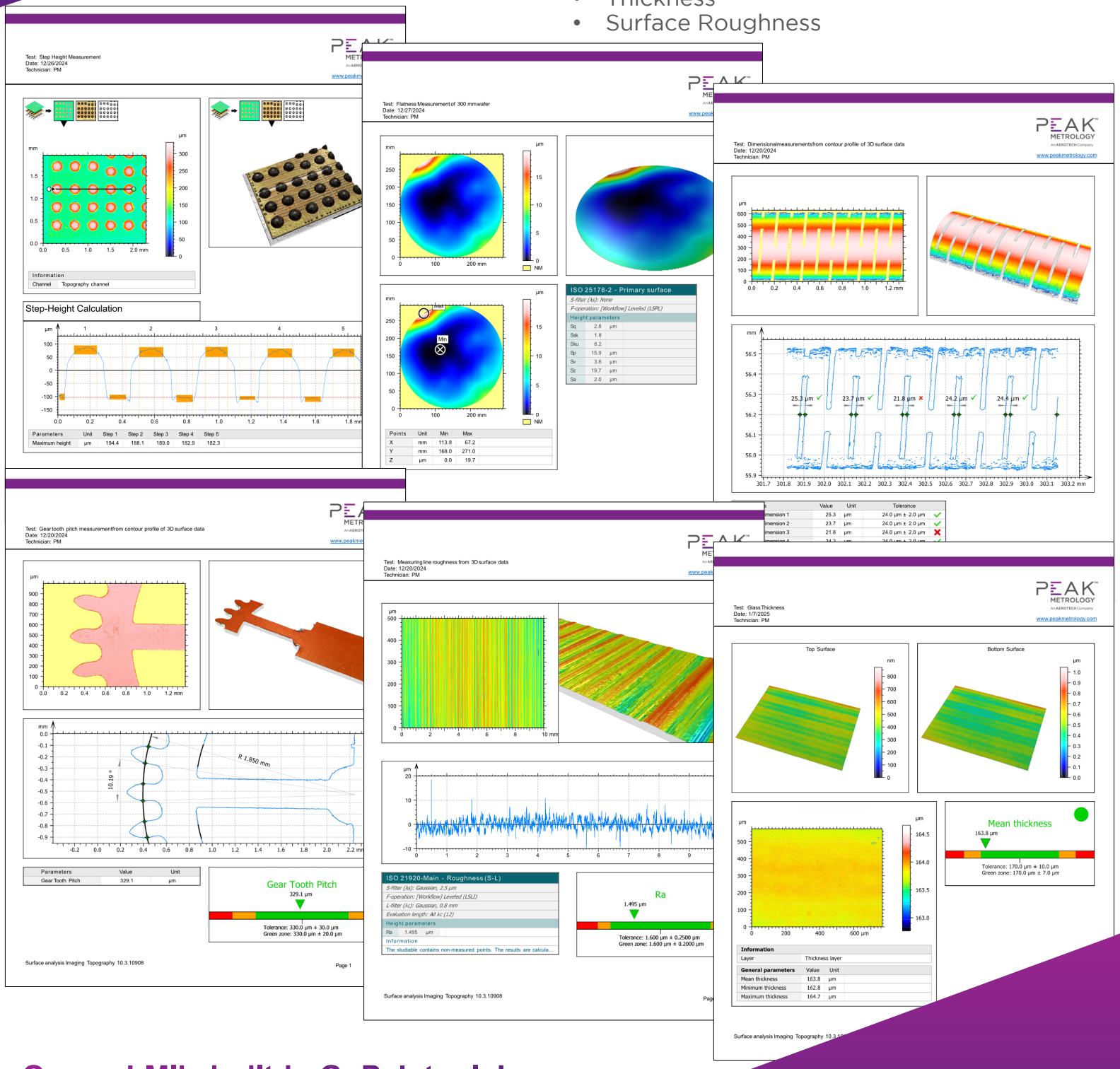
Analysis

Get precise answers

In addition to all of GoPxL's dynamic tools, Peak Analysis Software offers additional capabilities:

- Step Height
- Flatness
- GD&T
- Thickness
- Surface Roughness



Or use LMI's built-in GoPxL tools!

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LMI Kit

Complete the system

Peak provides all the motion equipment you need to be up and running in no time. The LMI Technologies equipment listed below is required to complete the system. Have questions? Don't hesitate to contact us for answers on what is required.

Measurement Head

Gocator 4000 Coaxial Line Confocal Sensors

Gocator 5500 Line Confocal Sensors

Software

GoPxL (included) running on the PC for sensor acceleration is recommended

Cables

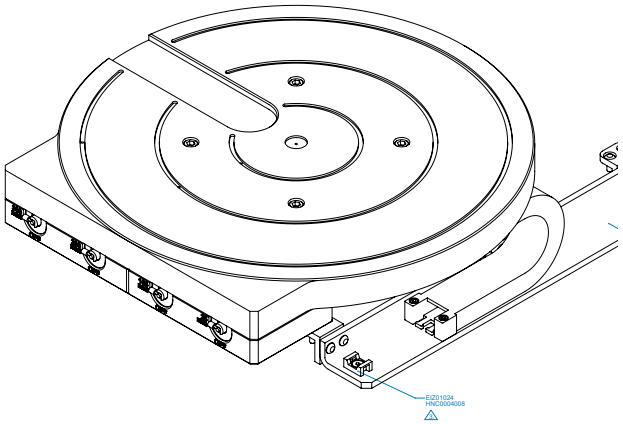
Cables 301176 and 301175 (5m lengths)

Fixtures

PM-FP-VZR

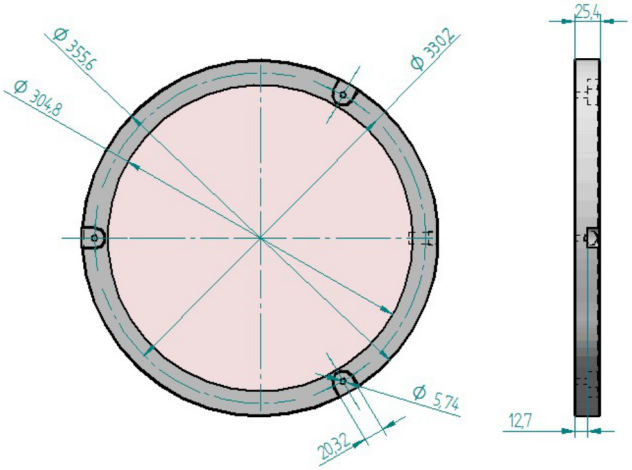
300 mm Dia Zone-Selectable Vacuum Chuck

Zones: 25, 100, 200, and 300 mm Diameters



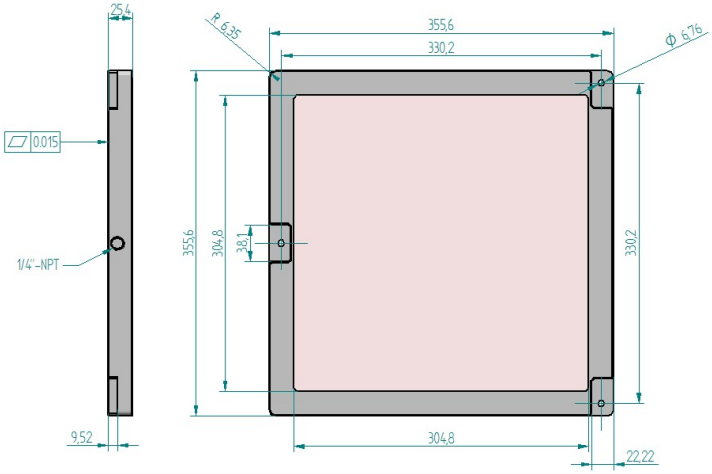
PM-FP-VPR

300 mm Diameter Porous Vacuum Chuck



PM-FP-VPS

300 mm Square Porous Vacuum Chuck



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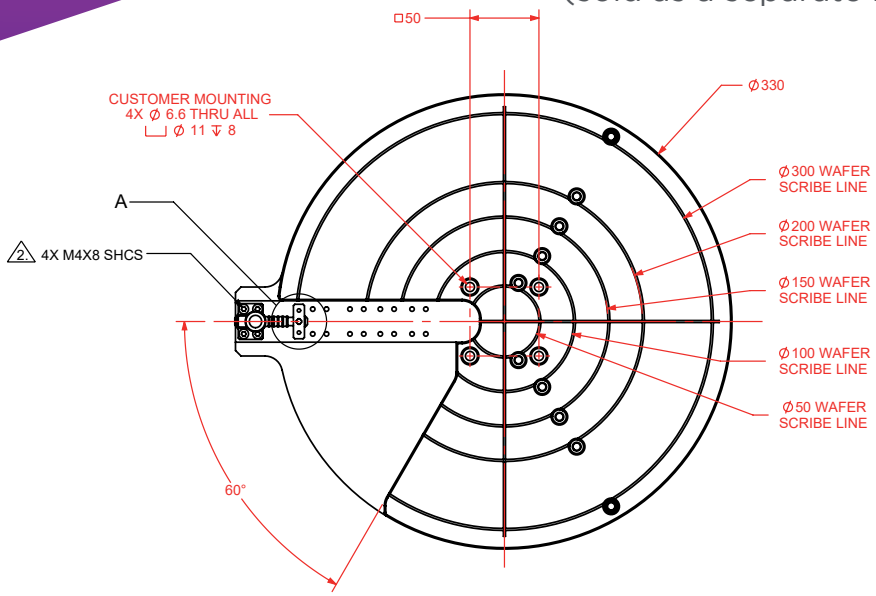
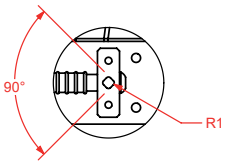
Fixtures

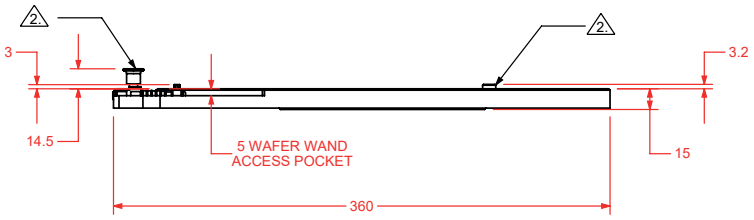
PM-FP-WP(R)

Wafer Plate with optional Rotation
(sold as a separate line item)

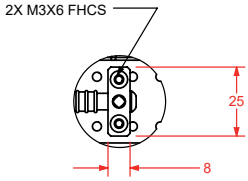




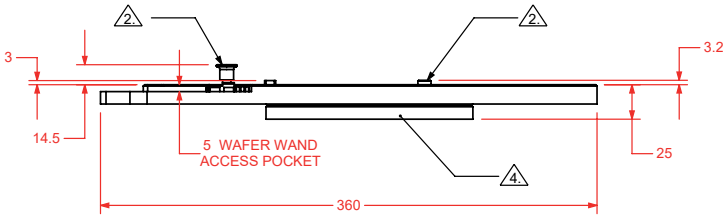
3. DETAIL A
PLUGER IN NOTCH CONFIGURATION
(Ø200 & Ø300 mm WAFERS)
SCALE 2 : 5



PM-FP-WP



3. DETAIL A
PLUGER IN FLAT CONFIGURATION
(Ø50, Ø100, & Ø150 mm WAFERS)
SCALE 2 : 5



PM-FP-WPR

NOTES:

1. PM-FP-WP SHOWN IN THE Ø 300 MM WAFER CONFIGURATION
   PM-FP-WPR SHOWN IN THE Ø 150 MM WAFER CONFIGURATION

2. QUANITY (2) ALIGNMENT BUSHINGS AND (1) SPRING LOADED PLUGER CAN BE POSITIONED TO ACOMMIDATE Ø50, Ø100, Ø150, Ø200, & Ø300 mm WAFERS

3. SPRING LOADED PLUGER HAS (2) CONFIGURATIONS. FLAT FOR Ø50, Ø100, & 150 mm WAFERS AND NOTCH FOR Ø200 & Ø300 mm WAFERS

4. PM-FP-WPR HAS A 360° MANUAL ADJUSTABLE BASE

DIMENSIONS: MILLIMETERS