**LEM-CT**

Interferometric Endpoint: Dry Etch, PECVD

- **Basic Interfero/Reflectometric model**
  - Simulate layers stack using (n,k) library
  - Obtain theoretical interferometric curve
  - Save as a reference

- **Real-Time**
  - Sample view: use joystick to move Laser spot!
  - Etch Rate calculation and Thickness evaluation
  - Multiple Interfaces detection
  - Local Endpoint [may be coupled to EV-140 OES]

- **Interferometric Methods**
  - Etch rate and Thickness endpoint
  - Fringes counting, Sub layer detection, Fourier
  - Stop in Remaining Thickness
  - Deep Trench, Bosch Process

And more: Reprocessing, Signal Treatment, Statistics, Multi-Runs Viewer
New LEM Series Evolution

With the New LEM-CT Evolution, Interferometric Endpoint on clean room is made easy!

- New motorized XY stage driven by joystick!
- New Win7 Fanless controller with new acquisition and frame grabber boards!
- Same software UI as OES products to offer versatility without compromise whatever the sensor!
- Keep your actual blue LEM camera

Since 2007, the DiGILEM camera family has been released by HORIBA Jobin Yvon with the new versatile LEM camera series offering a compact design and enhanced image quality for all types of samples. The LEM camera can be mounted on any process chamber with direct top view of the wafer, and provides a real-time digital CCD image of the sample surface making spot positioning simple. Based on the interferometry technique, the camera is ideally suited to etch/deposition rate monitoring and endpoint detection.

- Operating at 670, 808 or 905 nm, designed for OEMs and laboratory QC, the LEM camera provides a simple analog output of signal intensity that can be treated by any external software.

- In 2013, a new XY motorized stage driven by a joystick is introduced (Joystick is the easiest way to drive your XY stage!). It permits to replace all old manual or motorized stage installed in the past. Then, installing the joystick, you will be able to move the camera installed on the top window of the tool directly from the clean room without any software nor tool climbing to access previous XY manual stage...

New XY motorized stage for the LEM Camera

Driven by a controller plus a joystick

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- The LEM-CT includes full computer control and shares the same SIGMA-P platform as all HORIBA Jobin Yvon endpoint tools. It measures in real-time etch or deposition rate, thickness variations and also detects interface. The LEM CT is the perfect tool for OEMs and process development in industrial R&D environments. **In 2013, a new industrial version of LEM-CT is introduced based on up to date specifications:** Fanless PC, small size, Core I3 processor, Win7, new acquisition & Frame grabber boards.

**New industrial version of LEM-CT computer** is introduced based on up-to-date specifications:

- Fanless PC
- Core I3 processor
- Win7
- New acquisition board
- New Frame grabber
- Common Sigma_P software

**PS:**
we have another product based on a tilt head and white light source to cover applications where [300, 700] nm multi-wavelengths and Pattern Recognition solution is needed…

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