

Determine thin film stress for R&D and quality management in just a few seconds!

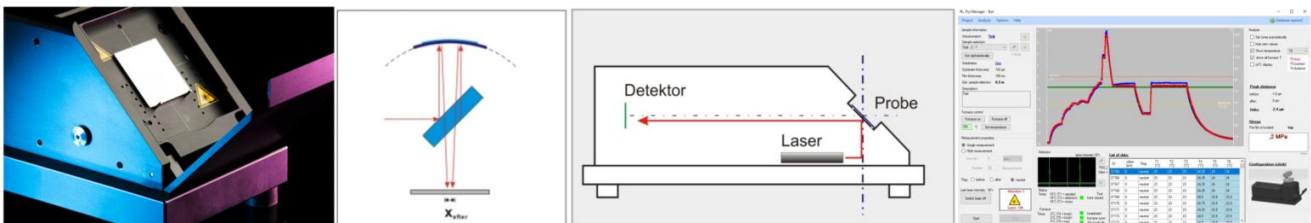
SIG-500SP

Measuring system for the determination of the intrinsic stress in thin layers – **EX-SITU**



Principle:

The mechanical stress in the coating is determined by measuring the bending of the substrate. The radius of this bending is geometrically determined by the deflection of several laser beams reflected from the substrate. (STONEY)



Features

- Uncomplicated operation
- Fast, easily reproducible specimen mounting
- Low space requirement

Substrates

- Any geometry < 100mm x 100mm can be used
- Planar, at least one side must mirror
- Thickness determines measurement accuracy

Software

- Win7 or higher
- Acquisition and clear archiving of data
- Simple and intuitive

Technical data

- CCD detector
- 650nm laser modules
- Laser class 1
- Resolution: $1/R = 1/R_0 - 1/R_1 = < 5 \times 10^{-5} \text{ m}^{-1}$
- L x W x H: 45cm x 15cm x 15cm
- 18kg
- 24V DC (external power supply 110V/230V to 24V)