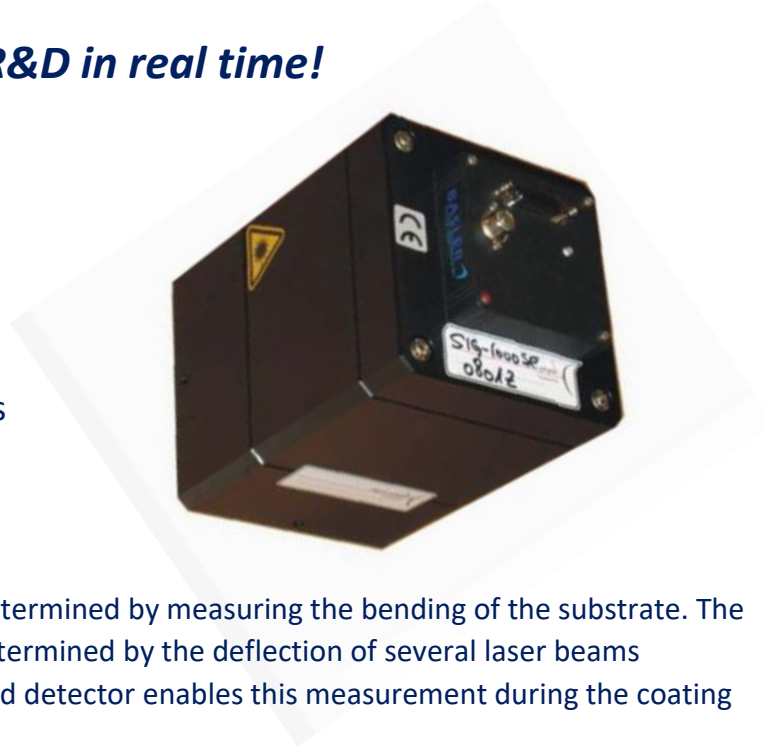


Capture layer stresses for R&D in real time!

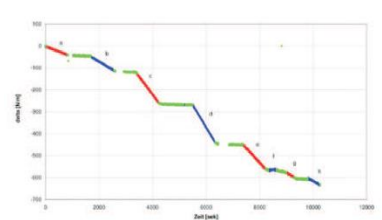
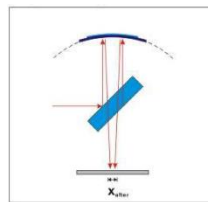
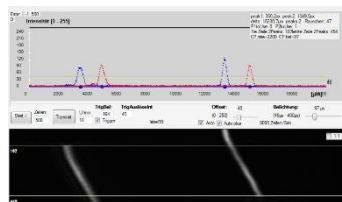
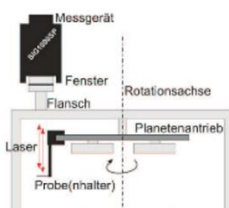
SIG-1000SP

Measuring system for the determination of the intrinsic stress in thin films – **IN-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. A high-speed detector enables this measurement during the coating process on moving substrates.



Features

- Real-time acquisition of mechanical stress
- Customized specimen holder
- Low space requirement

Substrates

- Any geometry > 20mm x 10mm can be used
- Planar, at least one side must mirror
- Substrate thickness determines measurement accuracy

Software

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

Technical data

- CCD high speed detector with up to 80.000 fps
- 650nm laser modules
- Resolution: $1/R = 1/R_0 - 1/R_1 = < 1 \times 10^{-4} \text{ m}^{-1}$
- L x W x H: 25cm x 15cm x 15cm
- Weight: 6kg
- 24V DC (external power supply 110V/230V to 24V)