



Wavefront sensors and adaptive optics for optical metrology, laser and microscopy



OPTICAL METROLOGY



HIGH-POWER LASERS



BIO-IMAGING



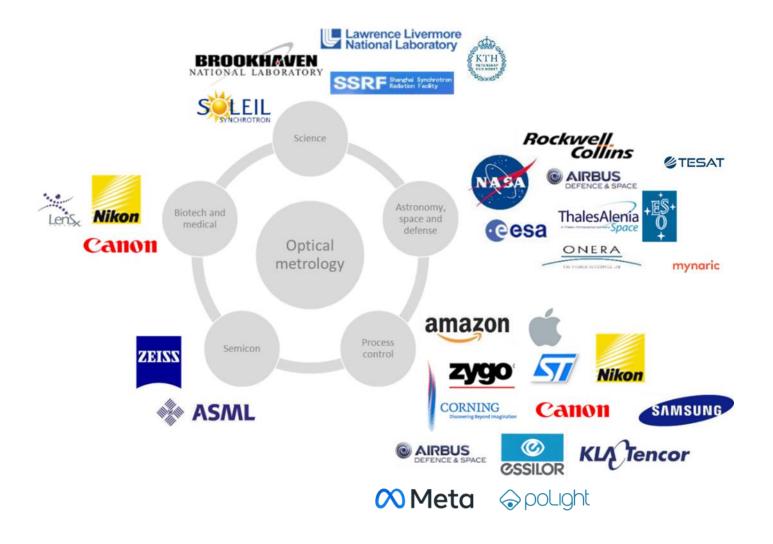
X-EUV



Company · Key figures







Optical metrology solutions



The OEC (The Optical Engineer Companion)



Modular system for lab and R&D

MESO



Robust instrument for industry and production

MESO · Unique Combination of features

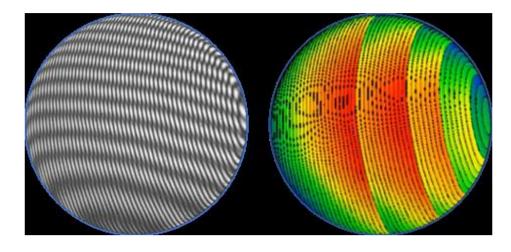




- + Insensitive to vibrations
- + At design wavelength testing from 400 to 800
- + Test diameter from 1,5" up to 6"
- + Insensitive to reflections from sample back surface



Std laser interferometer



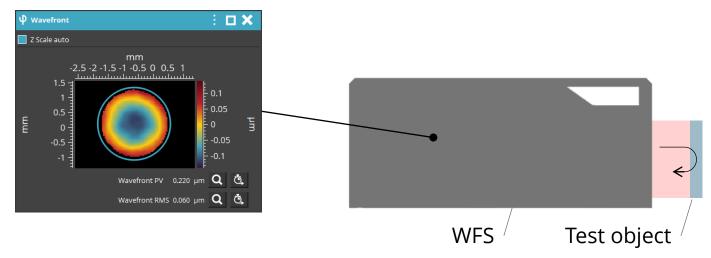
- 3 beams interference produced by a plane parallel optics



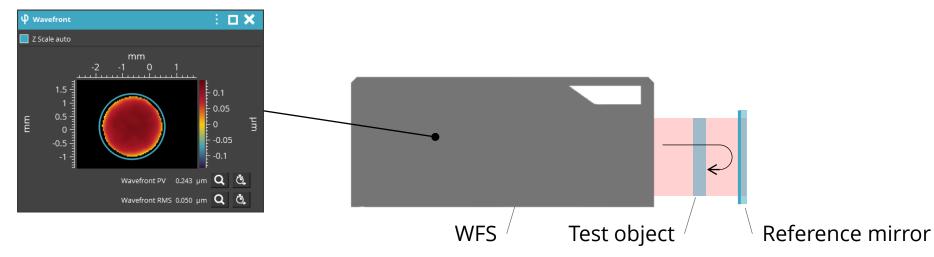
- + No need of coherent light to produce fringes
 - + Take advantage of the reflected signal!
 - + No sample surface preparation



Step 1: reflection measurement

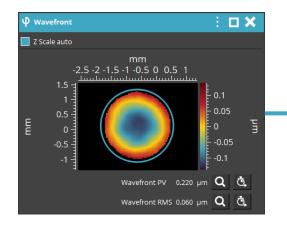


Step 2: transmission measurement





Step 1: reflection measurement



Wavefront PV 0.179 µm Q Č

Wavefront RMS 0.047 µm Q Ö

Wavefront PV 0.223 µm Q Q
Wavefront RMS 0.046 µm Q

mm -2.5 -2 -1.5 -1 -0.5 0 0.5 1 □ X

0.05

Wavefront PV 0.475 µm Q Č

Ψ Wavefront

Z Scale auto

0.5

Ψ Wavefront

Z Scale auto

0.5

-0.5 🚽

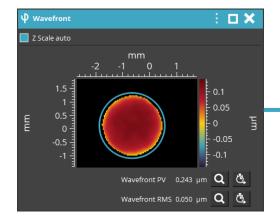
: **-** ×

0.1

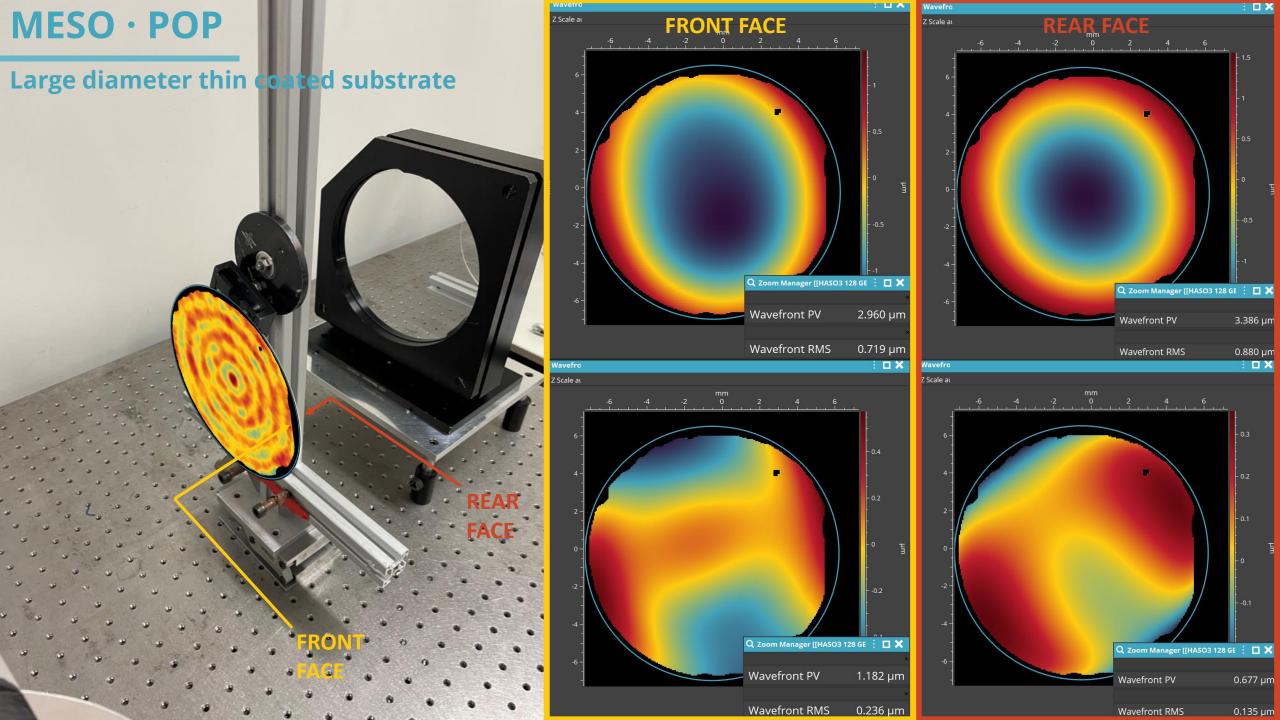
Front surface (RWE)

Rear surface (RWE)

Step 2: transmission measurement



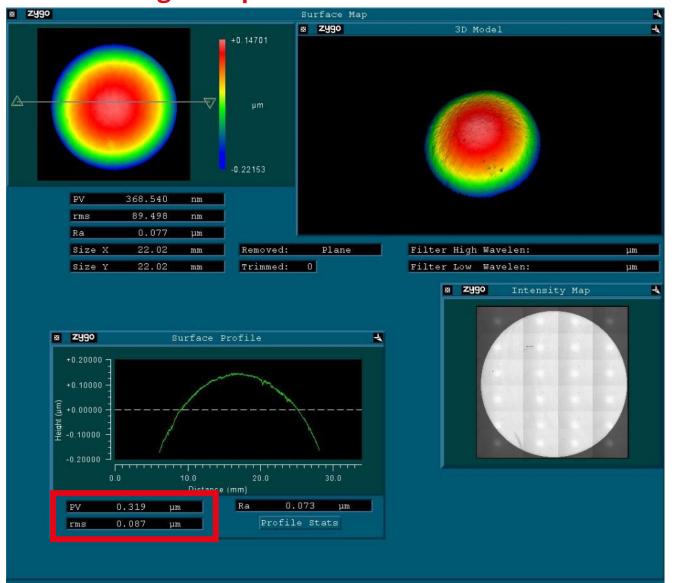
Transmitted wavefront (TWE)



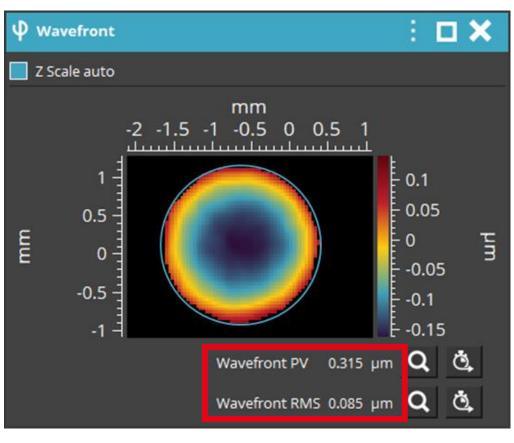


Flatness of crystal face

White light 3D profilometer: 5 hours



MESO: 1 min.







Martial DESTOC mdestoc@imagine-optic.com

Pleased to provide more information Happy to perform **tests on your samples**