OptiWorks Workshop のご案内

日時：２０１４年１０月１４日（火）

午後３時３０分より午後６時３０分まで

場所：OptiWorks 社（地図参照）

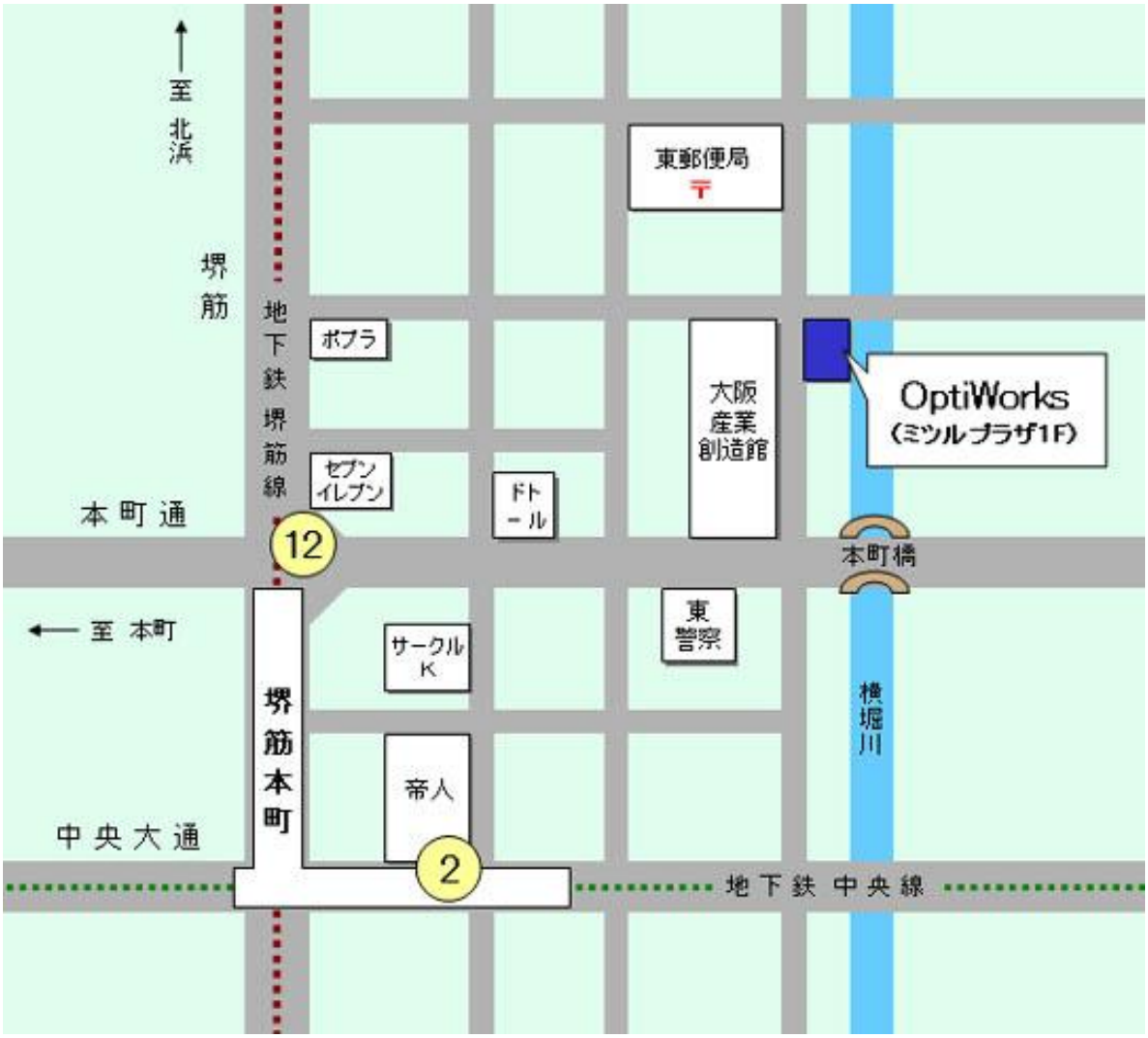
大阪市営地下鉄堺筋線／中央線堺筋本町駅②⑫出口より徒歩約 3 分。
大阪産業創造館の東隣です。

この度フランス PHASICS 社から Technical Sales Engineer、Xunyou GE 氏が來阪することになり、最近商品化されたユニークな光学波面測定器の紹介を受けることになりました。この測定方式は２次元グリッドを使用し、その波面のずれによって生じたグリッドの歪をセンサーで検出、波面分布を測定するもので従来にない特徴をもった方式を採用しています。波長域、測定範囲も選ぶことができ、それぞれのユーザーに対しても自由に仕様を選ぶことができます。また当日実機によるデモも行う予定ですので是非お越しになりご覧いただけたらと思います。

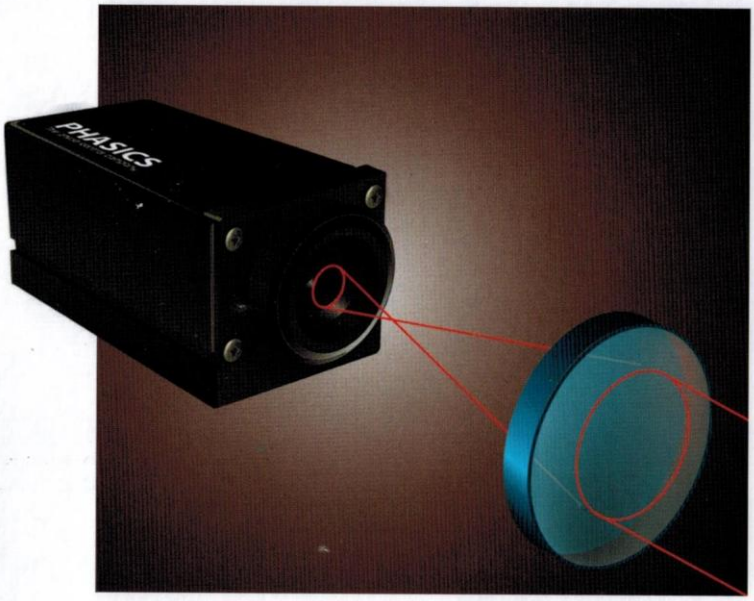
皆様のお越しをお待ちしています。

デモ予定機種

SID4-HR (with both SID4 and Kaleo software)


至 北浜
堺筋
地下鉄堺筋線
東郵便局
〒
ポプラ
セブンイレブン
ドトール
大阪産業創造館
OptiWorks
(ミツルプラザ1F)
本町通
12
本町橋
至 本町
サークルK
東警察
堺筋本町
横堀川
帝人
中央大通
2
地下鉄中央線

Kaleo I



→ PHASICS offers the most innovative solutions **for lens and objectives quality control in R&D** and production. Relying on a unique wavefront technology, the quadriwave lateral shearing interferometry*, PHASICS solutions provide a **fast and complete characterization** of your optics.

"SIMPLE MEASUREMENT, ADVANCED RESULTS"

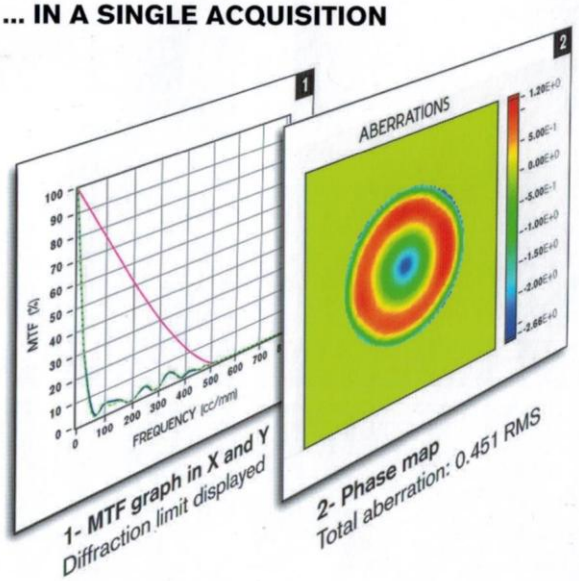
MEASURED ELEMENTS
- Lens
- Objective, Zoom
- Strongly aberrated subassembly

APPLICATIONS
- New product development
- Process optimization
- Cost-effective alignment of objectives

↘ GET THE MTF...
- Along any direction
- For any pupil size
- On and off-axis
- Up to cut-off frequency
- With various focusing methods

... AND WAVEFRONT QUALITY
- EFL, F#, NA
- Aberrations: Zernike, Seidel
- Real time filtering of phase map (Zernike, Kernel...)
- Through focus MTF
- Comparison to design
- Chromatic aberrations

... IN A SINGLE ACQUISITION



PHASICS - The phase control company

↘ DIRECT MEASUREMENT

Measuring diverging and converging beams **with no relay lens**, PHASICS sensor enables compact **direct set-up**:

- Simple alignment
- Same setup to cover your full optics range
- Characterization in working conditions
- Easy measurement interpretation

→ HIGH RESOLUTION

The unrivalled high resolution of PHASICS sensor ensures **reliability**, by enabling robust calculations and small defects detection.

- Up to 300 x 400 measurement points
- Nanometer level axial resolution

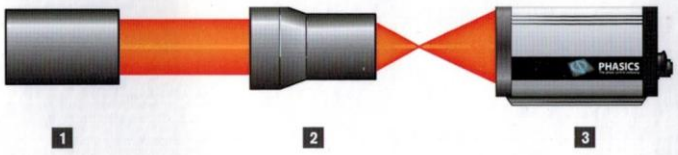
→ HIGH DYNAMICS

PHASICS sensor measures strongly **aberrated optics** to detect non-compliant **subassemblies** before assembly. It also measures **aspheric lenses** in transmission.

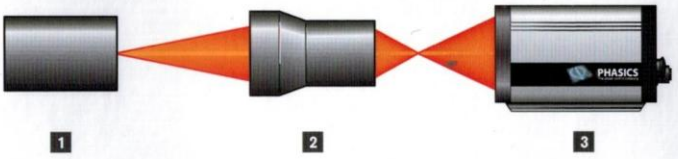
→ STABILITY

PHASICS technology does not use reference beam, making it **unsensitive to vibrations**.

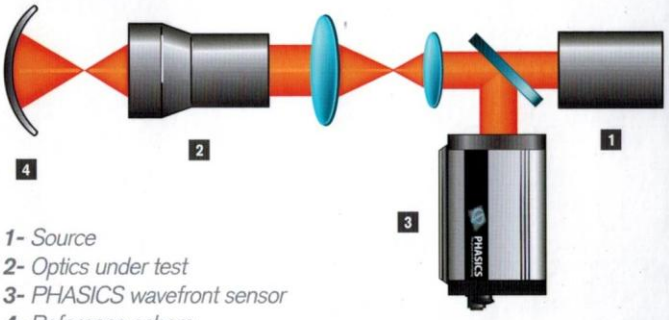
Single pass set-up – Infinite conjugation
Up to F/1 optics - Entrance pupil up to 100 mm



Single pass set-up – Point-to-point conjugation



Double-pass set-up



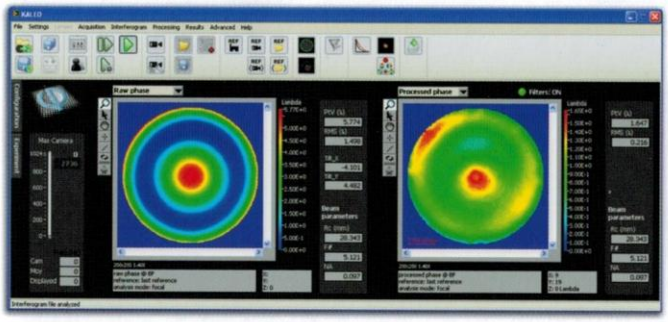
1- Source
2- Optics under test
3- PHASICS wavefront sensor
4- Reference sphere

"POWERFUL TECHNOLOGY"

→ ACHROMATICITY

Inherently achromatic, PHASICS technology makes possible measurement **at any wavelength** without any calibration:

- Focus shift with wavelength
- MTF comparison at various wavelengths



Serving the ease of use of PHASICS solution, it manages measurement from settings and acquisition to advanced calculations: Lens database - Alignment helpers - Automated reports

"EXPERT ANALYSIS SOFTWARE"

← EASY AND RIGOROUS ANALYSIS

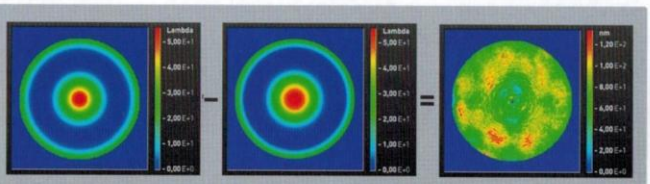
Taking advantage of our technology, the software solution ensures **reliable** calculation and offers **flexibility**:

- focusing methods (best or paraxial focus, MTF autofocus)
- pupil size
- advanced filtering options

Direct phase measurement makes possible **advanced analysis** while **simplifying the result interpretation**.

DESIGNPRO MODULE →

From the optical design file, this module simulates the nominal phase in the measurement plane and delivers the **residual wavefront error** (WFE)



Residual wavefront for a single CVX lens (PV=130 nm)

RETROPRO MODULE →

Direct measurement enables back propagating the measured wavefront to provide the **OPD information in the exit pupil** of the tested element.

The measurement can then easily be compared to optical design. It is of real interest for **off axis** measurement interpretation.

MTF and Zernike coefficients can be provided in the exit pupil of the optical element for on and off axis measurement, thus enabling an easy comparison to design data