

株式会社清原光学 Kiyohara Optics Inc.

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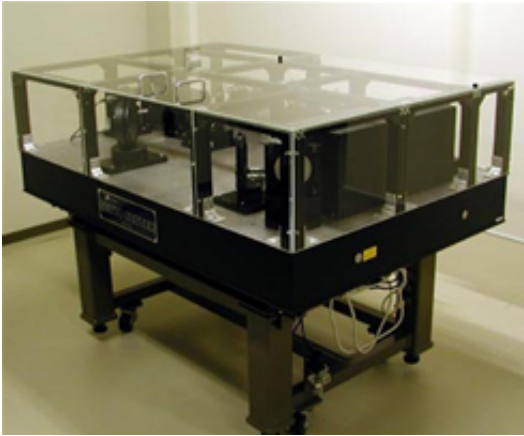
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Interferometer

Optical Systems

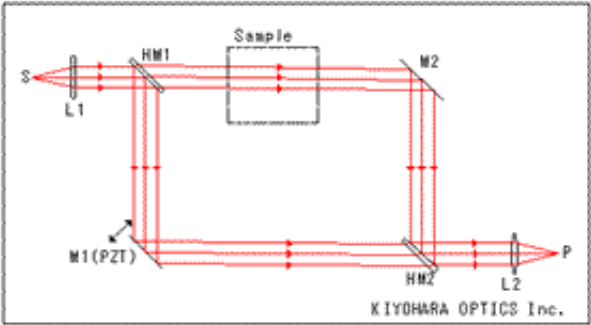
Optical Components

Mach-Zehnder Interferometer



Product Name	Mach-Zehnder Interferometer
Light Source	He-Ne laser
Clear Aperture	φ 50mm
Interferometer Precision	over λ /10
Purpose of Use	<ul style="list-style-type: none">• Measurement for precision of surface of transmitted wave for parallel glass• Measurement for aberration of wave surface of lens• Measurement for extraordinary of index of reflection such from wave plate, filter, etc.• Measurement for precision of surface for mirror• Measurement for distortion of laser emergent wave surface• Measurement for index of refraction and index distribution of transparent material such as air, gas, and etc.• Wind tunnel experiment (measurement for density of fluid, temperature, pressure, photographic density of component, and etc.• Measurement for photographic density of motor vehicle exhaust gas
Specifications, Features, and Benefits	<ul style="list-style-type: none">• High versatility and flexibility• Built-in phase shift mechanism and interference fringe analysis device

※We produce an interferometer with your specified request sizes and laser light sources.



The light, that came out from the light source S, is changed to parallel light at the collimator lens L1, and it is divided 2 luminous fluxes by the half mirror HM1.

Reflected light is reflected by the mirror M1, and it runs through the half mirror HM2 and the lens L2 to reach the P.

On the other hand, the light which was transmitted from the half mirror HM1 is reflected to both the mirror M2 and the half mirror HM2, and it runs through the lens L2 and reaches P.

These 4 reflecting surfaces are almost parallel, and the corners of the parallelogram are arranged to be in the center of the reflection.