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# The dual-band interferometer's optical system for testing the shape of convex spherical surfaces with a diameter up to 600 mm

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*A new dual-band interferometer's optical system is offered for non-contact testing of the shape of convex spherical surfaces with a diameter up to 600 mm.*

*Large lens, one surface of which is aspherical, is used as lens forming spherical wave front. The lens is rotated around a vertical axis to expand the range of controlled surfaces; wave aberration, introduced by the lens does not exceed 0.005 wave length of the He-Ne-laser. The reference spherical wave front generated rays are reflected from the surface of the convex meniscus lens. Meniscus lens with cube-prism optical system forms a fully corrected for spherical aberration.*

**Keywords:** *interferometer, testing, optical surface shape, convex spherical surface.*

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