Laser Industry Contribution Award



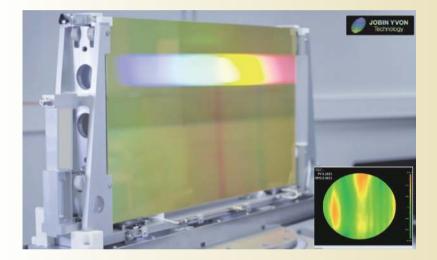
Diffraction grating for Laser pulse compression

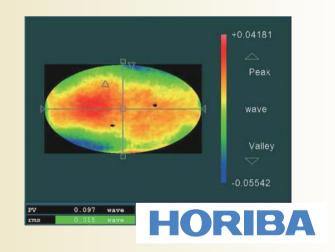
HORIBA

HORIBA, Ltd.



High surface quality Fused Silica blank 575 × 1015mm







Features & Application

Diffraction gratings are widely used not only for spectroscopies but also for laser pulse compression.

This application requires high diffraction efficiency, high wavefront quality and high damage threshold (high durability) for the grating. As a pioneer and world leader for having applied holographic recording technique to the grating production, we have realized these performances. Our master gratings made by this technique have the absolute efficiency of 90 % or more at usage wavelength with highly uniformity on the grating surface. In addition, a low stray light and an excellent wavefront quality are achieved, therefore, are the best gratings in this application. Nowadays more and more an ultra-high intensity and a large beam size are required in this field. To meet these requirements, we can also offer one meter class diffraction gratings.