

Pulse Compression Gratings

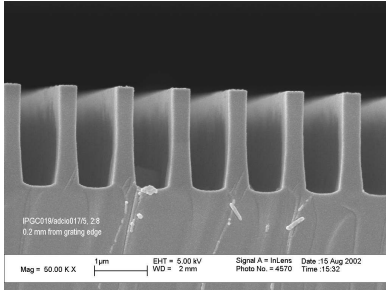
Fused Silica Transmission Gratings

Fused silica transmission grating technology offers unbeatable energy/power damage threshold combined with high-efficiency spectral performance.

As femtosecond laser systems advance to ever-increasing energy levels, demands to the energy/power handling capabilities of pulse compression gratings increase.

Ibsen manufactures 100% fused silica Pulse Compression Gratings that offer unbeatable energy/power handling capacity, combined with high-efficiency, low wavefront distortion performance. Pulse Compression Gratings from Ibsen build on Ibsen's world leading position in fused silica transmission gratings.



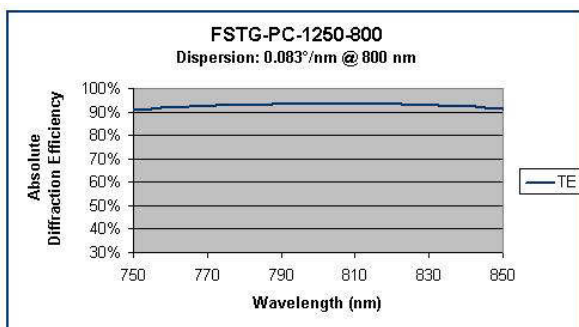


Benefits
Highest energy / power damage threshold
Environmentally and thermally stable
High diffraction efficiency
Low wavefront distortion
Low straylight

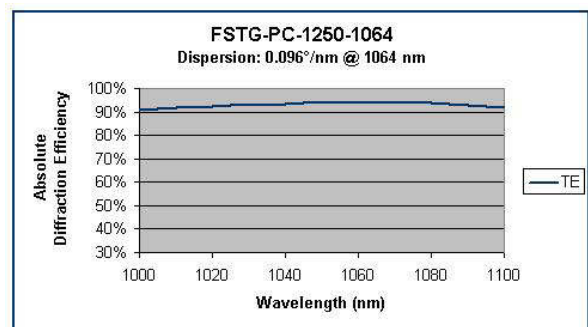
Features

Parameter	Specification	Comments
Production technology	Holographic stepper and RIE etching	Class 10 cleanroom environment
Materials	Fused silica	Plus high-power dielectric back-side AR coating
Resolution	1250 l/mm	+/- 0.1 line/mm
Dispersion @ 1064 nm	0.096 deg/nm	
Dispersion @ 800 nm	0.083 deg/nm	
Wavelengths of operation	800 nm or 1064	Or customized
Incidence angle	Littrow angle	Or customized
Diffraction efficiency	> 90%	Or customized
Grating area	20 mm x 10 mm	Or customized
Substrate size	30 mm x 25 mm x 2 mm	Or customized
Packaging and shipment	Fluoroware containers	Sealed in cleanroom
Energy / power damage threshold	See www.ibsenphotonics.com/products/transmission-gratings/highpower	

FSTG-PCG-1250-800



FSTG-PCG-1250-1064



The above gratings are examples. Ibsen operates as grating partner for our customers, from being an integrated part of the grating and instrument / module design phase, to the manufacturing of prototypes, to volume manufacturing of the OEM gratings.