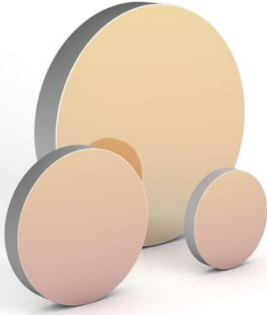


# Gires-Tournois Mirrors



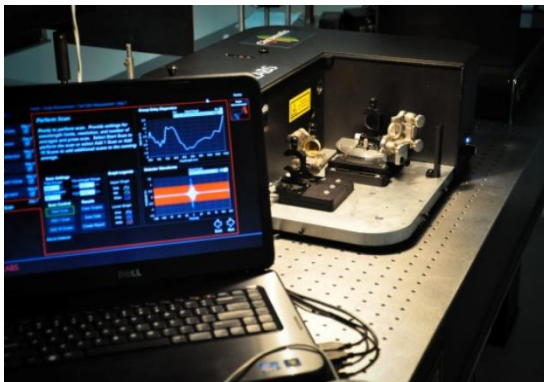
- Material: Fused Silica or N-BK7
- Custom reflectivity and GDD
- $R_s$  &  $R_p$  >99.8% @design wavelength
- GDD from -250 to -600 fs<sup>2</sup>
- High damage threshold

Below lists two standard dielectric broadband coatings offered by CASTECH. Other coatings can be designed upon your request.

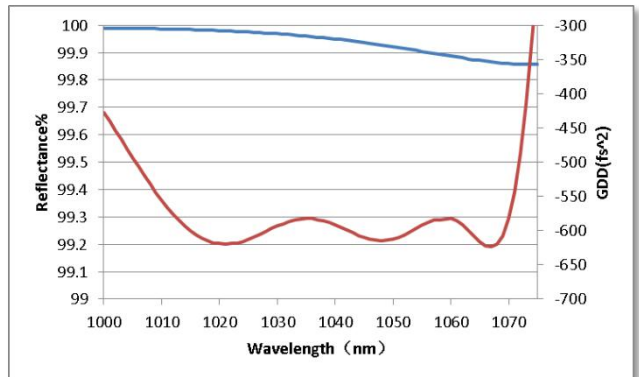
Coating Code	Center Wavelength (nm)	Angle of Incidence	Reflectivity per Surface
GT1	1020-1060	0°	$R_s$ & $R_p$ >99.8%
GT2	780-820	0°	$R_s$ & $R_p$ >99.8%

## Metrology

The group delay dispersion (GDD) measurement system characterizes the GDD properties of reflective and transmissive optics that are used with femtosecond pulsed lasers. Ultrafast pulses broaden as they propagate through an optical system. Short pulse width can be recovered by knowing the GDD induced by each optics and compensating for the distortions appropriately. For highly accurate and reliable results, the GDD measurement uses time-domain white light interferometer to measure the GDD. This dispersion measurement system includes software that guides the user through beam alignment, automatically finds the zero time delay position, and rapidly and accurately measures the dispersion. Every coating batch is tested in house by GDD measurement system to confirm your high-performance values.



GDD Measurement System  
GDD resolution:  $\pm 5$  fs<sup>2</sup>



$R_s$  &  $R_p$  >99.8% @(1020-1060)nm  
Angle of Incidence: 0°