

Replica gratings for pulse stretcher and compressor

HORIBA Jobin Yvon has traditionally provided master gratings for pulse compression applications, to ensure the highest optical performance and damage threshold. Master gratings are manufactured by HJY in both small and large dimensions.

We have also developed a very accurate replication process for producing high-quality and lower cost replica gratings. These replica gratings are the perfect solution for grating pulse stretching. This specific replication process is available for small size gratings up to 110 x 110 mm in dimension.

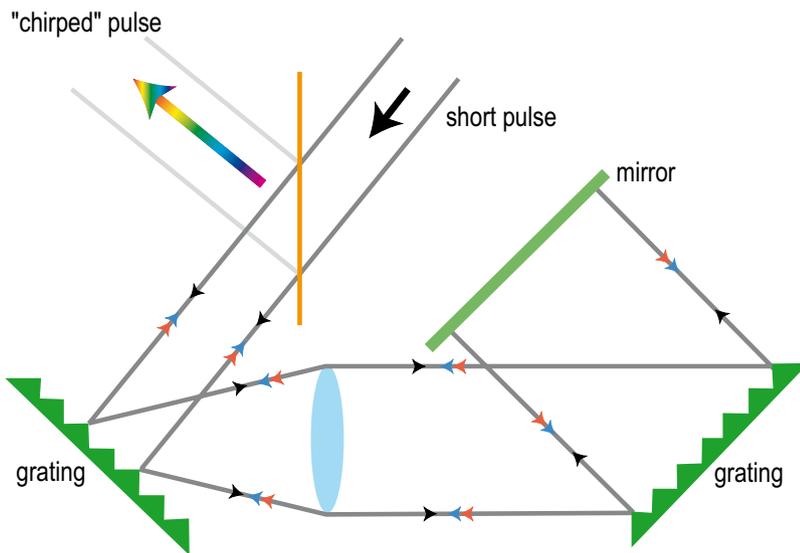
All replica gratings for pulse stretcher or compressor are gold coated.

Relevant features

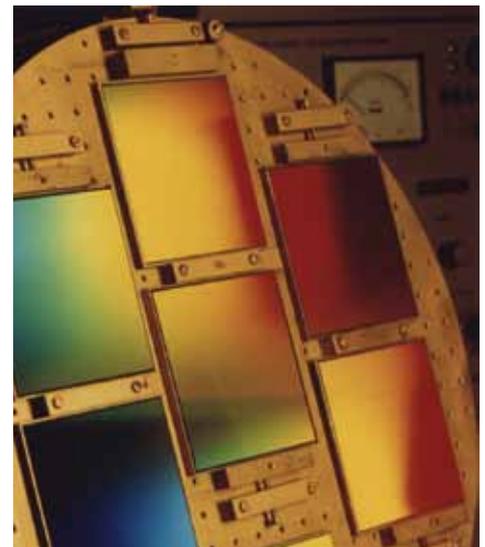
- Absolute efficiency on TM polarization: > 86%,
- Surface Flatness: < $\lambda/3$ PV at 800nm or 1053nm,
- Coating: gold,
- Several groove densities and dimensions are available,
- Cost effective solutions for pulsed stretcher and compressor

Delivered documentation with replica pulse compression gratings

- o Absolute efficiency, measured in the grating center location
- o Quality of the -1 order diffracted wavefront
- o A certificate of conformity



Gratings replication



blank size (mm)	1200 l/mm		1480 l/mm	1740 l/mm
	750 to 850 nm	1.55 μ m	750 to 850 nm	1.06 μ m
40x60x10	C524 26 090/T3	C524 33 090/T3	C524 28 090/T3	C524 21 090/T3
80x110x16	C524 26 160/T3	C524 33 160/T3	C524 28 160/T3	C524 21 160/T3
110x110x16	C524 26 180/T3	C524 33 180/T3	C524 28 180/T3	C524 21 180/T3