

Standard and Customs Optics

Altechna

A perfect solution for research and OEM applications, from prototype to large series.

- ✓ More than 20 years of experience
- ✓ Expertise in high performance optics, polarizing optics, crystals and laser accessories
- ✓ Standard or customed optics
- ✓ from UV to far infrared
- ✓ $R_{min} < 0.1 \%$
- ✓ $R_{max} > 99.995 \%$
- ✓ High reflectivity coatings up to 35.2 J/cm^2 @ 1064 nm, 10 ns, 10 Hz
- ✓ Polarizing coatings up to 57.2 J/cm^2 @ 1064 nm, 10 ns, 10 Hz

**Standard optics delivered
1 to 2 weeks**

Focus on customer needs



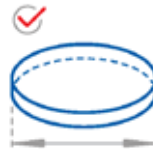
Laser related components



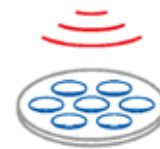
R&D Solutions in laser optics



Distribution



Quality & Measurements



Advanced coatings



Assembly development

Our capabilities

- ✓ Short delays for standard solutions Available on catalog
- ✓ Solutions on specifications for crystals, optics and optomechanical assemblies

Customization available on stock

Our metrology and optical quality inspection

- ✓ GDD measurement
- ✓ Goniometre
- ✓ Interferometre (ZYGO)
- ✓ DPSS CW lasers
- ✓ EFL & ROC tests
- ✓ Savvy inspector
- ✓ Humidity and temperature tests
- ✓ Stereo and analytical microscopes

For further information

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www.acalbfi.com/se

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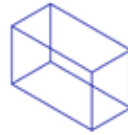
Product lines and availables customization



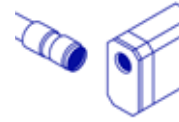
Uncoated optics



Coated optics



Crystals



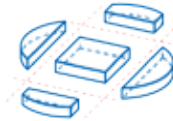
Laser accessories



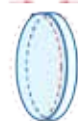
Polarization optics



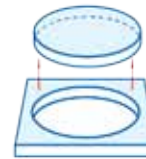
Cut corners



Cut to custom shapes



Reduce thickness



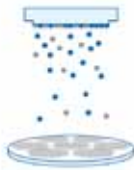
Drill hole



Reduce the diameter

Available coating technologies

MS



IBS



E-BEAM + IAD



	Electron beam evaporation	Ion assisted deposition	Ion beam sputtering	Magnetron sputtering
Deposition rate	> 10 Å/sec	~5 Å/sec	1-3 Å/sec	1-6 Å/sec
Coating area per run	274-820 cm ²	274-820 cm ²	500 cm ²	4400 cm ²
Thermal conductivity	low	medium	high	high
Temperature range during coating	200 - 300°C	20 - 100°C	20 - 150°C	20 - 100°C
Number of layers	1 - 50	~50	up to 200	up to 200
Density / Porosity	Porous	Dense	Near bulk	Near bulk
Adhesion / Durability	low	good	excellent	excellent
Humidity sensitivity	yes	yes, small	no	no
Aging effect	yes	yes, small	no	no
Intrinsic stress	< 100 MPa	~100 MPa	quelques 100 MPa	quelques 100 MPa

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