



**MATERION**



**BARR PRECISION OPTICS  
& THIN FILM COATINGS**

Astronomical  
Filters

# Astronomical Filters

Materion custom-designs precision thin film coatings and filters to meet your most challenging requirements. We cover a full range of wavelengths from <200nm to over 25 $\mu$ . We operate more than 80 coating chambers, including our newest large area coating cell that can handle 1400mm optics. We employ the broadest expanse of deposition technologies in the industry.

We have a long and successful track record as a pioneer in the field and as a leading producer of astronomical filters. Materion is the world's largest independent designer of precision thin film coatings and filters serving the space, science and astronomy communities.

## OUR HERITAGE IN THE ASTRONOMY COMMUNITY

We have been a major supplier of optical filters for the astronomy community worldwide for over 40 years. We have developed and manufactured filters and filter sets for a large variety of high profile ground based telescopes and astronomy projects. Examples include:

- HALE-BOPP Comet filter set (Lowell Observatory)
- ISAAC and SOFI programs (ESO)
- NIRSPEC Camera filter set (UCLA-Keck)
- GONG project (AURA)
- ISOON pre-filter set (NSO-AURA)
- Large CCD Mosaic Camera filter set (CFHT)

- CONICA project (Max Planck)
- 14" square H-Alpha filter on a single substrate (AAO)
- Sloan Digital Sky Survey Keck Interferometer IR reflector filter (JPL)
- Pan-STARRS PSI filter set (University of Hawaii)
- Subaru Suprime Cam and Hyper Suprime Cam (Subaru)
- SkyMapper H-alpha Narrow BP (ANU)
- MegaCam (CFHT)
- VBI H-beta high resolution filter (ATST / NSO)

Our successful participation in these programs through the years has allowed us to develop and strengthen relationships with leading observatories, telescope manufacturers, universities, research centers and governmental agencies from around the world.

## Materion ... Delivering New Levels of Innovation

[www.materion.com/barroptics](http://www.materion.com/barroptics)

## CORE COMPETENCIES

Materion has a wide range of design, deposition and test competencies from the ultra violet to far infrared; from dichroics to ultra narrow bandpass filters.

Materion has recently installed a purpose-built lab to coat and characterize narrow bandpass filters in sizes up to 750 mm as well as beamsplitters and AR coatings over 1 meter in diameter. Materion offers simple solutions to complex problems through the development of strong relationships with our customers.

## SPECIAL CAPABILITIES

- Coatings for deformable mirrors (AO applications)
- Large area (1.4 meter diameter) enhanced mirrors
- Patterned filters
- Multiband Rugate filters



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