Dynavac is the trusted leader in manufacturing systems for applying highly reflective coatings onto large astronomical telescope optics. Our expertise in thin film deposition technology and large system construction makes us the partner of choice for ensuring this critical process is executed with flawless precision.

Using proven chamber designs and deposition methods, our telescope mirror deposition systems provide a highly precise process for coating substrates with aluminum, protected aluminum, or protected silver coatings.

Dynavac offers:
- Turnkey design, construction, and commissioning across the globe
- Sputtering and evaporation technologies
- Standard and custom engineered handling solutions for a variety of mirror geometries
- Coating uniformity of better than +/-5% over the surface of the mirror
- Conceptual design and process development services

The EOS Large Astronomical Mirror System delivers the results you expect with the trusted support of a market leader.

The flawless performance you expect
From the most respected name in precision optical coating systems: Dynavac
### Specifications

**Applications & Performance**

**Applications**
- Evaporated or sputtered aluminum
- Sputtered aluminum with overcoat
- Sputtered silver with overcoat

**Performance**
- Precision control of thickness and optical properties
- Automated deposition process
- Thickness uniformity to ~5% over large areas

### System Configuration

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| **Vacuum Chamber** | Chambers to accommodate substrates from 2m to 8.4m  
Stainless steel and mild steel construction available  
Field construction services available |
| **Substrate Fixturing** | Variety of substrate orientation options  
Standard handle mount & wiffle tree fixturing for large substrates  
Single rotation fixture  
Planetary mechanism available for multi-optic coating |
| **Pumping System** | High vacuum - cryopumps, turbopumps  
Rough- single or multistage wet or dry pump packages  
Water vapor pumping systems |
| **Process Options** | Filament evaporation  
Magnetron sputtering  
Electron beam evaporation  
Ion assisted deposition  
Plasma Processing |
| **System Control** | Fully automated system and process control  
Enhanced data logging/trending capabilities  
PC/PLC control architecture  
LabView or RS operator interface  
Remote login capabilities  
Integrated quartz crystal monitoring  
Residual gas analyzer available  
Plasma emission monitor available |
| **System Commissioning** | Systems fully assembled and tested prior to shipment  
Full service transport and commissioning services  
Readily available post-installation system and software support |

110 Industrial Park Road, Hingham, MA 02043  
Tel: 781-740-8600  
sales@dynavac.com  
www.dynavac.com