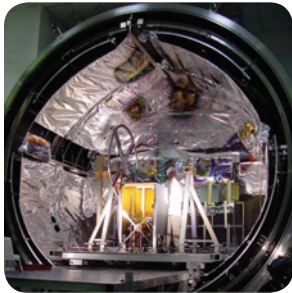


NASA MARSHALL SPACE FLIGHT CENTER: THE LARGE APERTURE COATING FACILITY 18-FOOT COATING CHAMBER

A Part of NASA's Strategic Capabilities Assets Program



The Large Aperture Coating Facility consists of a large vacuum coating system with the following capabilities: cryopumping; resistive, electro-beam evaporation; cryogenic cooling; and bakeout. This chamber has been used for optics-coating development work in the past. This work included e-beam gold coating for Constellation-X (CON-X) mandrels and resistive heating of aluminum for aluminizing a polymer sheet. The CON-X mandrels were used by Goddard Space Flight Center for their study on epoxy-replicated x-ray optics. The aluminized polymer, used in testing activity at Marshall Space Flight Center, looked into its potential use in solar propulsion in space.

The facility is currently active and available for research or fabrication.

For more information on the Strategic Capabilities Assets Program, visit <http://www.hq.nasa.gov/office/oim/oia/scap>.

Working area	4.8 meters x 3 meters
Ultimate pressure	10^{-7} Torr
Clean room	7 meters x 8.8 meters - Class 100,000
Temperature range	-180° C to 120° C

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