

Mechanical Design Service Request

Version 1.0 April 6, 2007

Identification

Project Title:

Task ID:

Account #

Principal Investigator:

Project Coordinator:

Submission Date:

Desired design completion date:

Number of systems to be built:

Type of Work Requested

Illustration for paper, proposal, review, etc (requires two weeks advance notice)

Beam Check on Omega (requires two weeks advance notice)

Beam Check on Omega EP (requires two weeks advance notice)

Export 3D models for external use

Analysis

DCO

Equipment modification

New project

General Description

Objective:

Describe the technical approach to achieving the objective (attach a separate document and/or a sketch if appropriate):

Identify any similar projects or equipment:

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Installation Location

OMEGA	Laser bay	Target bay	Target chamber (Port:)
OMEGA EP	Laser bay	Target bay	Target chamber (Port:)
La Cave			
Moving Cryostat Transfer Cart			
Room 157			
TIM			
Distance from TCC:			
Other:			

Functional Parts

- Actuators
- Calibration/alignment aids
- Cameras
- Consumable materials (i.e. film)
- Controls (PLC or Computer)
- Covers
- Cryogenic Cooling
- Electronics
- Heating
- Installation tools/fixtures
- Lasers
- Motors
- Optics
- Power supply
- Radiation shielding
- Sensors
- Structure
- User interface
- Vacuum
- Ventilation
- Other:

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Requirements

List the functional requirements for the mechanical design from a scientific or users perspective. Select the relevant requirements from the following list and describe each in the space below or in a separate document.

Cooling (temperature range, accuracy & precision)

Cycle time

Environmental (temperature, pressure, humidity, cleanliness)

Interface

Materials (special)

Measurement (accuracy, precision, dynamic range, bandwidth, efficiency)

Positioning (range, accuracy, precision, & speed)

Payload dimensions & mass

Pressure (or vacuum) range

Safety

Services (nitrogen, DI or chilled water, compressed air, vacuum, AC)

Service access

Size & weight

Other: