



Statement of Work

6 inch Viewport Clamps and Flanges C1104703-v1

1.0 Scope

This is a specification for the fabrication of stainless steel vacuum Flanges and aluminum Clamps used to mount high quality fused silica optical windows. These parts will be used in a high vacuum environment, as optical input and output housings.

2.0 Document Access

Many supplemental documents and specifications are incorporated into and made a part this Statement of Work. Click on the document links to access these documents from the LIGO Document Control Center (DCC) or go on line to the LIGO Public DCC at <https://dcc.ligo.org/> to access the DCC#.

3.0 Commercial Terms and Applicable LIGO Specifications:

Note: The documents listed below are invoked for this Statement of Work and comprise additional requirements which are integral to this Statement of Work.

- [LIGO-C080185-v1](#) LIGO Commercial Items or Services Contract General Provisions
- [LIGO-Q0900001-v5](#) Advanced LIGO Supplier Quality Requirements
- [LIGO-E0900364-v8](#) Metal Components for use in the Advanced LIGO Vacuum System

4.0 Quality System:

Referring to the above referenced LIGO Specification Q0900001, Suppliers should include a copy of their current ISO 9001, AS9100, or TS16949 certification in their bid package. Suppliers lacking current certification should send a copy of their Quality Manual with their bid package.

5.0 Parts/Assemblies to be manufactured, Quantity Required, and Inspection requirements:

- Refer to Section 8.0 for delivery schedule and location
- 100% Inspection Required

Drawing #	Part Description	Total Qty
D1101001-v1	aLIGO, High Quality, 6 inch Viewport Flange	80
D1101002-v1	aLIGO, High Quality, 6 inch Viewport Clamp	74
D1101115-v1	High Quality, 6 inch Viewport Clamp, wedged	29
D1101117-v1	aLIGO, Septum Viewport Flange	23

6.0 Manufacturing:

6.1 Requirements:

- Suppliers must refer to the LIGO Specifications referenced in Section 3 for additional, and in some cases, non-industry standard requirements.
- All material must be of domestic origin. Exclusions must be obtained in writing from LIGO before manufacturing.

6.2 Sub-Contracted Work:

- LIGO expects that at least 2/3 (by dollar value) of the contracted work be performed by the Supplier named on the Purchase Order. The Supplier shall be responsible for all sub-contracted work.

6.3 Precedence:

- The drawings typically represent the finished part as needed for use in service. Suppliers should always contact a LIGO representative to resolve any discrepancies or uncertainties in the documentation or instructions.

6.4 Special Instructions:

- 100% Dimensional Inspection required. Dimensions are critical for proper function.

6.5 Exclusions:

- None

7.0 End Item Data Package:

- Before delivery of the parts, the Supplier shall provide the following data, as a minimum:
 - Any as-built modifications (with approval of the LIGO Contracting Officer) as mark-ups to the drawings
 - Material certifications
 - Pickle/Passivation certifications, if applicable
 - Inspection reports of all dimensional features for the number of parts specified per Section 5 of this SOW
 - Certificate of compliance for each part number stating conformance to contract and drawing requirements

8.0 Delivery Requirements:

8.1 Shipping Containers and Packaging:

- The contractor is responsible for providing shipping containers and transportation which protects these parts from damage from the transportation environment (weather, handling, accidents, etc.). Mating edges of parts should be especially protected from damage during shipping.

8.2 Shipping Destination(s):

- The deliveries are FOB at these destinations, i.e. the Supplier has the responsibility for shipping title and control of goods until they are delivered and the transportation has been completed. The contractor selects the carrier and is responsible for the risk of transportation and for filing claims for loss or damage.
- These items will be shipped to:

California Institute of Technology (CIT)

ATTN: Mike Smith

LIGO Project MS 100-36

391 S. Holliston Ave.

Pasadena, CA 91125

8.3 Delivery Schedule:

- Partial and/or early deliveries are acceptable.
- Ship Date: 6 weeks ARO.