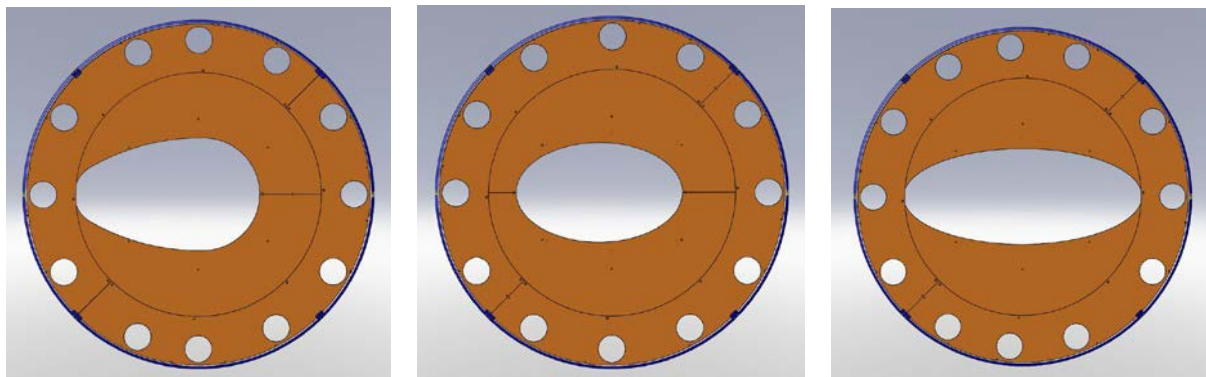




Statement of Work AO-120B: Cleaning of LHO Mode Cleaner Tube Baffles Parts C1107670-v3

1.0 Scope

This Statement of Work (SOW) is for the cleaning of the Mode Cleaner Tube Baffle sheet metal parts per IEST-STD-CC1246D in preparation for oxidization. The Mode Cleaner Tube Baffles will reside In-Vacuum at the LIGO Hanford Observatory. Surface finish and cleanliness criteria are of high importance and must adhere to the requirements specified within the LIGO control documents. The primary baffle piece parts are large; they are semi-circles of 3.5' diameter.



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-Q1100003-v1](#) Acceptable Quality Level (AQL) for Inspection of LIGO Components
- [LIGO-E1100842-v2](#) Specification for Mirror Finished (Super #8) Stainless Steel to be used in the LIGO Ultra-High 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 Part Numbers and Quantity:

Note: refer to Section 8.0 for delivery schedule and location

PART NUMBER	REV	DESCRIPTION	QTY
D1002995	V3	APERTURE PLATE_1500MM	4
D1003109	V3	APERTURE PLATE_75MM	4
D1003110	V3	APERTURE PLATE_200MM	4
D1003118-00	V3	TUBE BAFFLE PLATE_UPPER - MCA	3
D1003118-01	V3	TUBE BAFFLE PLATE_UPPER - MCB1	1
D1003118-02	V3	TUBE BAFFLE PLATE_UPPER - MCB2	1
D1003118-03	V3	TUBE BAFFLE PLATE_UPPER - MCB3	1
D1003118-04	V3	TUBE BAFFLE PLATE_UPPER - MCB4	1
D1003119-00	V3	TUBE BAFFLE PLATE_LOWER - MCA	3
D1003119-01	V3	TUBE BAFFLE PLATE_LOWER - MCB1	1
D1003119-02	V3	TUBE BAFFLE PLATE_LOWER - MCB2	1
D1003119-03	V3	TUBE BAFFLE PLATE_LOWER - MCB3	1
D1003119-04	V3	TUBE BAFFLE PLATE_LOWER - MCB4	1
D1101150	V3	aLIGO_MC_Tube_Baffle_Plate_Upper_MCA1	1
D1101152	V3	aLIGO_MC_Tube_Baffle_Plate_Lower_MCA3	1

Inspection Requirement: 100% Inspection.

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.

6.2 Sub-Contracted Work:

- Not applicable.

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 uncertainties in the documentation or instructions.

6.4 Special Instructions:

- PVC covering is to be carefully removed without disturbing flatness or form of the part
- Parts shall be precision cleaned to particulate level 100 (or lower) and Non-Volatile Residue (NVR) level A/10 (or lower) per IEST-STD-CC1246D.
- The baffle parts material will be cleaned with **Acetone**, then in **Liquinox**, then **De-ionized water** immediately to keep it from staining the surface. LIGO will accept suggestions from the supplier on alternate detergents or parameters used to meet the LIGO specification.
- Cleanliness is to be qualified by Gravimetric testing.
- Place each part in an anti-static bag fabricated from Ameristat poly sheet and cleaned to Class 100.
- Compress the bag tightly around the part to purge excess air. Tie wrap for closure or tape. **DO NOT HEAT SEAL.**
- Place an identification label with the LIGO part number on bag.
- Place each bagged part back into the LIGO shipping container in which the part originally arrived. Use care not the puncture or cut the bags.

6.5 Exclusions:

- FTIR is NOT requested.
- Do NOT wrap parts in aluminum foil.
- Baking will be performed at LIGO and is NOT part of this RFQ.

7.0 End Item Data Package:

Before delivery of the parts, the Supplier shall provide the following data, as a minimum:

- Measurement data of the surface particulate cleanliness and Non-Volatile Residue (NVR) level for each part.
- Certification that each part meets the required cleanliness levels.

8.0 Delivery Requirements:

8.1 Shipping Containers and Packaging:

LIGO is responsible for providing shipping containers and transportation. Vendor is responsible for packaging so that parts are protected 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):

LIGO will be responsible for picking up parts at suppliers' dock in conjunction with Section 8.3 Delivery Schedule. Supplier is responsible for providing a complete and accurate packing slip.

All items will be shipped to:

West Coast Porcelain Industries, Inc.
ATTN: Liam O'Byrne, General Manager
133 N. Sherman Avenue
Corona, CA 92882
liam@hkfinc.com
Tel: 951-278-8680

8.3 Delivery Schedule:

- Ship Date: 2 weeks ARO and parts
- Partial and/or early deliveries may be acceptable with prior approval.