LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Issue Date: 12/14/07

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS ASSEMBLIES

VENDOR: ATLAS PART NAME: LCLS Vacuum Chamber Bi-metal flange

DRAWING #: L1440202-200050-01 SERIAL #: Ø8

P.O. #: 8A-00803 DATE: 12-18-07

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject
2. Obtain manufacturers certification data delivered with flange.	Accept/Reject
3. Verify the upstream and downstream flanges fit snugly on the chamber weld locations.	Accept/Reject
4. Leak check flange per section 3.4 and 3.5 of ESD 1.4-118	Accept/Reject

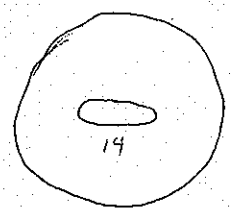
CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Slot thickness	7.00	± .08	7.09	Accept/Reject — OK MTE
Overall length	24.71	+ 0 / -.10	24.53 / 24.52 24.52 / 24.52	Accept/Reject — OK MTE MATCH @ WELDING
Flatness	<= .03	N/A	<.03	Accept/Reject
Angle	15°	± 0.3°	Re-Machined at Hi-Tech to 15°	Accept/Reject
Perpendicularity to A (2X)	<= .03	N/A	<.03 /	Accept/Reject

INSPECTOR: MB & BN QA Supervisor: MTE

TEST EQUIPMENT USED: DIGITAL HT. GAUGE

COMMENTS:

Sealed @ 65 in lb torque; ≤ 2.5×10^{-10} mb l/s LR (RXO) 12-21-07

Inside Surface polished with 60 + 30 micron polishing paper. 10th