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 #: 14

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	7.12	Accept/Reject - OK MTE
Overall length	24.71	+ 0 / -.10	24.94 / 24.95 24.93 / 24.95	Accept/Reject - OK, MATCH @ WELDING
Flatness	</= .03	N/A	<.03	Accept/Reject
Angle	15°	± 0.3°	re-machined at Hitech to 15°	Accept/Reject
Perpendicularity to A (2X)	</= .03	N/A	≤.03	Accept/Reject

INSPECTOR: MB & DN QA Supervisor: MTE

TEST EQUIPMENT USED: DIGITAL HT. GAUGE

COMMENTS:

Sealed @ 65 lb in torque; ≤ 1.2×10⁻⁹ mb l/s LR 12/20/07 RLO

Inside surface polished with 60 and 30 micron polishing paper. KTK.