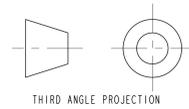


NOTES: (UNLESS OTHERWISE SPECIFIED)

1. THIS IS A CRYOGENIC VACUUM COMPONENT.
2. WELDING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
3. CLEANING PROCEDURE : PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
4. PACKAGING AND STORAGE PROCEDURE OF THE COMPONENTS: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
5. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982. UNITS ARE IN INCHES [mm] UNLESS OTHERWISE SPECIFIED.
6. USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
7. USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
8. VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
9. FITTINGS MAY BE USED IN PLACE OF BENDS; SUBJECT TO LBNL APPROVAL.
10. VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE FABRICATION OR ASSEMBLY; SUBJECT TO LBNL APPROVAL.
11. REMOVE ALL THE BURRS AND REAM THE ENDS FOR CIRCULARITY AND CLEAN ENDS.
12. TUBE END SURFACE MUST BE PERPENDICULAR TO THE TUBE AXIS WITHIN +/- .010.
13. PERFORM ACCEPTANCE TESTS PER LBNL SPECIFICATION M989.
14. A MARK DESIGNATING THE INSTALLED LENGTH WILL BE UTILIZED DURING FINAL INSTALLATION OF THE DEEDBOX ASSEMBLY. MARK, SCRIBE OR ETCH THIS LOCATION IN A PERMANENT MANNER, SUBJECT TO LBNL APPROVAL, TO AN ACCURACY OF 0.063".
15. PROVIDE A MINIMUM LENGTH OF 4.0" OF STRAIGHT, SMOOTH PIPE ON THE INDICATED SIDE OF THE INSTALLED LENGTH MARK FOR PIPE WELDING DURING FINAL INSTALLATION OF THE FEEDBOX ASSEMBLY.
16. PIPE MUST BE STRAIGHT AND SMOOTH (NO BUMPS) FOR 0.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
17. CAP BOTH ENDS OF PIPE TO FACILITATE ACCEPTANCE TESTS.



REV	DWG	CHK	ZONE	DATE	INITIAL RELEASE CHANGES
A	ARH	SPV		12-11-02	

ITEM	PART NO.	REQD	DESCRIPTION	MATERIAL
9	-	1	PIPE, PER ASTM A312	SS 304L
8	-	1	PIPE, PER ASTM A312	SS 304L
7	-	1	PIPE, PER ASTM A312	SS 304L
6	-	1	PIPE, PER ASTM A312	SS 304L
5	25H406	1	THRUST SUPPORT, BUS DUCT	SS 304L
4	-	1	WELD RING, ID 75mm, FNAL SUPPLIED	SS 304L
3	-	1	BRAIDED FLEX HOSE, 1 1/2" ID X 5.5' LL	SS 300 SERIES
2	251307	1	FLANGE, FNAL* 5520-MB-390033	SS 300 SERIES
1	-	1	BRAIDED FLEX HOSE, 1 1/2" ID X 4' LL	SS 300 SERIES

**ERNEST ORLANDO LAWRENCE**  
**BERKELEY NATIONAL LABORATORY**  
 UNIVERSITY OF CALIFORNIA - BERKELEY

LHC IR FEEDBOX  
 CRYOGENICS

PIPE WELDMENT, LD ORL / LD CROSSOVER

MICROFILMED: DWG. TYPE: SHOWN ON: SCALE: 1/4  
 ASSEM - SHEET 1 OF 1  
 PATENT CLEAR: DESIGN ACCT. NO: CATEGORY CODE: DWG. NO.: 25M9196  
 ZSLCE2 LH2003

UNLESS OTHERWISE SPECIFIED:  
 X.X ± 0.1 FRACTION ± 1/64  
 X.XX ± 0.03 ANGLES ± 1.00°  
 X.XXX ± 0.010 FINISH: 125 μm  
 DO NOT SCALE PRINT  
 TOLERANCES:  
 DIMENSIONS: 1.5 THREAD BELLET ON MACHINED THREADS  
 BREAK EDGES: 0.16 MAX. ON MACHINED WORK  
 REMOVE BURRS; WELD SPATTER A LOOSE SCALE  
 IN ACCORDANCE WITH ADP 114.5M 1 EN 1

SHOP ORDERS:  
 DATE: 16-04-02  
 DATE: 29-04-02  
 DATE: 16-04-02

ERNEST ORLANDO LAWRENCE  
 UNIVERSITY OF CALIFORNIA - BERKELEY  
 LHC IR FEEDBOX  
 CRYOGENICS  
 SHEET 1 OF 1