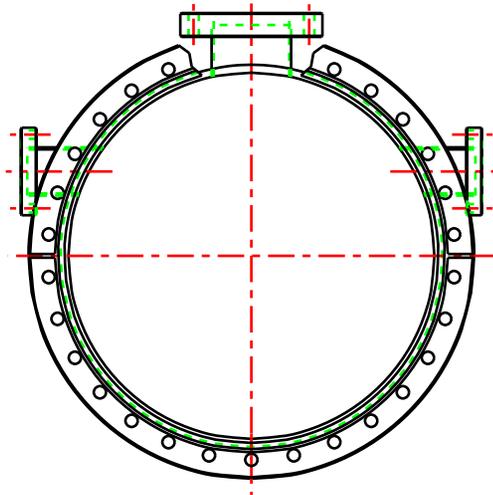
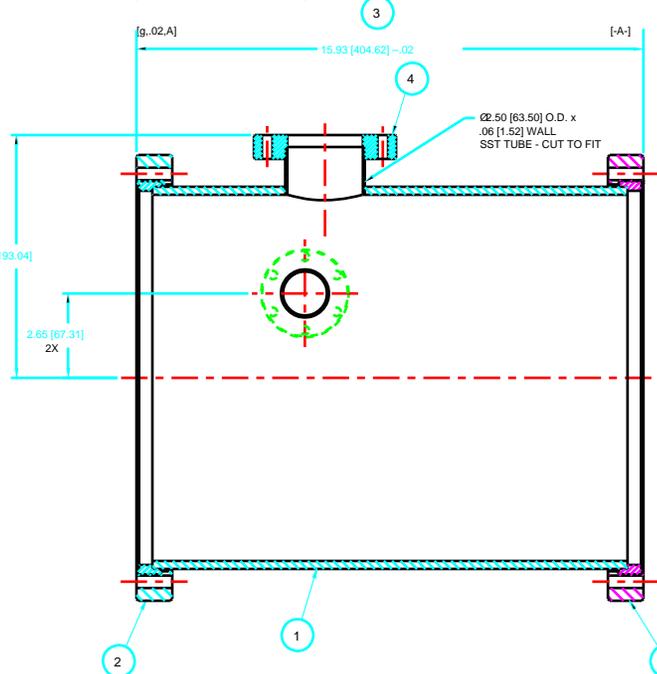
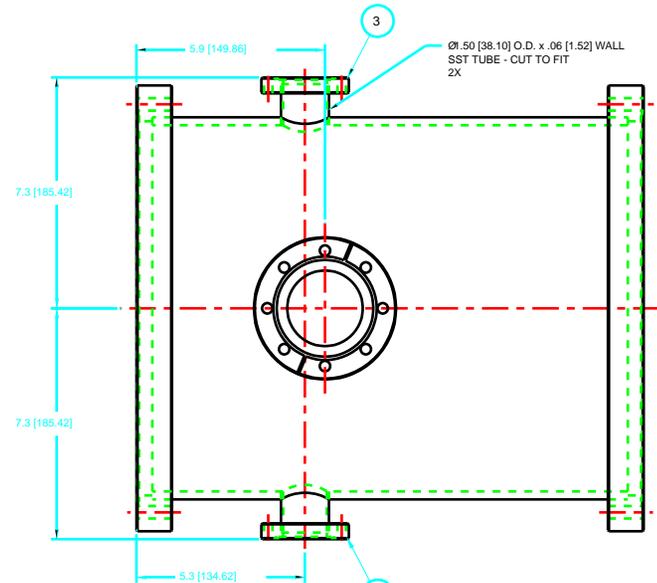


8 7 6 5 4 3 2 1



- NOTE:
- THIS IS A ULTRA-HIGH VACUUM CHAMBER (UHV).
  - WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
    - CIMCOOL 5 STAR 49
    - TRIM SOL
  - ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE CHAMBER NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN. THE CHAMBER VACUUM SIDE SURFACE ROUGHNESS SHALL BE BETTER THAN 63 MICROINCH RMS AFTER ELECTROPOLISHING.
  - WELD SHALL BE GAS TUNGSTEN ARC (GTAW) OR TUNGSTEN INERT GAS (TIG) ON VACUUM SIDE OF JOINTS.
  - VACUUM CHAMBER SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 x 10<sup>-10</sup> STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:
    - ALCATEL ASM-110TCL
    - VARIAN NCR 925 OR 936
    - VEECO MS-9, MS-90 OR MS-18
    - DUPONT CEC 24-120B
 CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING. FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM, THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
  - ALL FLANGES ARE TO BE PERPENDICULAR TO TANK AXIS IN .030.
  - ALL DIMENSIONS IN [ ] ARE MILLIMETERS AND ARE FOR REFERENCE ONLY.
  - MACHINE FINISH FOR ALL VACUUM SURFACES BEFORE ELECTROPOLISHING.
  - ALL MATERIAL IS 304 SST UNLESS OTHERWISE SPECIFIED.

REF. SOURCE

MDC VACUUM PRODUCTS CORP.  
 23842 CABOT BLVD.  
 HAYWARD, CA. 94545-1651  
 1-800-443-8817  
 FAX: 1-501-887-0626

ITEM	QUANTITY	DESCRIPTION	MATERIAL / SPEC	REV
4	MDC #110021	FLANGE 4-1/2" NOM. NON-ROTATABLE	SST 304	1
3	MDC #110014	FLANGE 2-3/4" NOM. NON-ROTATABLE	SST 304	2
2	MDC #100038	FLANGE 14" NOM. ROTATABLE	SST 304	2
1		12" O.D. x .25 THK TUBING	SST 304	1

PARTS LIST		DATE		DATE	
A2415400		5/7/96	6/24/96		
DESIGNED BY	R. KRAKORA	DATE	6/24/96	DESIGNED BY	D.S.HU
CHECKED BY	J.CHANG	DATE	6/18/96	CHECKED BY	T.M.KUZAY
APPROVED BY	KRAKORA/CHANG	DATE	5/7/96	APPROVED BY	
DATE	6/18/96	DATE	6/18/96	DATE	

SCALE	1:2	SHEET	11
DATE	6/18/96	REV	D
P4105091203-330000-00			

8 7 6 5 4 3 2 1