

ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION
1	V0494017		1	EA	FLANGE, GROOVED, 44 5/8" ID X 52" O.D.
2	V0494047		1	EA	FLANGE, FLAT FACE, 44 5/8" ID X 60" O.D.
3	XX		XX	SF	PLATE, 304L SSTL, 1/4" THK
4	XX		XX	FT	TUBING, RECT, 8" X 6" X 1/2" 304 SSTL
5	XX		XX	FT	TUBE, 304L SST, 8" O.D X 1/4" WALL
6	XX		1	EA	BELLOWS ASSY
7	XX		1	EA	FLANGE, CONFLAT, 10" O.D X 8" TUBE O.D.
8	XX		12	EA	NUT, HEX, A563 GR-A, 1"-8 UNC-2B
9	XX		XX	FT	ROD, THREADED, 1"-8 UNC-2A (A36)
10	XX		1	EA	FLANGE, CONFLAT, BLANK 10" O.D.
11	XX		12	EA	WASHER, FLAT 1"
12	XX		6	SF	PLATE 3/8" THK 304 SST, 4"x3 3/4"x3/8" THK

■ ELECTROLESS NICKEL PLATED

NOT FOR CONSTRUCTION

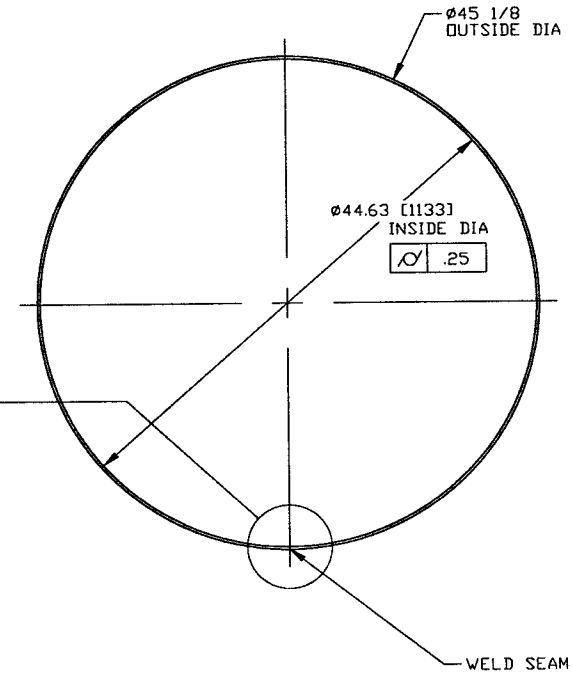
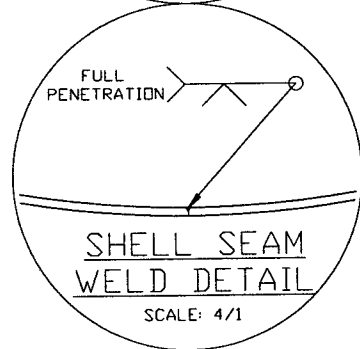
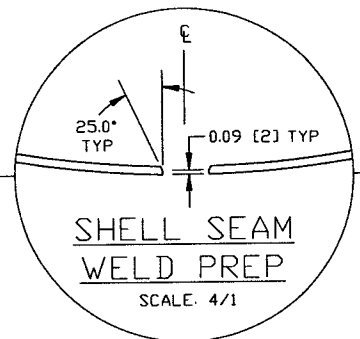
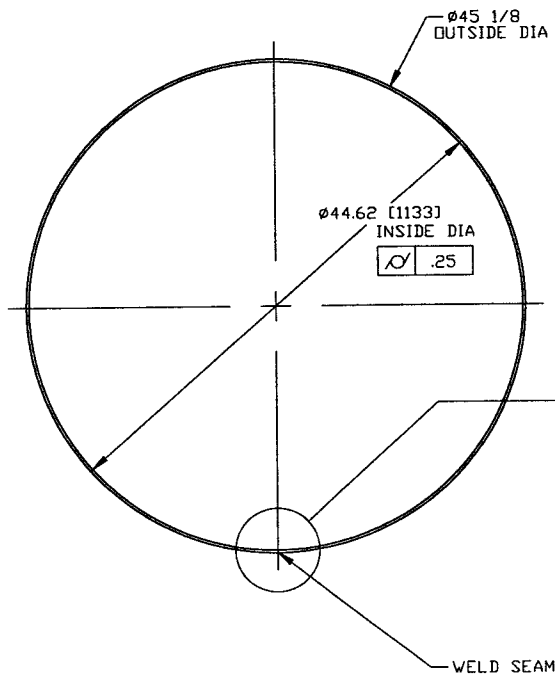
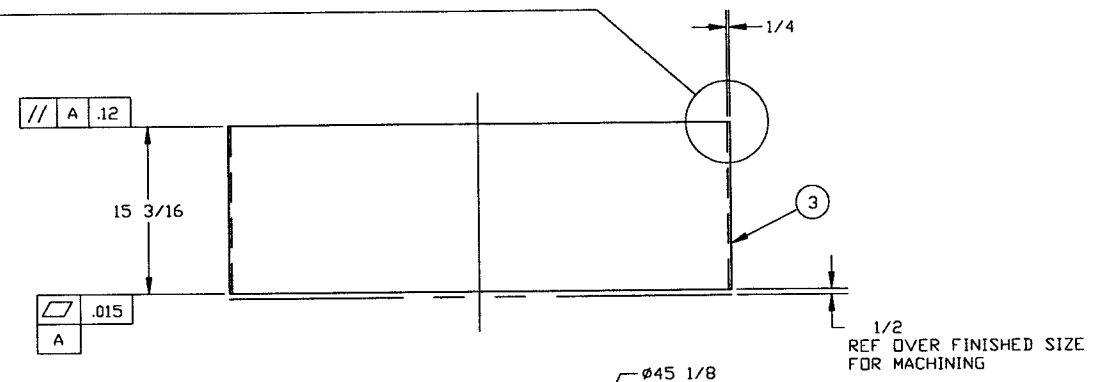
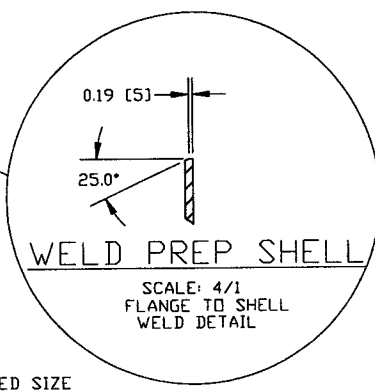
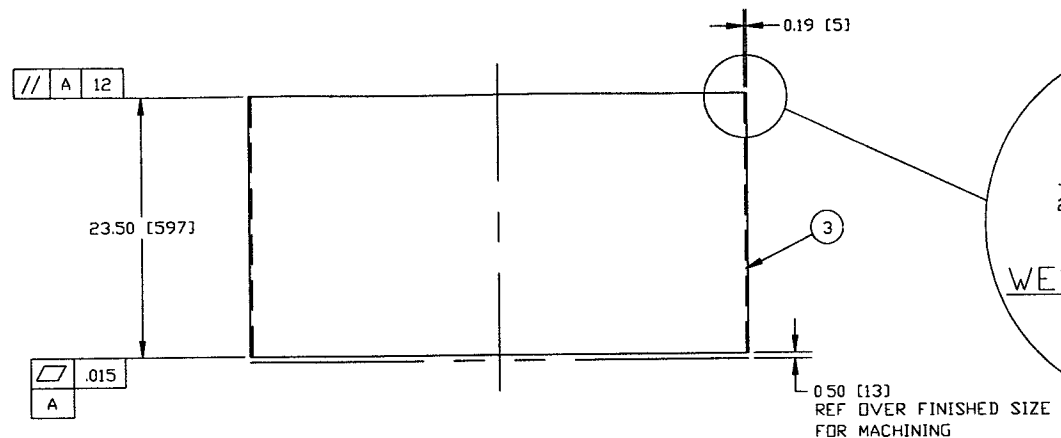
- NOTES:
- LEAK TEST & METHOD PER PSI SPEC: V049-2-014
 - CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED.
 - BOLT HOLES TO STRADDLE CENTERLINE ±.015 AS SHOWN.
 - CLEAN PER SPEC: V049-2-015
 - DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
 - DIMENSIONS SHOWN IN PARENTHESES ARE IN MILLIMETERS.
 - SPOOL FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
 - FOR FLANGE DETAILS SEE DWG. V049-4-047 & 017.
 - THESE FLANGES EACH INCLUDE AN ANNULAR CHANNEL BETWEEN D-RINGS, MANIFOLD TO A SINGLE PUMPOUT PORT ON EACH CHAMBER, SEE DWG V049-4-
 - REGISTERED TRADEMARK, VARIAN VACUUM PRODUCTS; COMPATIBLE ALTERNATIVES ARE ACCEPTABLE.

Raymond P. Cirto, PE
 5/6/95 LIGO D961140-00-V

SYMBOL		CHARACTERISTIC	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE IN INCHES	REV	DESCRIPTION	DATE	BY	CHKD	DRWN	DATE	DESN
□		FLATNESS	FRONTAL ±.1	0	ISSUED FOR FDR	4/27/96	DA				
○		CYLINDRICITY	INDICATED ±.0005	P1	PRELIMINARY	4/13/96	HA				
//		PARALLELISM	TWO PLACE DECIMAL ±.005								
⊥		PERPENDICULARITY	FINISHED SURFACE AND BREAK CORNERS IN REMOVE ALL BURRS								
∠		ANGULARITY	DO NOT SCALE THIS DRAWING								
⊕		TRUE POSITION	USED ON								
⊙		CONCENTRICITY	NEXT ASS'Y								

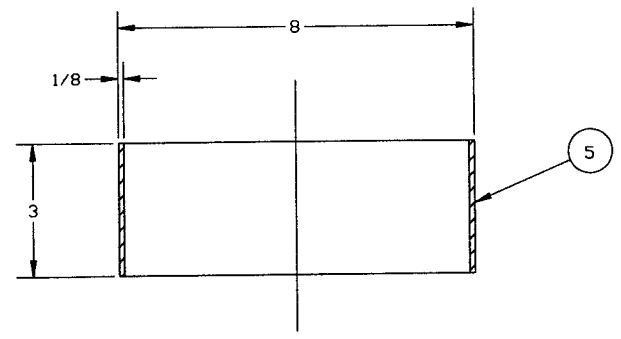
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION

PROCESS SYSTEMS INTERNATIONAL INC.		ADAPTER A-1	
20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA		44 5/8" ID X 60 1/2" I.D.	
		LIGO VACUUM EQUIPMENT	
CAB FILE	SIZE	DWG. NO.	REV.
4A1S1	D	V049-4-A1	0
SCALE	SHEET	1 OF 3	
1-1/2" = 1'			



DETAIL 1
SCALE: 1-1/2'=1'

DETAIL 2
SCALE: 1-1/2'=1'



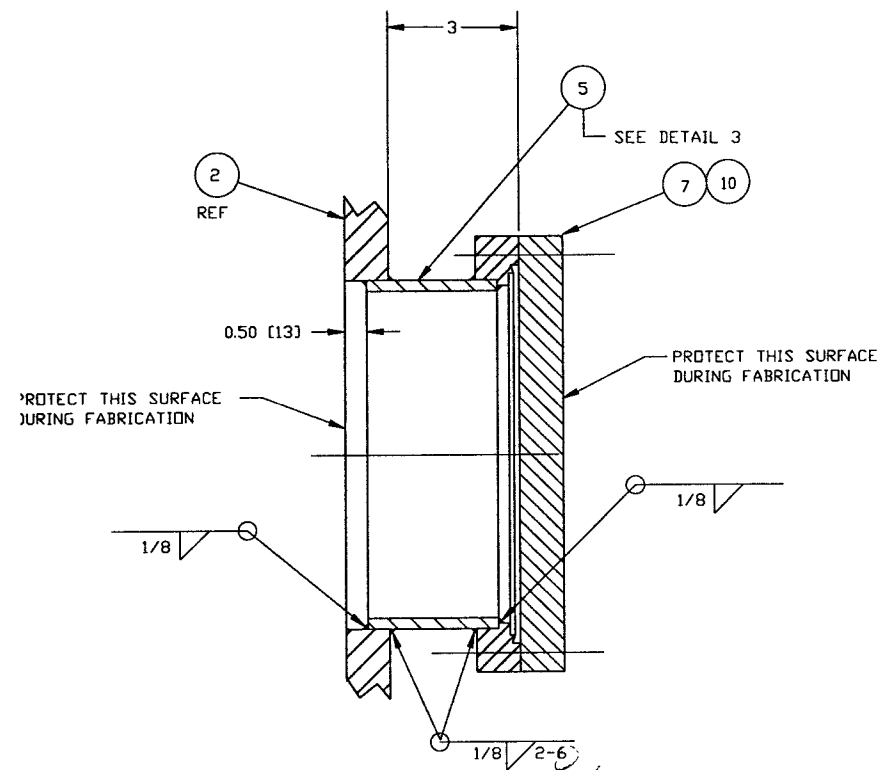
DETAIL 3
SCALE: HALF

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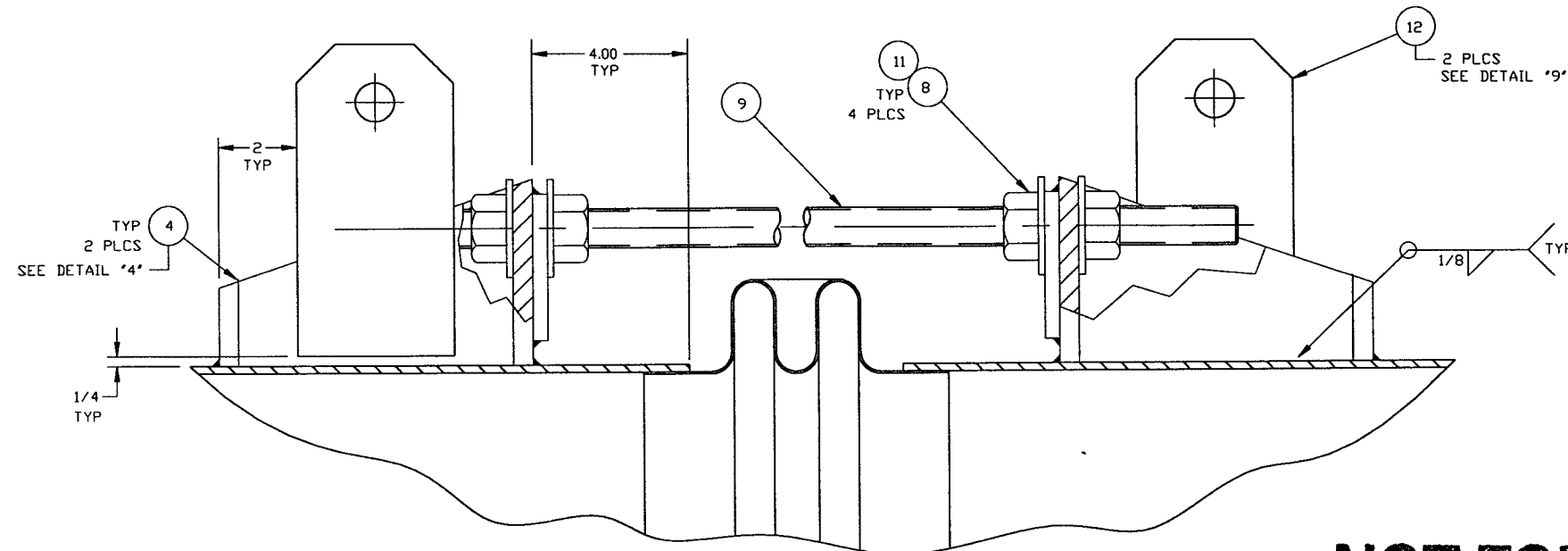
LIGO D961140-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALKUP DR WESTBOROUGH, MASSACHUSETTS 01581 USA			
ADAPTER A-1 44 5/8" I.D. X 60 1/2" I.D. LIGO VACUUM EQUIPMENT			
CAD FILE 4A1S2	SIZE D	DWG NO. V049-4-A1	REV 0
SCALE AS NOTED	SHEET 2	OF 3	

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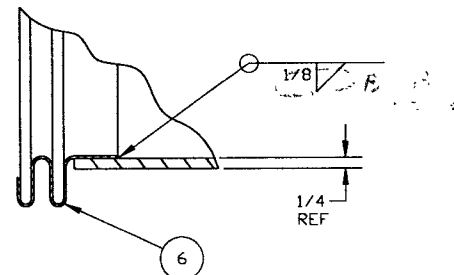


DETAIL 4
QTY: 6

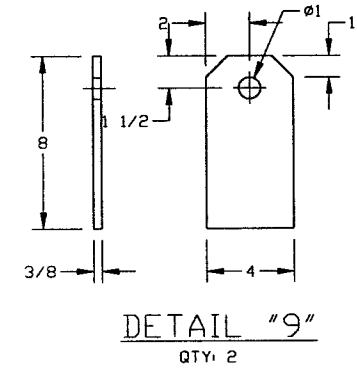
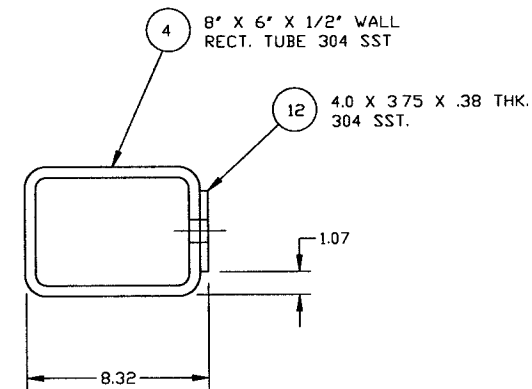


DETAIL "5"
EXPANSION JOINT & TIE ROD ASSY.
QTY: 3

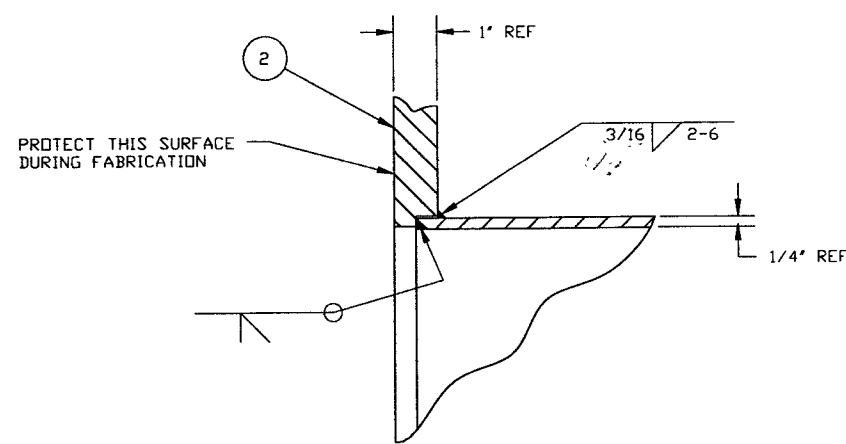
**NOT FOR
CONSTRUCTION**



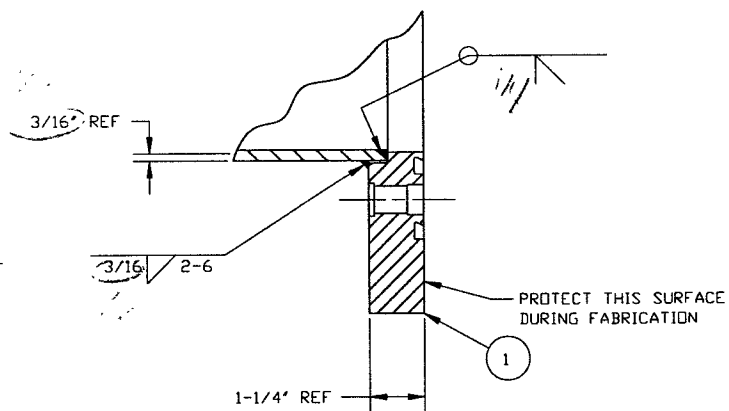
DETAIL "6"
QTY: 2



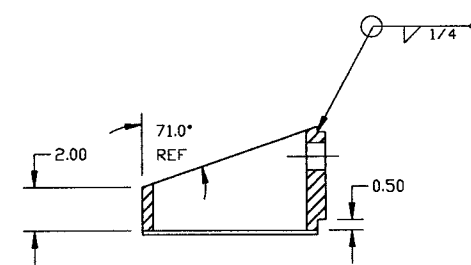
DETAIL "9"
QTY: 2



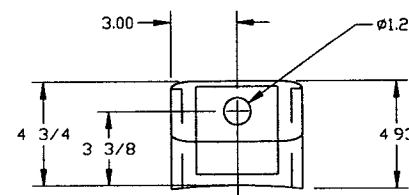
DETAIL "7"



DETAIL "8"



DETAIL "4"
QTY: 6



Raymond D. Gatto, PE
5/6/96 LIGO D961140-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
ADAPTER A-1 44 5/8 I.D. X 60 1/2 I.D. LIGO VACUUM EQUIPMENT			
CAD FILE 4A1S3	SIZE D	DWG NO V049-4-A1	REV 0
SCALE AS NOTED	SHEET 3 OF 3		

APR 27 1996 - 120031