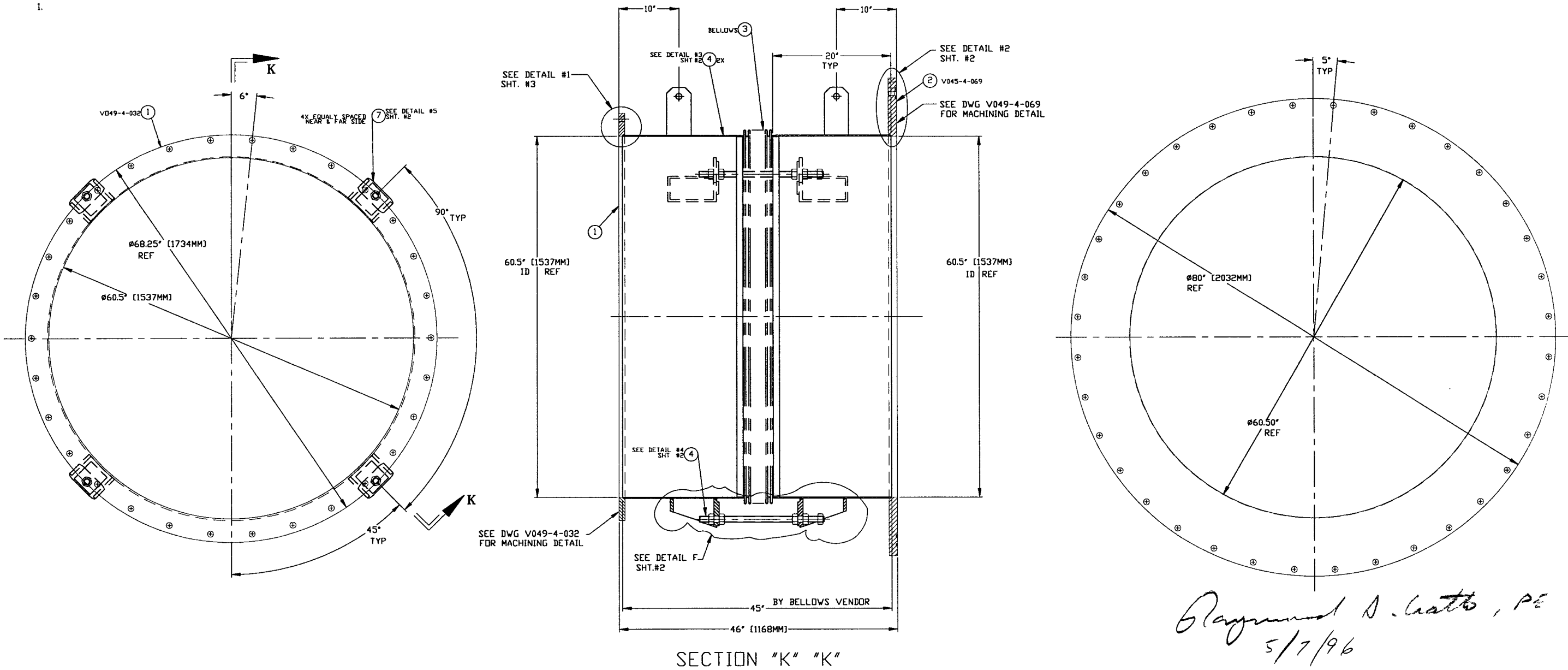


ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION
1	V049-4-032	3	1		60.5" ID FLANGE DETAIL (FLAT)
2	V049-4-069	3	1		60.5 ID X 800 OD FLANGE GROOVE
3	-	3	1		BELLOWS
4	DETAIL #3	3	2		60.5 I.D. SHELL, 304L SST.
5	DETAIL #4	3	3		TIE ROD, 1-BUNC THREADED ROD, 304L SST.
6	DETAIL #5	3	8		80 X 6.0 X .5 THK. REQ. TUBE, 304 SST.
7	DETAIL #5	3	8		4.0 X 3.75 X .38 THK. PLT. 304 SST.
9	-	3	20		NUT, HEX 1-BUNC 304 SST.

NOTES:

10. LEAK TEST & METHOD PER PSI SPEC: V049-2-014
9. CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED.
8. BOLT HOLES TO STRADDLE NATURAL CENTERLINES AS SHOWN, +/- .015
7. CLEAN PER SPEC: V049-2-015
6. DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
- 5.
4. ADAPTER FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
3. FOR FLANGE DETAILS SEE DWGS. V049-4-032 & V049-4-069
- 2.
- 1.

**NOT FOR
CONSTRUCTION**



Raymond J. Gatto, PE
5/7/96

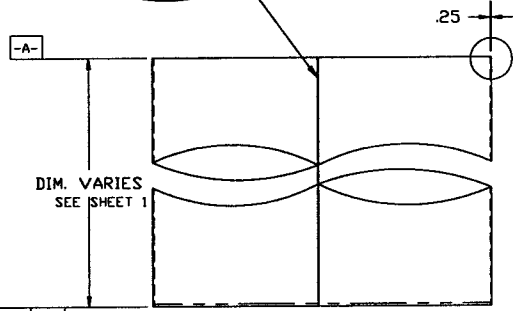
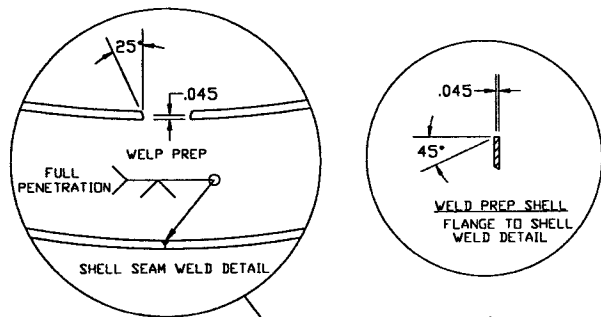
LIG0-D961147-00-V

<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL # 1 ANGULAR/CHAMF 30°-30° BEND #2° TWO PLACE DECIMAL # .01 THREE PLACE DECIMAL # .005 FINISHED SURFACE RNS BREAK CORNERS IN REMOVE ALL BURRS</p>		<p>DO NOT SCALE THIS DRAWING</p>		<p>ISSUED FOR FOR</p>		<p>CHKD TOV 5/4/96 0145</p>		<p>SCALE NONE</p>	
<p>USED ON</p>		<p>REV</p>		<p>DESCRIPTION</p>		<p>DATE</p>		<p>DESN</p>	
<p>NEXT ASS'Y.</p>		<p>ISSUE DESCRIPTION</p>		<p>SCALE</p>		<p>SHEET</p>		<p>1 OF 2</p>	

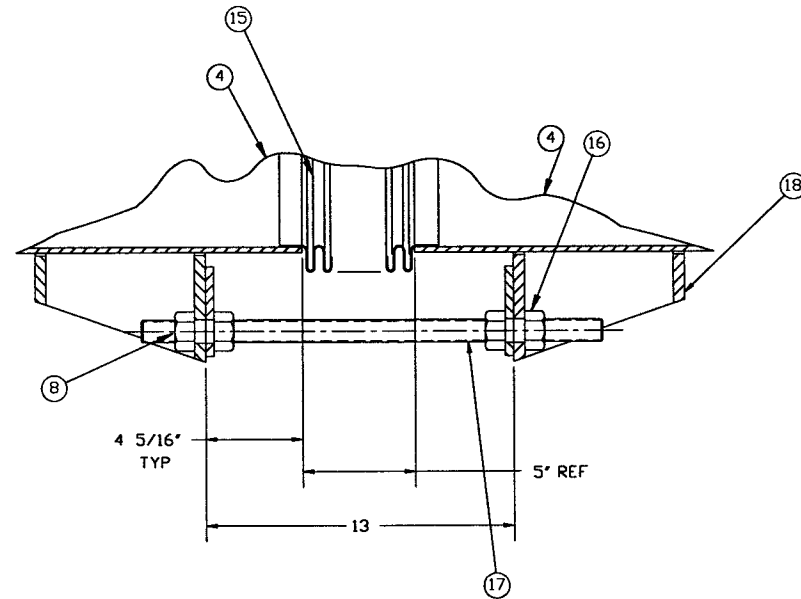
PROCESS SYSTEMS INTERNATIONAL INC.
 20 WALKUP DR WESTBOROUGH, MASSACHUSETTS 01581 USA
ADAPTER A-13
 60.50" ID x 72.25" ID
 LIG0 VACUUM EQUIPMENT
 CAD FILE: V0494A13S1
 SIZE: D
 DWG NO: V049-4-A13
 REV: C
 SHEET: 1 OF 2

AND CONFIDENTIAL
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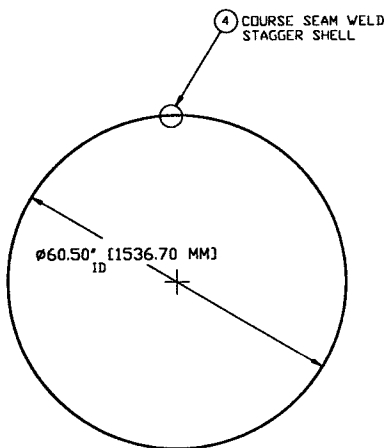


.015 A



DETAIL "F"
EXPANSION JOINT TIE-ROD ASSY.
TYP 4 PLACES

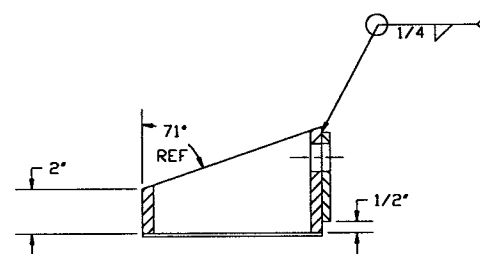
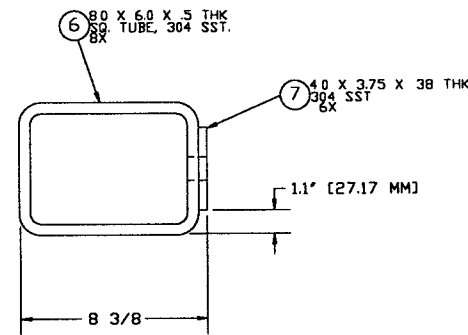
**NOT FOR
CONSTRUCTION**



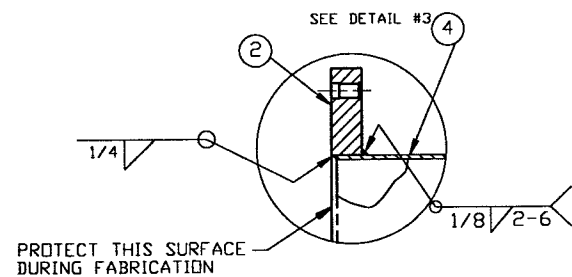
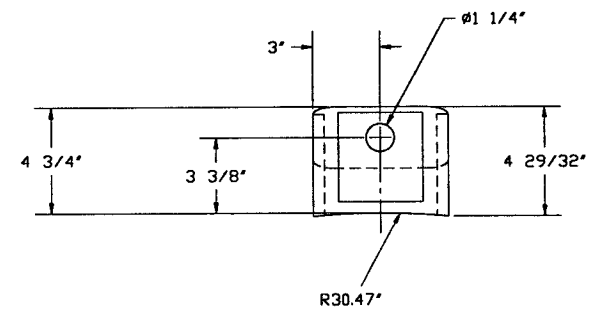
DETAIL "3"
QTY: 2



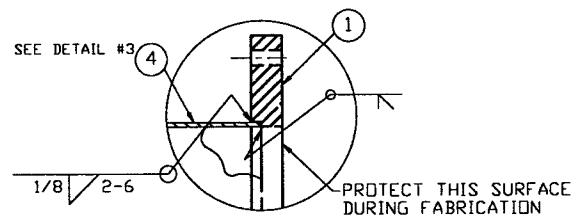
DETAIL "4"



DETAIL "5"
QTY: 8



DETAIL "2"



DETAIL "1"

Raymond D. Crath, PE
5/7/96
LIGO'D961147-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
ADAPTER A-13 60.50"ID x 72.25"ID LIGO VACUUM EQUIPMENT			
CAD FILE 494A13S2	SIZE D	ENG NO. V049-4-A-13	REV 0
SCALE NONE	SHEET 2 OF 2		

May 07, 1996 - 12:48:30