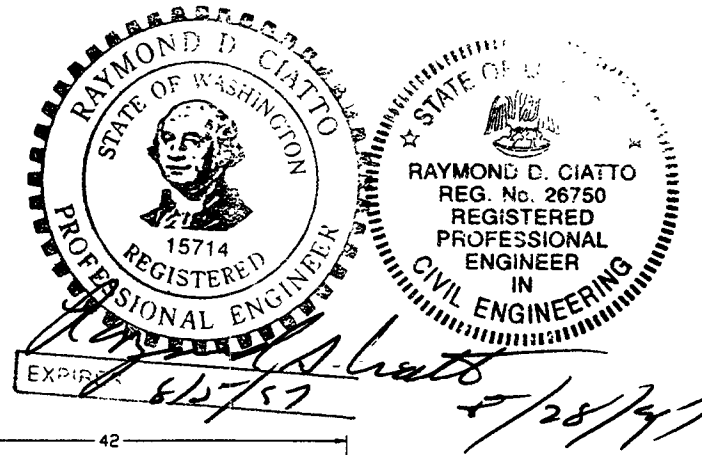


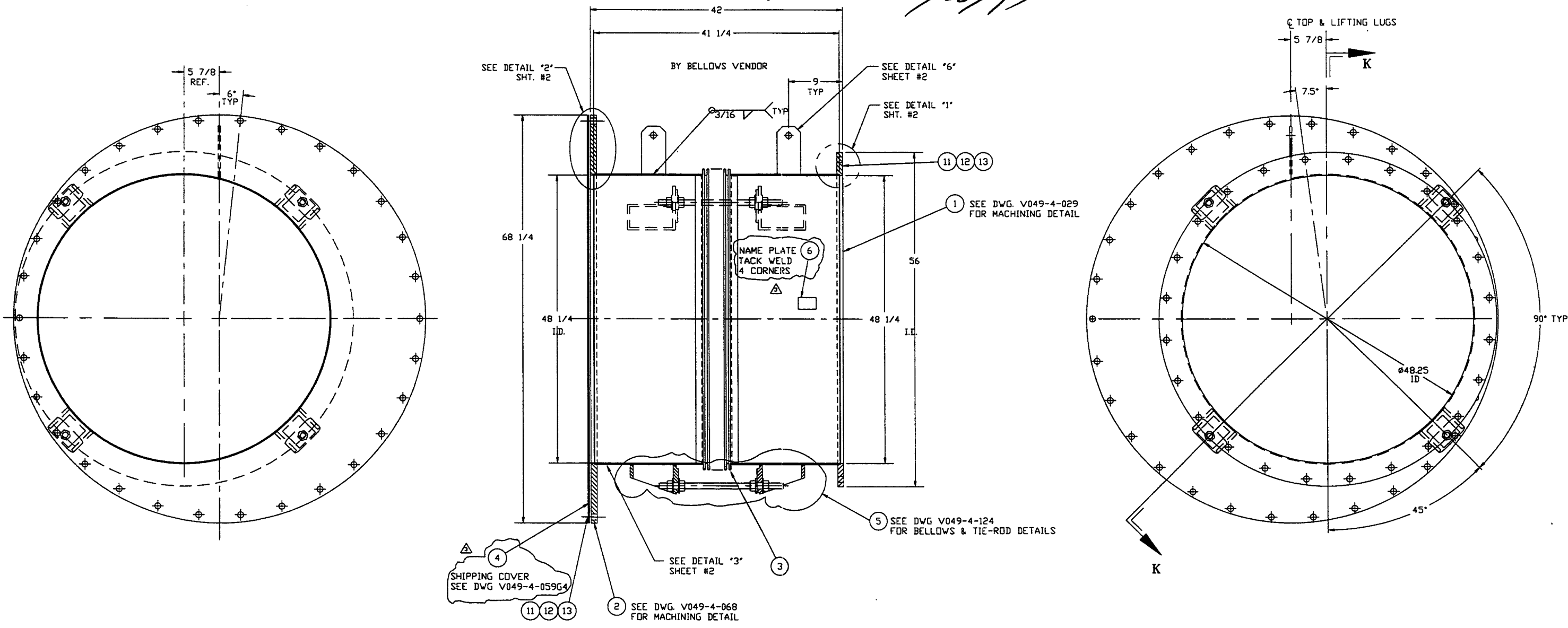
NOTES:

11. WDS NO'S. REFER TO WELD DATA SPEC. V049-2-084
10. PLATES PRIOR TO ROLLING MUST HAVE DIAGONAL CORNER TO CORNER DIMENSIONS WITHIN 1/16" OF EACH OTHER.
9. EACH FINISHED SHELL IS TO BE MARKED WITH A SEQUENTIAL PSI SERIAL NUMBER. THE NUMBER IS TO BE MADE FROM THE DRAWING PLUS THE SEQUENTIAL NUMBER. V0494A12-01-02 ETC.
8. TIGHTEN TIE-ROD NUTS WITH BELLOWS IN 'FREE' POSITION TO 100 FT-LB PRIOR TO LEAK TEST
7. LEAK TEST & METHOD PER PSI SPEC. V049-2-014
6. CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED, AS NOTED.
5. BOLT HOLES TO STRADDLE VERTICAL CENTERLINE ± 015
4. CLEAN PER SPEC. V049-2-015
3. DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
2. SPOOL FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
1. FOR FLANGE DETAILS SEE DWG. V049-4-029 & 068.



ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION
1	V0494029		1	EA	48.25" ID FLANGE DETAIL (FLAT)
2	V0494068		1	EA	48.25" ID x 68.25" OD FLANGE DETAIL (FLAT)
3	V0494A12P1		1	EA	BELLOWS ASSY. (PER SPEC V049-2-017)
4	V0494059G4		1	EA	SHIPPING COVER ASSY
5	***		4	EA	TIE-ROD ASSY. (PER V049-4-124)
6	V0494M740		1	EA	PSI NAME PLATE, 2" X 3"
7					
8					
9					
10	***		3	1.5 FT	FLAT BAR, 304 SST, 3/8"x4"
11	202678		3	54 EA	BOLT, SA193B7, HEX, 7/8"-9UNC X 4" LG.
12	202679		3	54 EA	NUT, SA1942H, HEX, 7/8"-9UNC
13	202581		3	138 EA	WASHER, STL, 1 3/4" OD X 15/16" ID X 1/4" THK.

* ELECTROLESS NICKEL PLATE
 *** SUPPLIED BY BELLOWS VENDOR

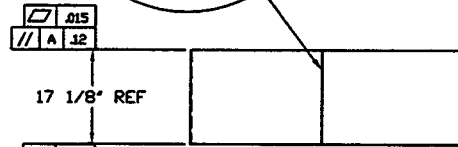
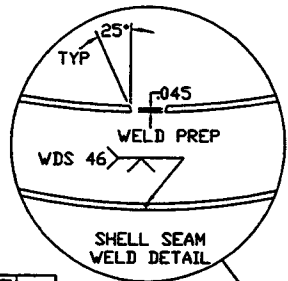



TAG NO'S: WA-12A, WA-12B

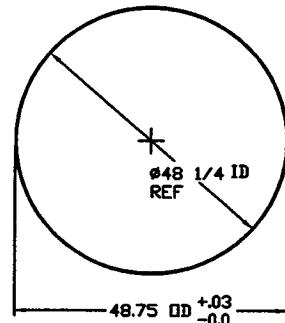
APPROX. WEIGHT: 1204#

<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION BELONGING TO PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS AFFILIATED COMPANIES AND SHALL BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS SUPPLIED. IT SHALL NOT BE COPIED, REPRODUCED OR OTHERWISE USED, NOR SHALL SUCH INFORMATION BE FURNISHED IN WHOLE OR IN PART TO OTHERS EXCEPT IN ACCORDANCE WITH THE TERMS OF ANY AGREEMENT UNDER WHICH IT WAS SUPPLIED OR WITH THE PRIOR WRITTEN CONSENT OF PROCESS SYSTEMS INTERNATIONAL, INC. AND SHALL BE RETURNED UPON REQUEST.</p>		<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES:</p> <p>FRACTIONAL ± .1</p> <p>ANGULAR ± .01° - .02° BEND ± 2°</p> <p>TWO PLACE DECIMAL ± .03</p> <p>THREE PLACE DECIMAL ± .015</p> <p>FURNISHED SURFACE FINISH:</p> <p>BREAK CORNERS IN OUT-</p> <p>REMOVE ALL BURRS</p>		<p>3 REISSUED FOR FAB/SHIPPING AS NOTED</p> <p>2 DESIGN UPDATE/ISSUED FOR FABRICATION</p> <p>1 DESIGN UPDATE / FABRICATION (BELLOWS ASSY. ONLY)</p> <p>0 ISSUED FOR FDR</p>		<p>DO NOT SCALE THIS DRAWING</p> <p>USED ON</p> <p>NEXT ASSY:</p>		<p>REV DESCRIPTION</p> <p>ISSUE DESCRIPTION</p>		<p>PROCESS SYSTEMS INTERNATIONAL, INC.</p> <p>20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</p> <p>ADAPTER A-12</p> <p>48.25" ID x 60.50" ID</p> <p>LIGO VACUUM EQUIPMENT</p>			
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	REV	DESCRIPTION	CHKD	DRWN	DATE	DESN	CAD FILE	SIZE	DWG. NO.	REV
										V0494A12	D	V049-4-A12	3
										SCALE	1/8	SHEET	1 OF 2

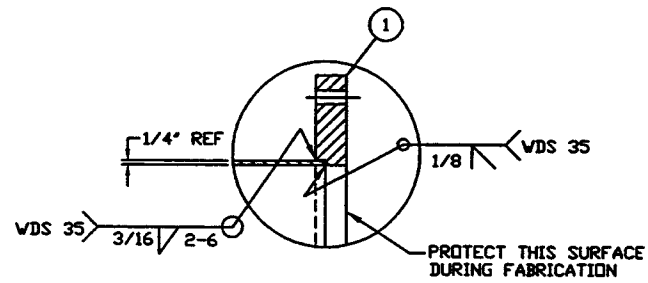
LIGO-D961146-03-V



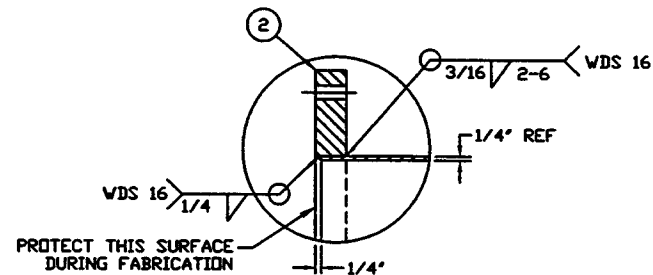
 .015
 -A-
 * NOTE:
 FINAL LENGTH TO BE DETERMINED
 BY BELLOWS VENDOR.



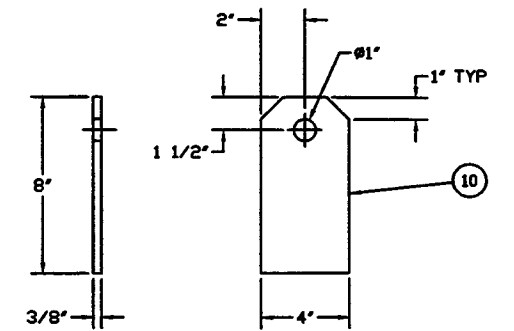
DETAIL "3"
 QTY: 2
 MAKE FROM V049M163-1



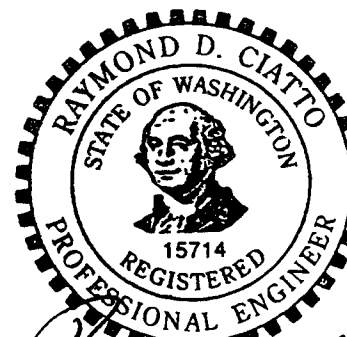
DETAIL "1"



DETAIL "2"




DETAIL "6"
 QTY: 2



EXPIRES 12/27/97

2/28/97

 PROCESS SYSTEMS INTERNATIONAL INC. <small>20 WALUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</small>			
ADAPTER A-12 48.25" ID 60.50" ID LIGD VACUUM EQUIPMENT			
CAD FILE 494A12S2	SIZE D	REV. NO. V049-4-A-12	REV. 3
SCALE NONE	SHEET 2 OF 2		

NOV 22, 1996 - 06:23:55