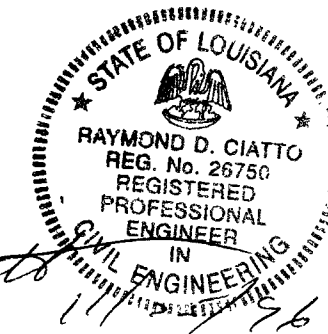
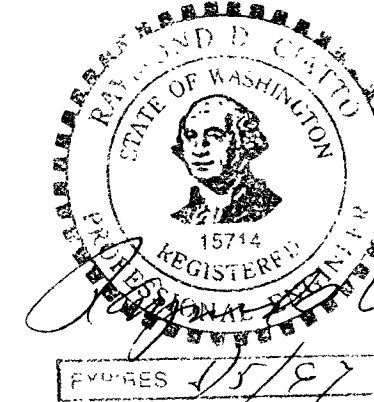


ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION	
1	V0494042		1	EA	FLANGE, FLAT FACED, 44 5/8" I.D.	
2	V0494060		1	EA	FLANGE, GROOVED, 44 5/8" I.D.	
3						
4	V0494BE4P1		1	EA	BELLOWS ASSY (PER SPEC V049-2-017)	
5	***		3	EA	TIE-ROD ASS'Y (PER DWG. V049-4-124)	
6						
7						
8						
9						
10						
11	202678		3	24	EA	BOLT, SA193 B7, HEX, 7/8-9 UNC X 4" LG.
12	202679		3	24	EA	NUT, SA193 2H, HEX, 7/8-9 UNC
13	202581		3	48	EA	WASHER, STL, 1 3/4" OD X 15/16" ID X 1/4" THK.
14	V049M026		1	EA	O-RING, VITON (PER SPEC. V049-2-025)	
15	V049M027		1	EA	O-RING, VITON (PER SPEC. V049-2-025)	
16	V0494061		1	EA	3/4" OD ELBOW X 2 3/4" O.D. CONFLAT FLANGE	

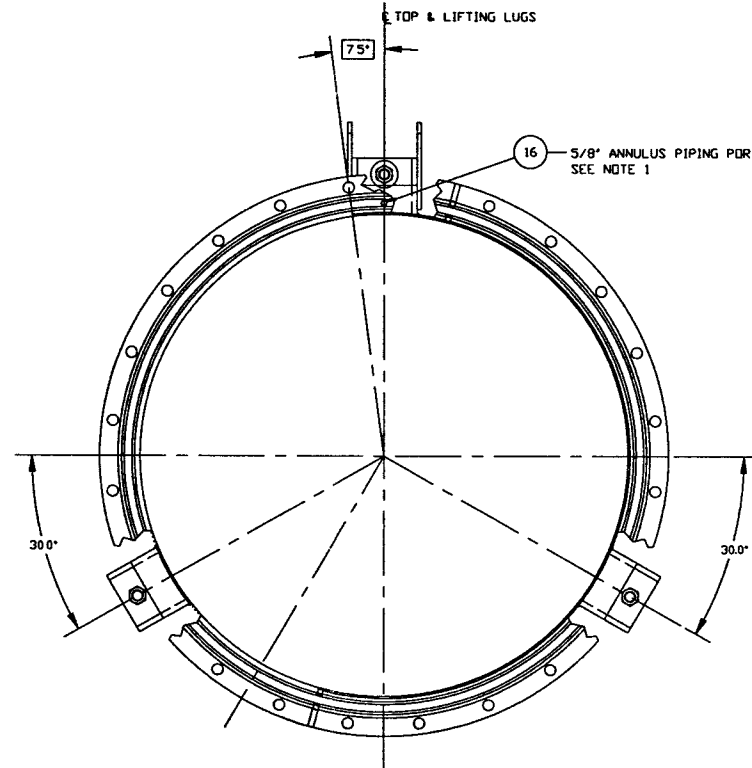
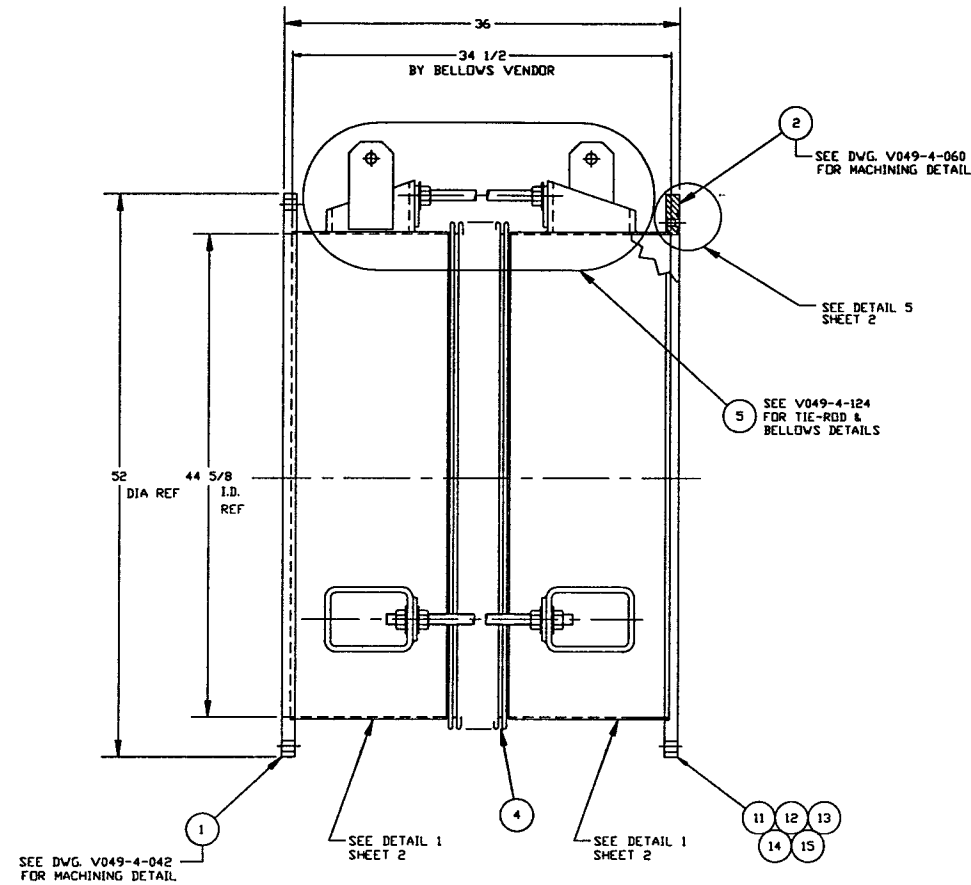
■ ELECTROLESS NICKEL PLATING
 ■■■ SUPPLIED BY BELLOWS VENDOR



NOTES:

- PLATES PRIOR TO ROLLING MUST HAVE DIAGONAL CORNER TO CORNER DIMENSIONS WITHIN 1/16" OF EACH OTHER.
- 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. V0494BE4-01, -02 ETC.
- TIGHTEN TIE-ROD NUTS WITH BELLOWS IN 'FREE' POSITION TO 100 FT-LBS PRIOR TO LEAK TEST
- LEAK TEST & METHOD PER PSI SPEC. V049-2-014
- CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED, AS NOTED.
- BOLT HOLES OF ALL FLANGES TO STRADDLE VERTICAL CENTERLINE ± .015
- CLEAN PER SPEC. V049-2-015
- DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
- SPOOL FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
- FOR FLANGE DETAILS SEE DWG. V049-4-042 & 060.
- THIS FLANGE INCLUDES AN ANNULAR CHANNEL BETWEEN O-RINGS FOR A SINGLE PUMPOUT PORT, SEE DWG. V049-4-061.

0961163-02-V APPROX. WEIGHT: 2703#



DWG NO	DESCRIPTION	DWG NO	DESCRIPTION

REV	DESCRIPTION	CHKD	DRWN	DATE	DESD
2	DESIGN UPDATE/ISSUED FOR FABRICATION			11/22/96	0180
1	DESIGN UPDATE/FABRICATION (BELLOWS ASSY ONLY)			9/11/96	0191
0	ISSUED FOR FDR			4/29/96	0146
P1	PRELIMINARY DESIGN UPDATE			3/07/96	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONAL ± .01
 ANGULAR ± .01
 TWO PLACE DECIMAL ± .02
 THREE PLACE DECIMAL ± .015
 FINISHED SURFACE RMS
 BREAK CORNERS IN
 REMOVE ALL BURRS

DO NOT SCALE THIS DRAWING

USED ON: _____

NEXT ASS'Y: _____

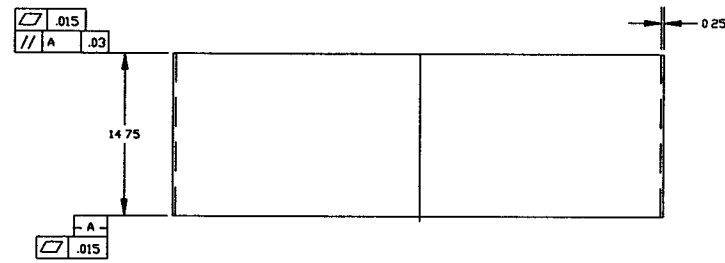
ISSUE DESCRIPTION

PROCESS SYSTEMS INTERNATIONAL, INC.
 20 WALKUP DR WESTBOROUGH, MASSACHUSETTS 01581 USA

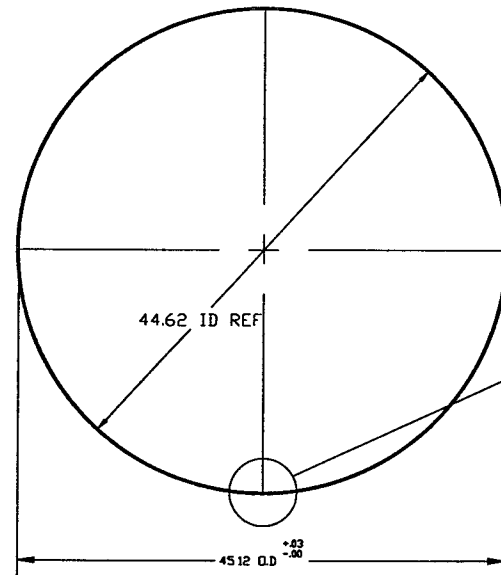
SPOOL BE-4
 44 5/8" ID
 LIGO VACUUM EQUIPMENT

CAD FILE BE4S1
 SIZE D
 DWG NO. V049-4-BE4
 SHEET 2

SCALE 1-1/2" = 1"
 SHEET 1 OF 2

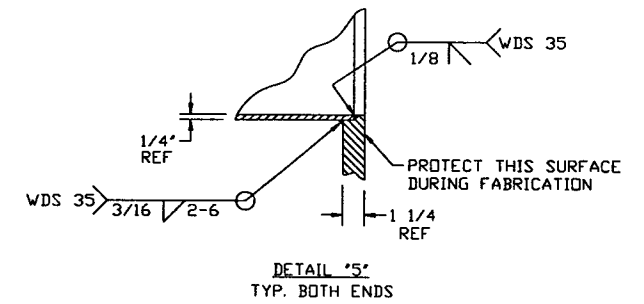
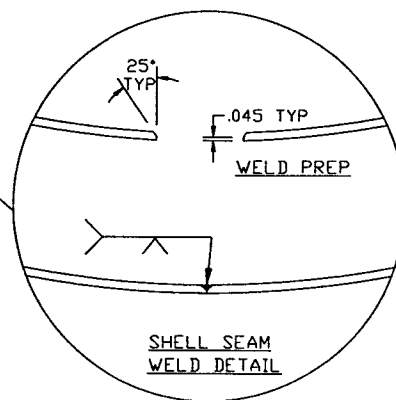


NOTE:
FINAL FINISHED LENGTH TO BE
DETERMINED BY BELLOWS VENDOR.



DETAIL 1
QTY. (2)

MAKE FROM V049M158-1



SEE SHEET 1 FOR REVISIONS

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
SPOOL BE-4 44.62" ID LIGD VACUUM EQUIPMENT			
CAD FILE 4BE4S2	SIZE D	DWG. NO. V049-4-BE4	REV. 2
SCALE AS NOTED		SHEET 2 OF 2	