

Title: **FABRICATION PLAN FOR SPOOLS AND BEAM TUBES**

**FABRICATION PLAN  
FOR  
SPOOLS AND BEAM TUBES  
LIGO VACUUM EQUIPMENT**

**Hanford, Washington  
and  
Livingston, Louisiana**

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**PROJECT MANAGER:** Barclay Beyly

Information contained in this specification and its attachments is proprietary in nature and shall be kept confidential. It shall be used only as required to respond to the specification requirements, and shall not be disclosed to any other party.


Ø	PF 5/2/96	REB 5/2/96	ISSUED PER DED 0161 FOR FDR
REV LTR.	BY-DATE	APPD. DATE	DESCRIPTION OF CHANGE

<b>PROCESS SYSTEMS INTERNATIONAL, INC.</b>				<b>SPECIFICATION</b>		
INITIAL APPROVALS	PREPARED <u>PF</u>	DATE <u>5/2/96</u>	APPROVED <u>REB</u>	DATE <u>5/2/96</u>	Number <b>A V049-2-083</b>	Rev. Ø
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- 3. Fabrication Priority List

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### 4.5 Procurement

PSI will procure all S.S. plate and flange material.

PSI will purchase vessel heads.

### 4.6 Quality Assurance

Each Spool and Tube Fabrication Process shall be monitored and control via the Quality Plan.

PSI will inspect all incoming materials to purchase documents.

### 4.7 Shop Conditioning/Testing

The Spools and Beam Tubes will be shop conditioned (cleaning, bakeout, etc.) per PSI Procedure V049-2-047.

### 4.8 Preparation For Shipment

The Spools and Beam Tubes will be prepared and shipped per PSI Procedure V049-2-123.

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## ATTACHMENT 1

## SPOOLS AND BEAM TUBES DOCUMENTS

1.	Spec. For Spool and Beam Tube Fabrication	V049-2-097
2.	Spool and Beam Tube Quality Plan	V049-2-099
3.	Flanges	V049-2-040 & V049-2-042
4.	Raw Material Handling Procedure	V049-2-120
5.	Weld Data Sheet Spec.	V049-2-084
6.	Weld Procedures	V049-2-070, 071, 072, 073
7.	Weld Repair Procedure	V049-2-074
8.	Cleaning Procedures	V049-2-015
9.	Painting Procedures	V049-2-077
10.	Component Shop Conditioning/Test Plan	V049-2-014
11.	Bakeout Procedure	V049-2-019
12.	Leak Test Procedure	V049-2-047
13.	Dimensional Verification Procedure	V049-2-121
14.	Component, Handling, and Shipping Procedure	V049-2-123
15.	PSI Drawings	

Adapter A-1, 44.62" ID x 72.25 ID	V049-4-A1
Adapter A-2, 48.25" ID x 72.25 ID	V049-4-A2
Adapter A-3, 48.25" ID x 60.5 ID	V049-4-A3
60" HAM Cover, Grooved	V049-4-A4
Adapter A-6, 48.25" ID x 60.5 ID	V049-4-A6
Adapter A-7, 60.5" ID x 72.25 ID	V049-4-A7
Adapter A-12, 48.25" ID x 60.5 ID	V049-4-A12
BSC End Cover 60"	V049-4-A11
Adapter A-13, 60.5" ID With 72.25 ID.	V049-4-A13
Adapter A-14, 44.62" ID With 60.5 ID	V049-4-A14
Adapter A-15, 48.25" ID With 60.5 ID	V049-4-A15
Spool B-1, 72.25 ID	V049-4-B1
Spool B-2A, 30.5 ID x 60.5 ID	V049-4-B2A
Spool B-2B, 30.5 ID x 60.5 ID	V049-4-B2B
Spool B03A, 30.5 ID x 60.5 ID	V049-4-B3A
Spool B-4, 48.25" ID	V049-4-B4
Spool B-5A, 30.5 ID x 60.5 ID	V049-4-B5A
Spool B-6, 48.25" ID	V049-4-B6
Spool B-7, 48.25" ID	V049-4-B7
Spool B-8, 72.25" ID	V049-4-B8
Spool B-9, 72.25" ID	V049-4-B9
Spool BE-1, 72.25" ID	V049-4-BE1
Spool BE-2, 60.5" ID	V049-4-BE2
Off Set Spool BE-3, 60.5" ID x 60.5 ID	V049-4-BE3
Off Set Spool BE-3A, 60.5" ID x 60.5 ID	V049-4-BE3A
Spool, BE-4, 44.62" ID	V049-4-BE4
Spool, BE-5, 72.25" ID	V049-4-BE5
Spool, BE-6, 72.25" ID x 72.25 ID	V049-4-BE6

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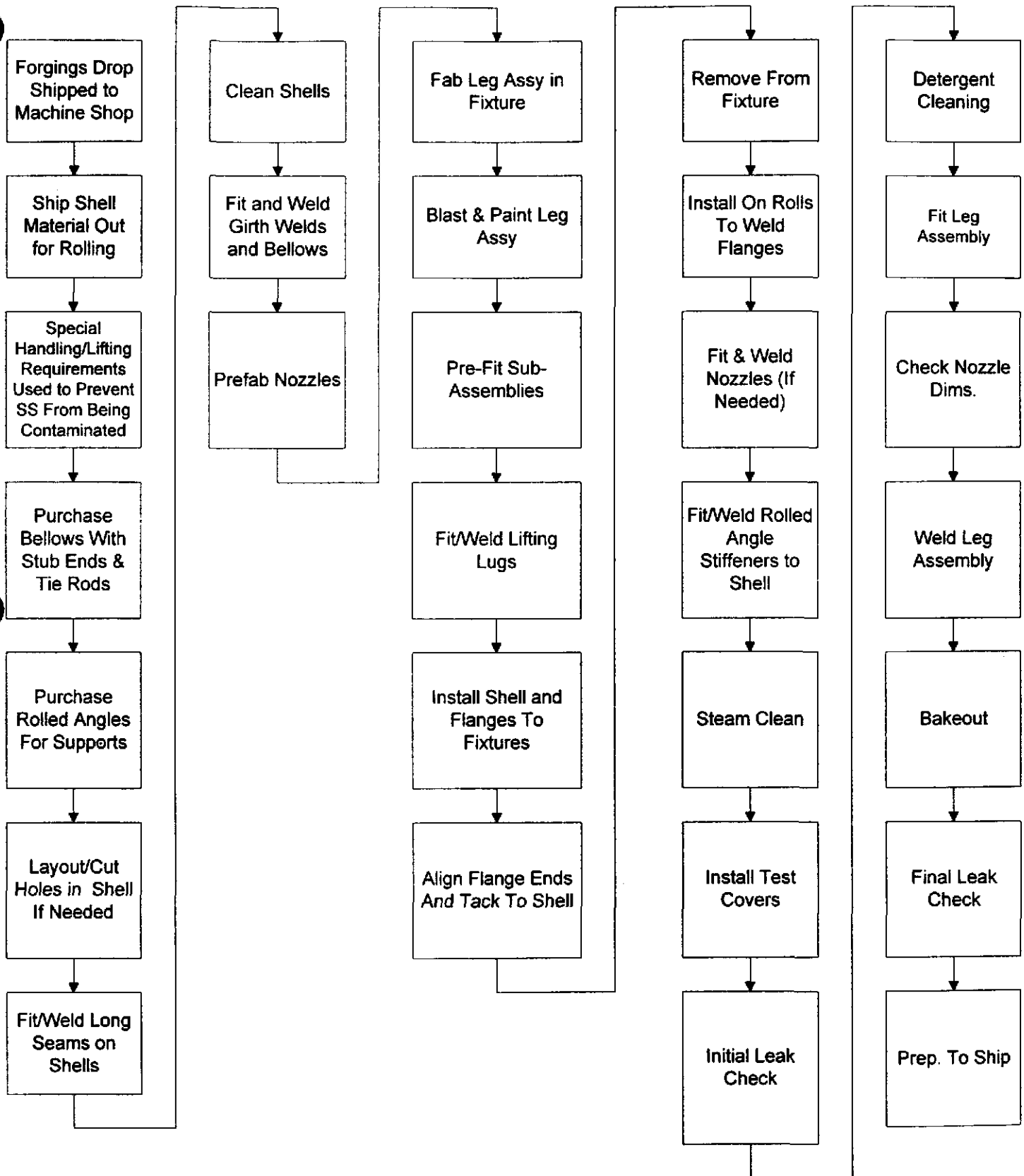
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## ATTACHMENT 2 SPOOLS AND BEAM TUBE FABRICATION PROCESS DIAGRAM



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**ATTACHMENT 3**

**SPOOL AND BEAM TUBE FABRICATION PRIORITY LIST**

**First Priority For Washington**

**Second Priority For Washington**

2-A1  
2-A3  
1-A6  
1-A12  
2-A13  
2-A15  
2-A15  
2-B1  
2-B2A  
1-B3A  
1-B4  
1-B5A  
1-B6  
1-B7  
2-B8  
2-BE2  
2-BE3  
2-BE3A  
2-BE4  
1-BE5  
1-BE6  
2-BE9

4-A1  
2-A7  
  
2-A14  
2-BE4

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**ATTACHMENT 3**

**SPOOLS AND BEAM TUBE FABRICATION PRIORITY LIST**

**For Louisiana Site**

4-A1

2-A2

2-A3

2-A4

2-A7

2-B1

1-B3A

1-B5A

2-B9

2-BE1

2-BE2

4-BE3

4-BE4

1-BE5

1-BE6

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