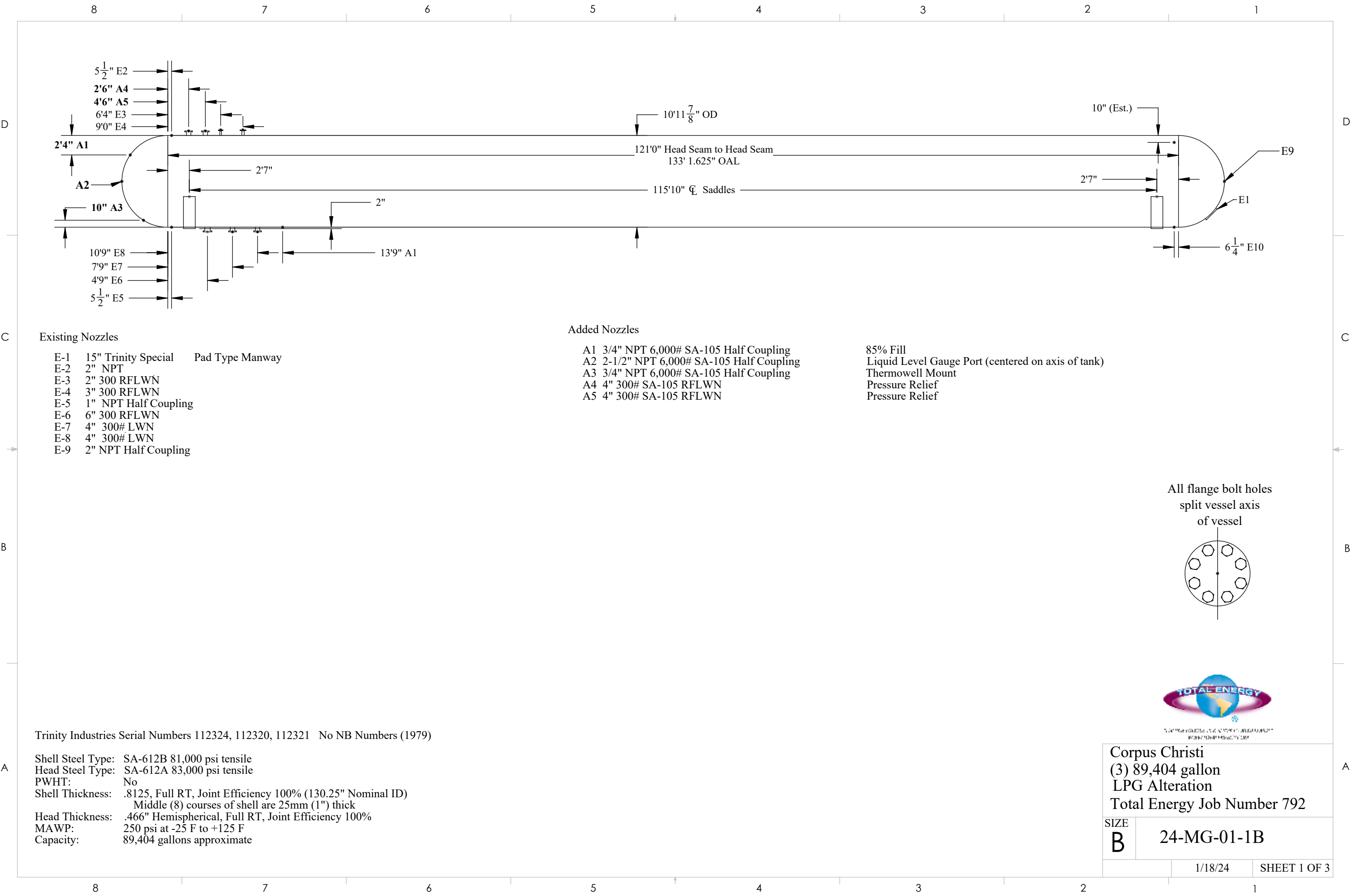




Existing Nozzles

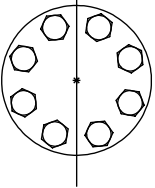
- E-1 15" Trinity Special Pad Type Manway
- E-2 2" NPT
- E-3 2" 300 RFLWN
- E-4 3" 300 RFLWN
- E-5 1" NPT Half Coupling
- E-6 6" 300 RFLWN
- E-7 4" 300# LWN
- E-8 4" 300# LWN
- E-9 2" NPT Half Coupling

Added Nozzles

- A1 3/4" NPT 6,000# SA-105 Half Coupling
- A2 2-1/2" NPT 6,000# SA-105 Half Coupling
- A3 3/4" NPT 6,000# SA-105 Half Coupling
- A4 4" 300# SA-105 RFLWN
- A5 4" 300# SA-105 RFLWN

- 85% Fill
- Liquid Level Gauge Port (centered on axis of tank)
- Thermowell Mount
- Pressure Relief
- Pressure Relief

All flange bolt holes
split vessel axis
of vessel

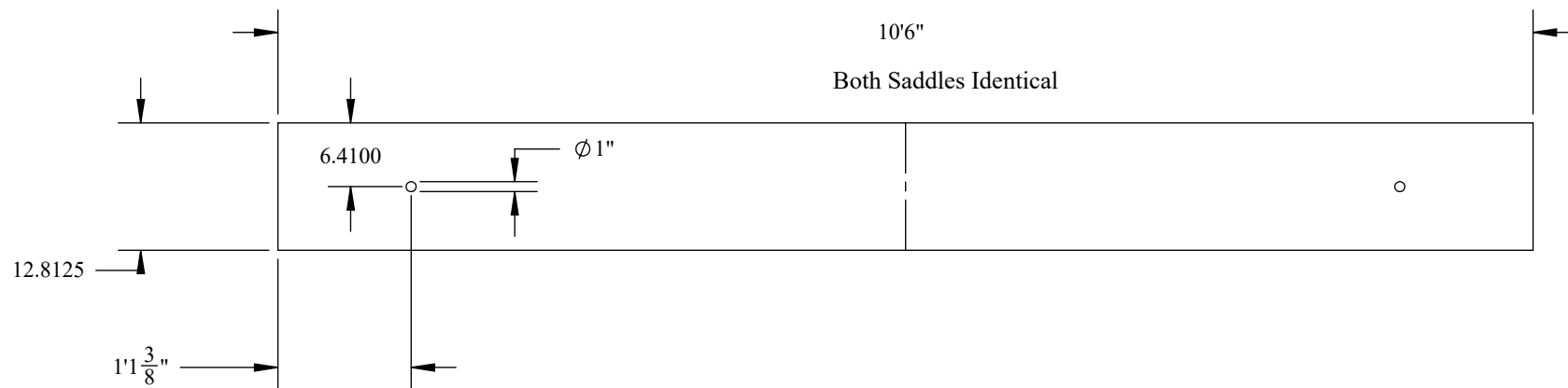


Trinity Industries Serial Numbers 112324, 112320, 112321 No NB Numbers (1979)

Shell Steel Type: SA-612B 81,000 psi tensile
Head Steel Type: SA-612A 83,000 psi tensile
PWHT: No
Shell Thickness: .8125, Full RT, Joint Efficiency 100% (130.25" Nominal ID)
Middle (8) courses of shell are 25mm (1") thick
Head Thickness: .466" Hemispherical, Full RT, Joint Efficiency 100%
MAWP: 250 psi at -25 F to +125 F
Capacity: 89,404 gallons approximate

Corpus Christi
(3) 89,404 gallon
LPG Alteration
Total Energy Job Number 792

SIZE	24-MG-01-1B		
		1/18/24	SHEET 1 OF 3

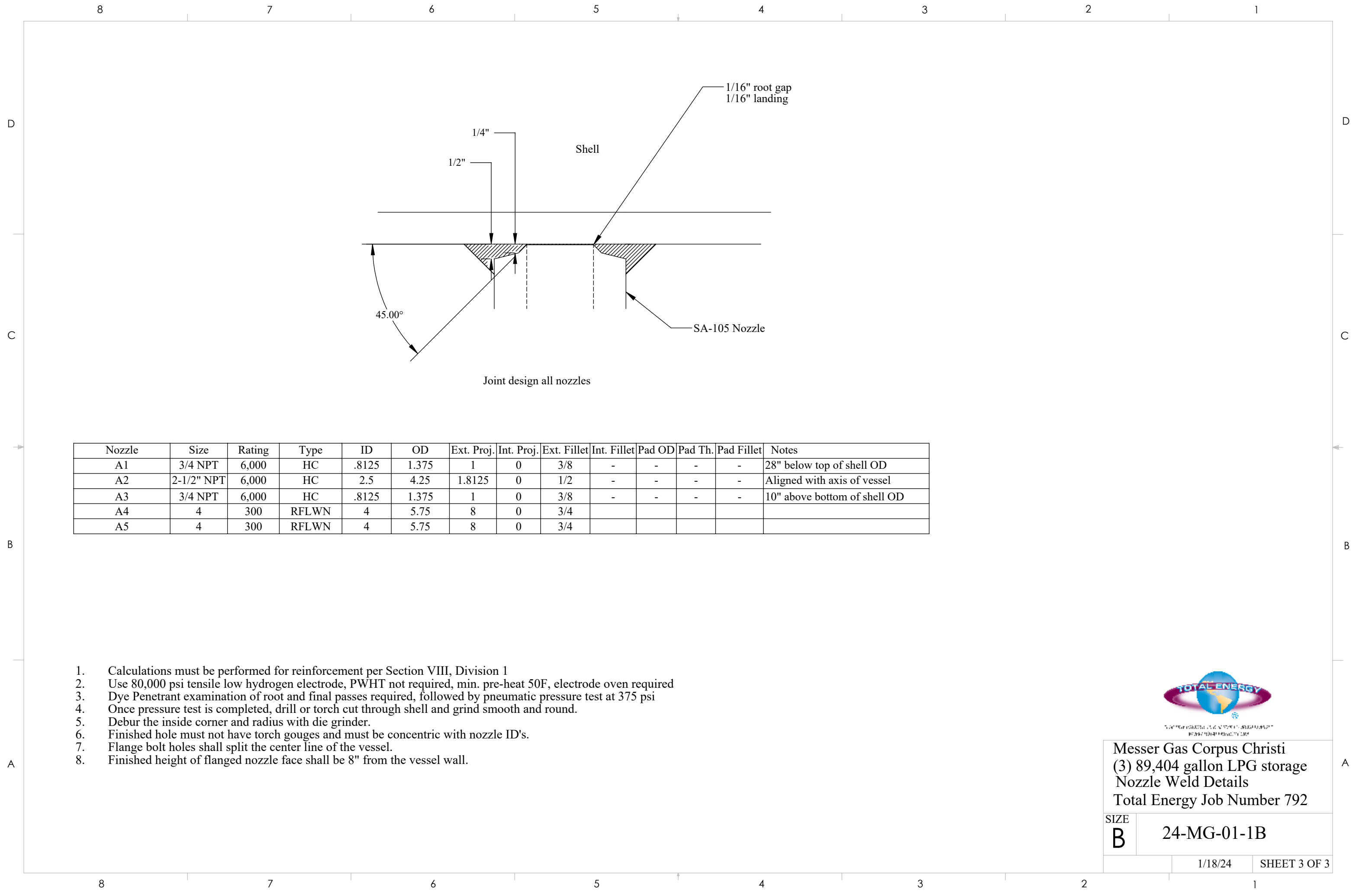


Saddle Foot Plate 3/4" thick



Corpus Christi
(3) 89,404 gallon
Typical Saddle Dimensions
Total Energy Job Number 792

SIZE	24-MG-01-1B	
	1/18/24	SHEET 2 OF 3



Nozzle	Size	Rating	Type	ID	OD	Ext. Proj.	Int. Proj.	Ext. Fillet	Int. Fillet	Pad OD	Pad Th.	Pad Fillet	Notes
A1	3/4 NPT	6,000	HC	.8125	1.375	1	0	3/8	-	-	-	-	28" below top of shell OD
A2	2-1/2" NPT	6,000	HC	2.5	4.25	1.8125	0	1/2	-	-	-	-	Aligned with axis of vessel
A3	3/4 NPT	6,000	HC	.8125	1.375	1	0	3/8	-	-	-	-	10" above bottom of shell OD
A4	4	300	RFLWN	4	5.75	8	0	3/4					
A5	4	300	RFLWN	4	5.75	8	0	3/4					

1. Calculations must be performed for reinforcement per Section VIII, Division 1
2. Use 80,000 psi tensile low hydrogen electrode, PWHT not required, min. pre-heat 50F, electrode oven required
3. Dye Penetrant examination of root and final passes required, followed by pneumatic pressure test at 375 psi
4. Once pressure test is completed, drill or torch cut through shell and grind smooth and round.
5. Debur the inside corner and radius with die grinder.
6. Finished hole must not have torch gouges and must be concentric with nozzle ID's.
7. Flange bolt holes shall split the center line of the vessel.
8. Finished height of flanged nozzle face shall be 8" from the vessel wall.



Messer Gas Corpus Christi
(3) 89,404 gallon LPG storage
Nozzle Weld Details
Total Energy Job Number 792

SIZE	24-MG-01-1B		
	1/18/24	SHEET 3 OF 3	