

DESIGN DATA	
TANK CONTENTS:	30% HCL
SPECIFIC GRAVITY:	1.19
DESIGN PRESSURE:	ATMOSPHERIC
WORKING PRESSURE:	ATMOSPHERIC
WORKING TEMPERATURE:	AMBIENT
WEIGHT EMPTY:	7210 LBS. + SADDLES
TANK CAPACITY:	36093 LITRE
SHIPPING DIMENSIONS:	10'-6" SQ x 23'-6" LG. APPROX. + SADDLES

**PRECISIONEERING DKG**  
303 NANTUCKET BLVD. SCARBOROUGH, ONTARIO

SHOP ORDER: TH22181    DATE MFD: 2022

CUSTOMER: ARCELORMITTAL

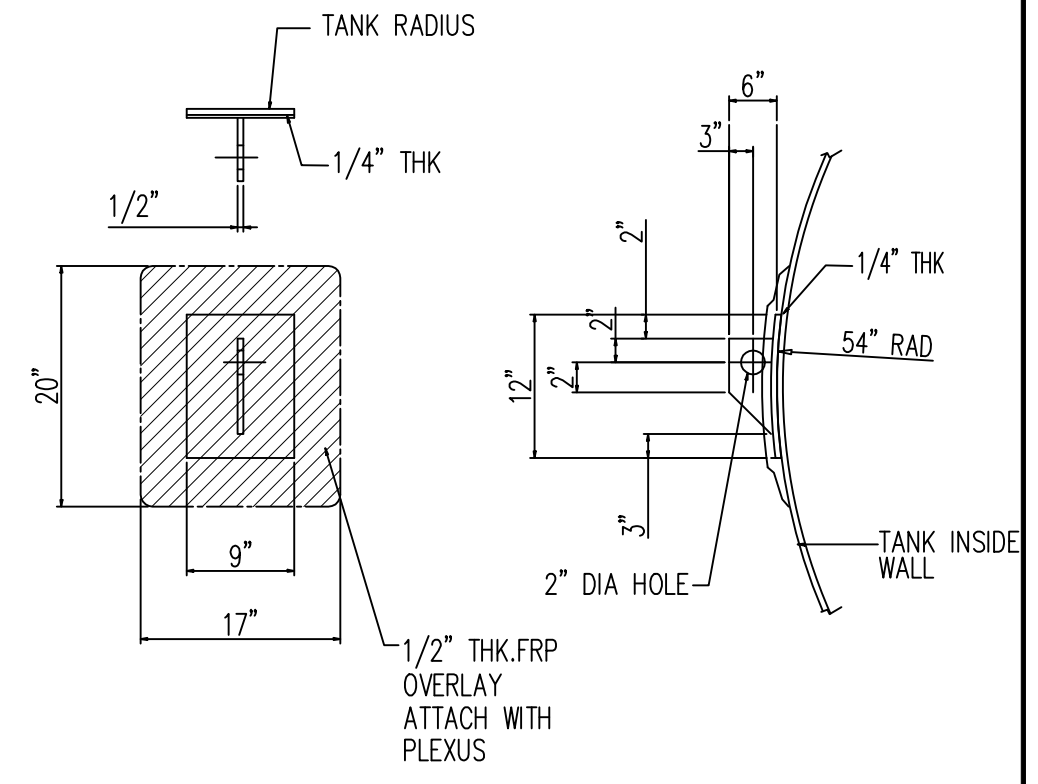
PURCHASE ORDER: 4500868396    EQUIP. NO.: 30% HCL STORAGE TANK

DESCRIPTION: 9'-0" x 20'-0" STRAIGHT SIDE TANK

WORKG. PRESS: ATMOSPHERIC    WORKG. TEMP: AMBIENT

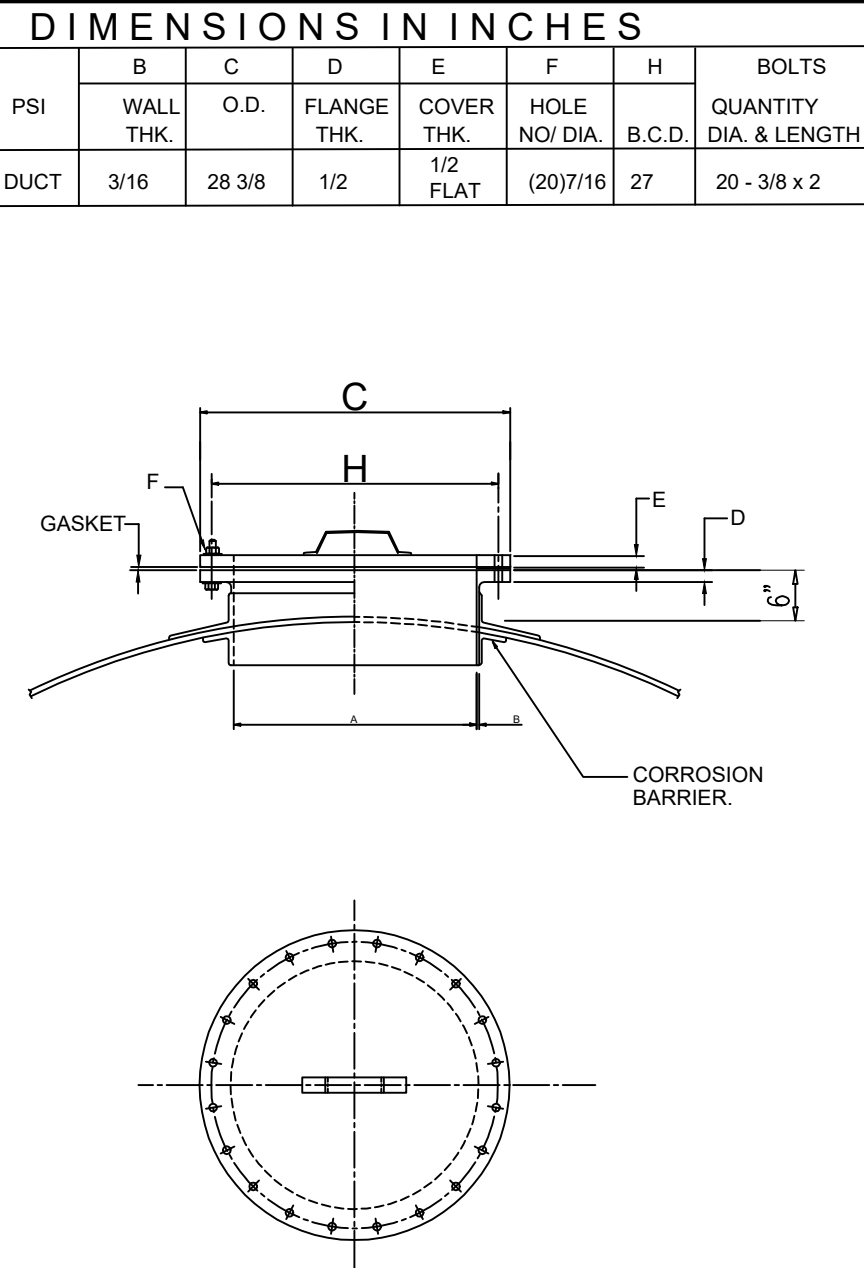
MATERIAL: VINYL ESTER

**TANK NAMEPLATE**  
MATERIAL: FRP



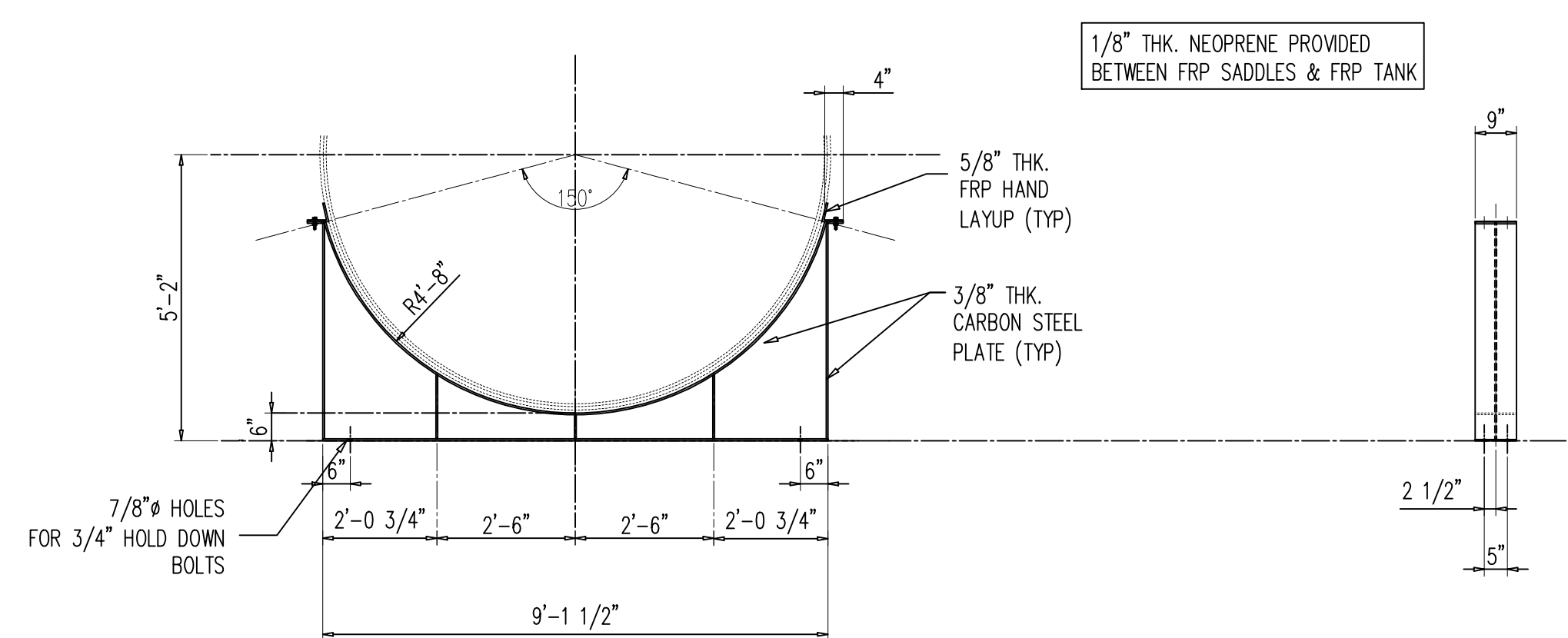
- NOTES:**
- MATERIAL - CARBON STEEL
  - SURFACE FINISH - WIRE BRUSH AND PAINTED WITH EPOXY FINISH DFT 6MIL COLOR GREY
  - REMOVE ALL BURRS, SHARP EDGES AND ROUND ALL CORNERS

**DETAIL OF TOP MANWAY**



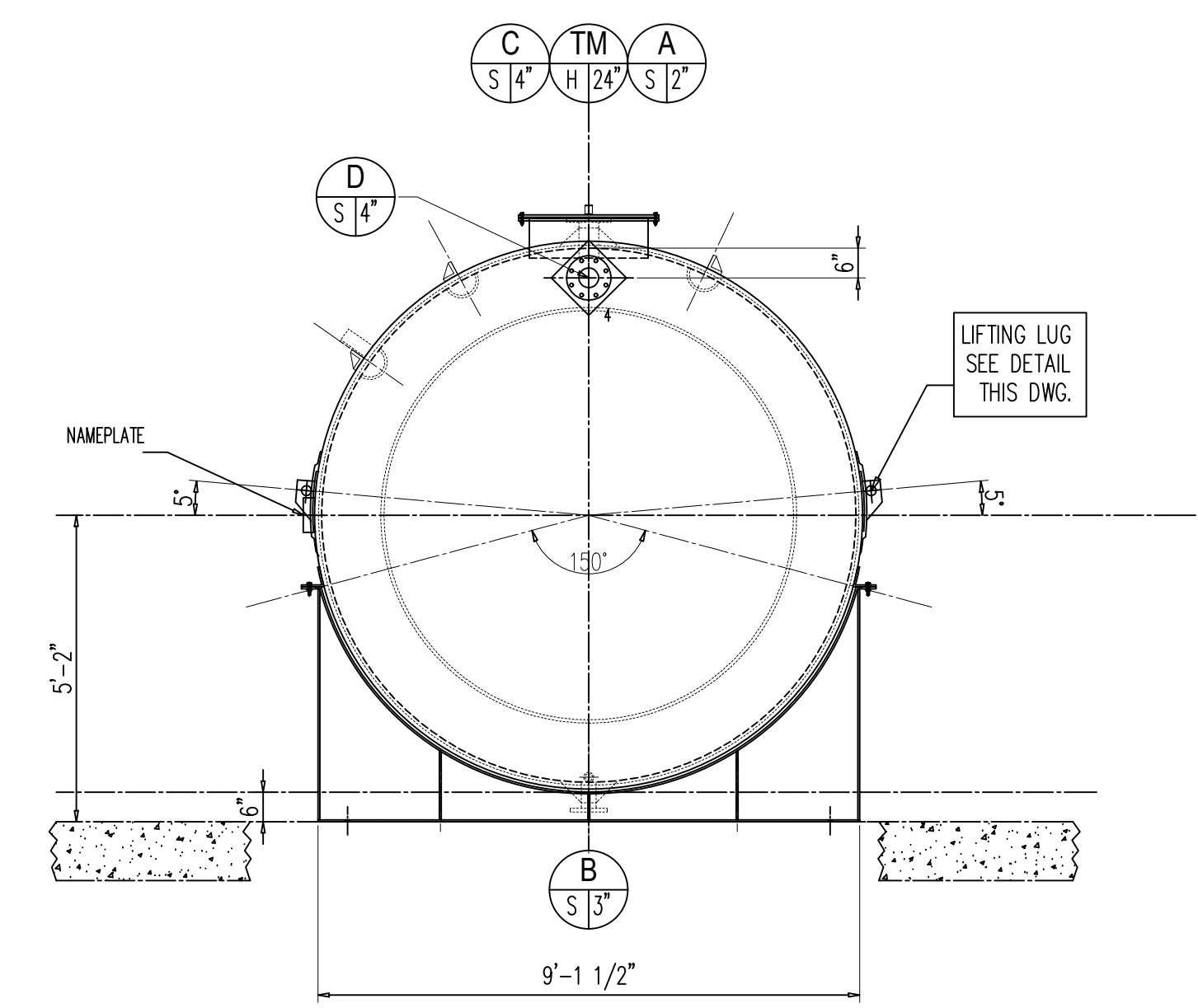
**DETAIL OF TOP MANWAY**

DIMENSIONS IN INCHES							
A	B	C	D	E	F	H	BOLTS QUANTITY DIA. & LENGTH
I.D.	WALL THK.	O.D.	FLANGE THK.	COVER THK.	HOLE NO/DIA.	B.C.D.	
24	DUCT	3/16	28 3/8	1/2	1/2 FLAT	(2017)16	27 20 - 3/8 x 2

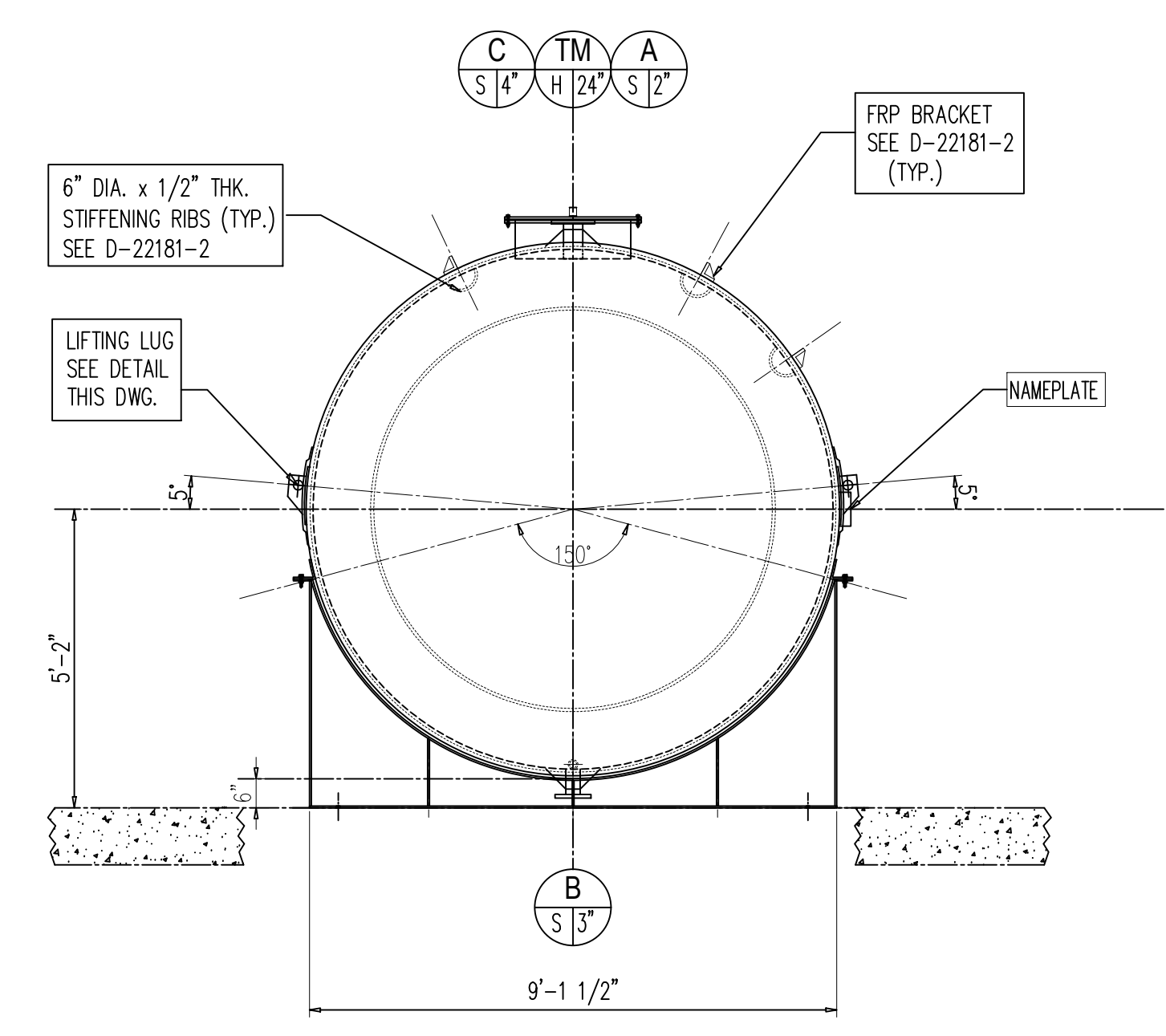


**STEEL SADDLE DETAIL**

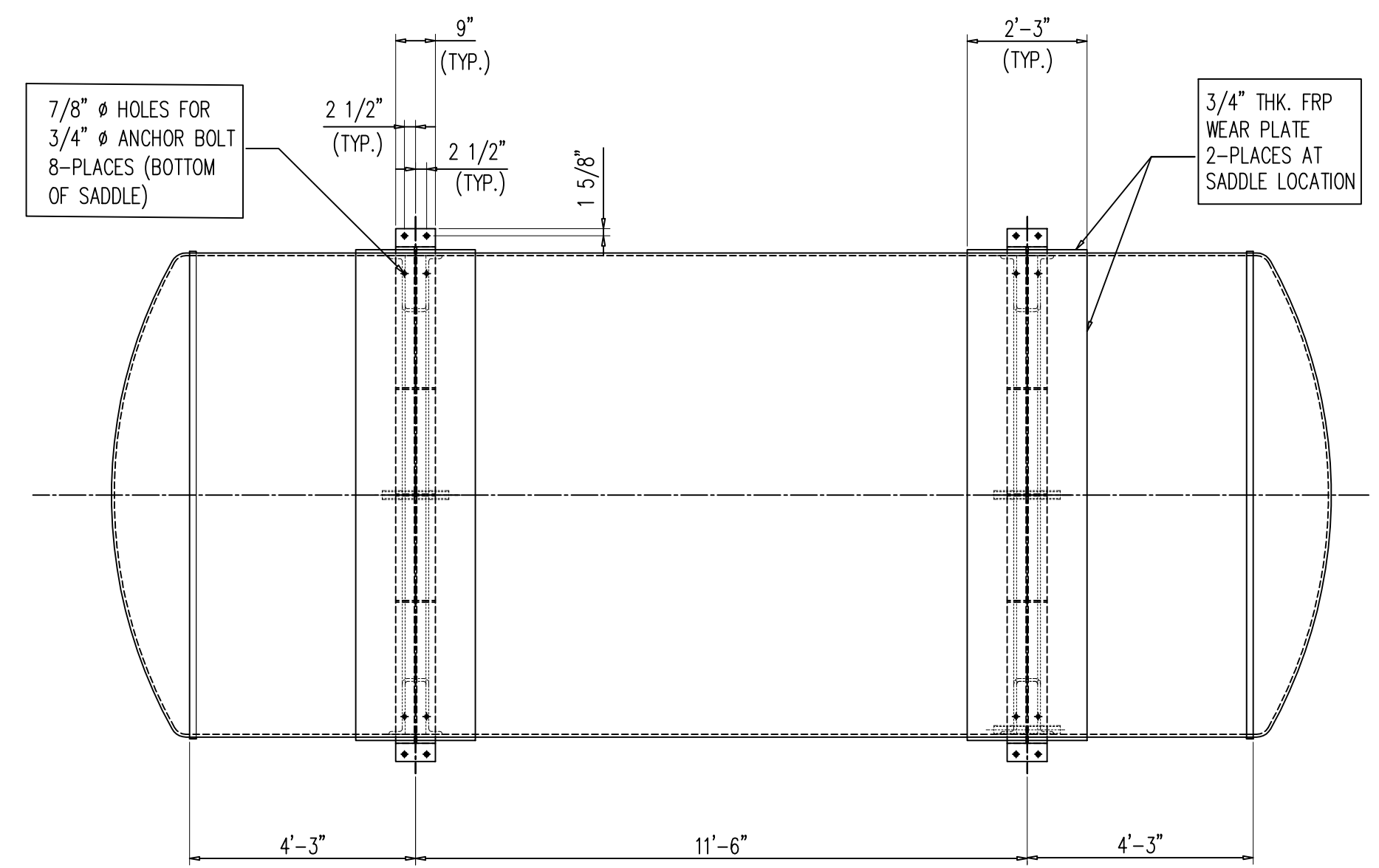
MATERIAL: 3/8" THK. CARBON STEEL PLATE EPOXY PAINTED GREY QTY - 2



**VIEW B - B**

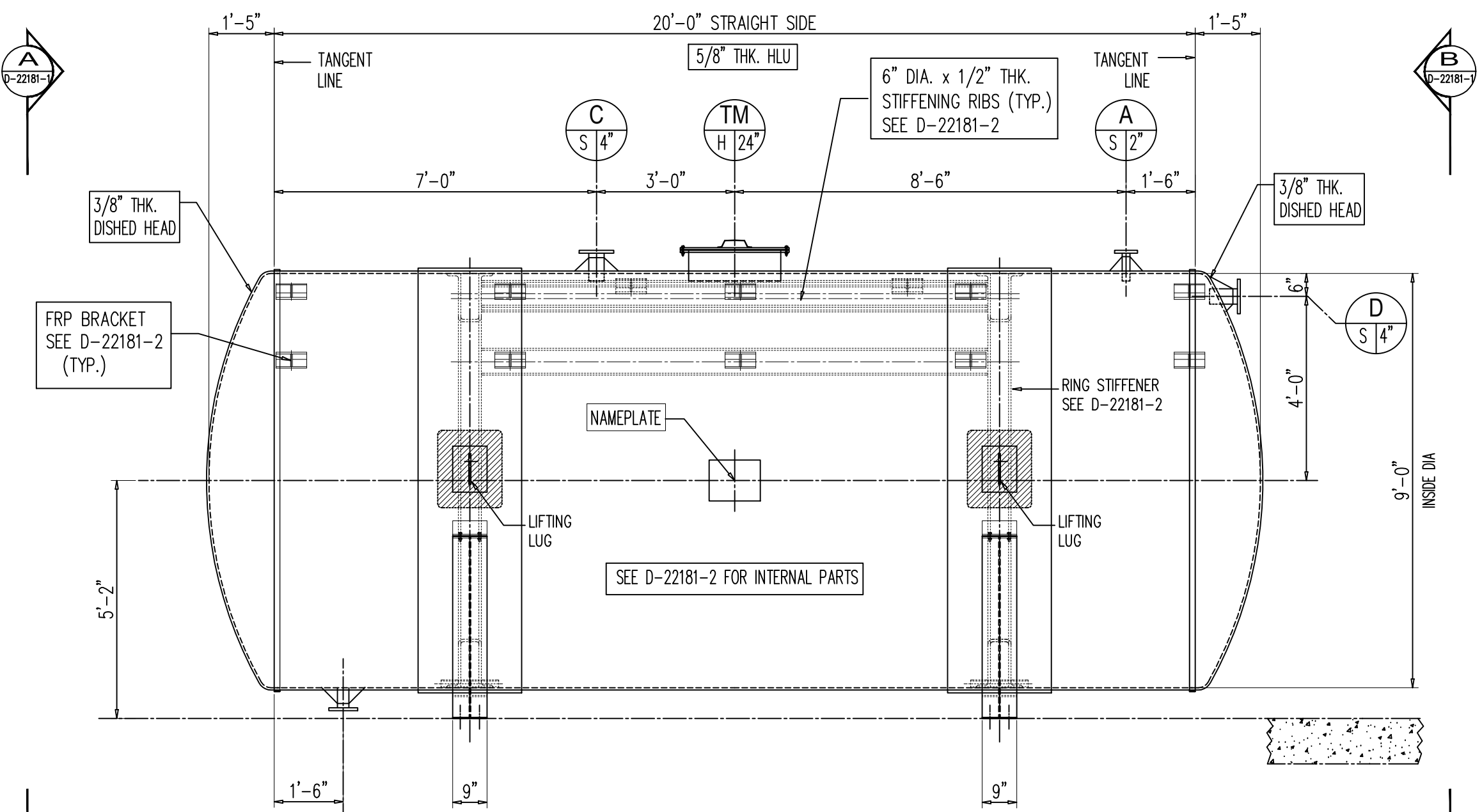


**VIEW A - A**



**PLAN**

SHOWING STEEL SADDLES



**ELEVATION**

ELEVATION VIEW IS FOR REFERENCE LOCATION ONLY FOR TRUE ORIENTATION REFER TO PLAN VIEWS

PLEASE NOTE THIS DRAWING IS PREPARED BASED ON INFORMATION PROVIDED TO PRECISIONEERING. PLEASE CLOSELY CHECK ALL DETAILS SHOWN BEFORE DRAWING IS APPROVED.

**SEISMIC DATA:**

- HORIZONTAL LATERAL FORCE (V) ON THE TANK = 16,003 LB.
- BENDING MOMENT = 927,536 IN-LB.
- TENSION ON EACH HOLD DOWN ANCHOR = 2,893 LB

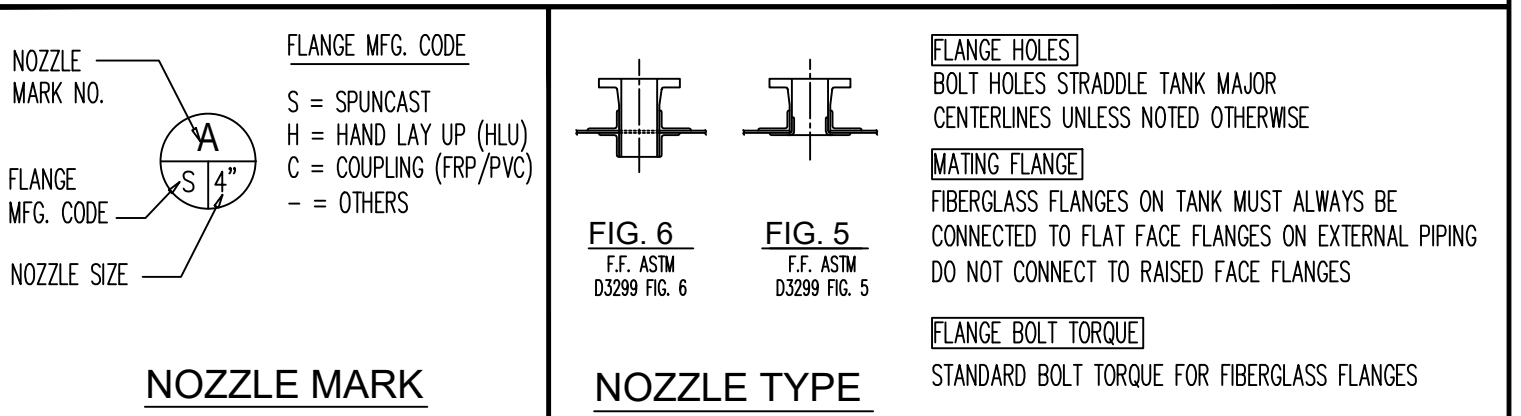
ANCHOR BOLTS SIZED & SUPPLIED BY OTHERS TO CARRY FOLLOWING LOADS:

UPLIFT ON EACH ANCHOR = 2,893 LB.  
SIDE LOAD V ON TANK = 16,003 LB.



NOZZLE SCHEDULE		SHOP ORDER NO.	DRAWING NO.	REV							
		TH22181	D-22181-1	0							
MARK	SIZE	DRILLING	RATING	CONN TYPE	NOZ PROJ	STRAP THK.	STRAP WIDTH ON SHELL	GUSSET INTERNAL PIPE	MFG. CODE	DESCRIPTION	Q.C. CHECK
A	2"	150 LB.	150PSI	FIG. 6	6"	1/4"	4"	[P]	-	SPUN FILL	
B	3"	150 LB.	150PSI	FIG. 5	6"	1/4"	4"	[P]	-	SPUN DISCHARGE	
C	4"	150 LB.	150PSI	FIG. 6	6"	5/16"	5"	[P]	-	SPUN VENT	
D	4"	150 LB.	150PSI	FIG. 6	6"	1/4"	4"	[P]	-	SPUN OVERFLOW	
TM	24"	DUCT MANWAY	FIG. 6	6"	3/4"	12"	-	-	-	HLU TOP MANWAY	

BLIND FLANGES & COVERS							
ITEM	SIZE	DRILLING	RATING	THK	DESCRIPTION	GASKET	BOLTS
1	24"	DUCT MANWAY	STD		TOP MANWAY-TM		1/8" THK. EPDM 304SS



CONSTRUCTION DETAILS		LAMINATE SEQUENCE	
CORROSION LINER REINFORCING	2-C GLASS + 4 MAT	THK.	HLU LAMINATE
LINER	DERAKANE 411 - 350 OR EQUIVALENT	3/16	V V - 4M. 2M. H
HLU STRUCTURAL	DERAKANE 411 - 350 OR EQUIVALENT	1/4	V V - 4M. M R M M. H
FW STRUCTURAL	DERAKANE 411 - 350 OR EQUIVALENT	5/16	V V - 4M. 2(MR) M. H
HOT COAT OUTER SKIN	POLY-44-2111	3/8	V V - 4M. 3(MR) M. H
SPECIFICATION	CGSB 41-GP-22 & ASTM D4097	7/16	V V - 4M. 3(MR) MM. H
		1/2	V V - 4M. 3(MR) M. MRM. H

QUALITY CONTROL					
BARCOL HARDNESS	MINIMUM	TOP HEAD	SHELL	BOTTOM	HEAD TO SHELL JOINT
	THICKNESS	TOP HEAD	SHELL	BOTTOM	

TANK REQUIREMENTS				TANK HANDLING INSTRUCTIONS
LAMINATE LEVEL	STD.	LIFTING LUGS	YES	
UV PROTECTED	YES	HOLD DOWN LUGS	YES	
HYDROTEST	YES (2 HRS.)	PYRAMID GUSSETS [P]	YES	
POST CURE	YES	STEEL SADDLES	YES	
SAVE CUT-OUTS	YES			

FOR TANK REQUIREMENTS ADDITIONAL DETAILS REFER TO DWG (S) D-22181-2

**CERTIFIED FOR PRODUCTION**

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DO NOT SCALE THIS DRAWING USE DIMENSIONS ONLY		ISSUED FOR CUSTOMER REVIEW & APPROVAL		REVISION	
BY	DATE	BY	DATE	NO	

THE INFORMATION AND KNOW HOW ON THIS DRAWING ARE CONFIDENTIAL AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PRECISIONEERING DKG

CAD FILE NO.: TH22181-1    SIZE: D    SCALE: 3/8" = 1'-0"

CUSTOMER REFERENCE DWG.: 4500868396

DRAWN: J. SINGH    DATE: APR 2022

**PRECISIONEERING DKG**  
303 NANTUCKET BLVD. SCARBOROUGH ONTARIO CANADA M1P 9P8 sales@precisioneering.com

FRP TANK FOR ARCELORMITTAL

SHOP ORDER NO.: TH22181    DRAWING NO.: D-22181-1    REV: 0