



FABRICATION NOTES:

- ALL FLANGE BOLT HOLES TO STRADDLE TRUE VESSEL CENTER LINES
- CLEAN VESSEL THOROUGHLY AND PROTECT ALL OPENINGS FOR SHIPMENT
- LENGTHS SHOWN IN B.O.M. FOR REFERENCE ONLY. DRAWING DIMENSIONS TAKE PRECEDENCE
- MINIMUM FILLET WELD SIZES SHALL BE 1/4" UON
- *ELEVATION DETAILS ARE FOR ELEVATION CLARITY ONLY. SEE ORIENTATION VIEW FOR TRUE ORIENTATION.
- ALL BEVEL ANGLES TO BE 5± ROOT PASS GAP TO BE ± 3/16"
- INTERNAL PROJECTION FOR NOZZLES (IF REQ'D.) TO BE SPECIFIED ON THE VESSEL OUT-LINE DRAWING. WHERE INTERNAL PROJECTIONS NOT REQUIRED, THE NOZZLE SHALL BE SQUARE AND SMOOTH.

FABRICATION NOTES:

- TAPER DIFFERENCES IN THICKNESS TO A 3 : 1 TAPER.
- IF SHOWN, LIFTING LUGS ARE DESIGNED FOR EMPTY VESSEL LIFT ONLY.
- ALL NOZZLE REINFORCING PADS WEAR PLATES TO BE DRILLED/TAPPED, 1/4" NPT
- INSIDE EDGES OF NOZZLE NECKS TO HAVE 1/8" MIN. RADIUS OR 1/2 THE WALL THICKNESS IF PIPE WALL IS LESS THAN 1/4".
- WHEN PWHT IS REQUIRED, ALL COUPLINGS MUST BE RETAPPED AFTER PWHT.

NOZZLE SCHEDULE

MARK	NO. REQ'D.	SIZE	RATING	TYPE	MATERIAL	SERVICE	ANSI B16.5 FLANGES / B2.1 NPT			P.S.V. DN PIPING			RE-PAD MATERIAL & COMMENTS	
							INT. PROJ.	EXT. PROJ.	WELD DETAIL	"a"	"b"	"c"		WELD SIZE
N1	1	2"	150#	-	-	-	-	8"	-	-	-	-	-	-
N2	1	3"	150#	-	-	-	-	8"	-	-	-	-	-	-
N3	1	6"	150#	-	-	-	-	8"	-	-	-	-	-	0.5"THICK x 3"WIDE
N4	1	2"	150#	-	-	-	-	8"	-	-	-	-	-	-
N5	1	6"	150#	-	-	-	-	8"	-	-	-	-	-	-
N6	1	2"	150#	-	-	-	-	8"	-	-	-	-	-	-
C1	1	0.75"	3000#	-	-	-	-	1"	-	-	-	-	-	-
C2	1	0.75"	3000#	-	-	-	-	1"	-	-	-	-	-	-
C3	1	2"	3000#	-	-	-	-	1"	-	-	-	-	-	-
C4	1	1"	3000#	-	-	-	-	1"	-	-	-	-	-	-
M1	1	18"	150#	-	-	-	-	12"	-	-	-	-	-	0.5"THICK x 4.5"WIDE

VESSEL INFORMATION: (FROM ORIGINAL DATA REPORT / PLATE / STAMPING)

MANUFACTURER: Bethlehem Steel YEAR BUILT: 1951
 CONSTRUCTION CODE: ADDENDA

VESSEL TAG No.	SERIAL No.	NATIONAL BOARD No.
	1534	
-	-	-
-	-	-

HEAT TREATMENT: (GIRTH SEAMS) _____ (LONG SEAMS) _____

THICKNESSES: (SHELL) _____ (HEADS) _____ ELLIP. OR HEMI. _____

CORROSION ALLOWANCE: _____

MAWP: 125 PSI @ 105 °F MDMT: _____ °F @ _____ PSI

VACUUM PRESSURE: _____ PSI HYDRO TEST PRESSURE: 205 PSI

CONSTRUCTION SAFETY FACTOR: _____ RATIO

MATERIALS: SHELLS: _____ HEADS: _____ RE-PADS: _____

FLANGES: _____ PIPE NOZZLES: _____

CAPACITY / WEIGHT: U.S. GALLONS/WEIGHT 80,000 _____

ORIGINAL SERVICE: _____

NOTES / REMARKS: _____

MATERIALS OF CONSTRUCTION:

SHELLS: SA516-70
 HEADS: SA516-70
 RE-PADS: SA516-70
 FLANGES: SA105
 PIPE NOZZLES: SA105
 WELD FITTINGS: SA105
 STUDS: SA193-B7
 NUTS: SA194-2H

WELDING PROCEDURES:

HEAD / SHELL: GMAW/ECMAW/SMW: GFA-1-1-HT
 SHELL / SHELL: GTAW/ECMAW/SMW/SAW: GFA-1-1-HT, S-A-A-HT, TF-1-1-HT
 FLANGE TO PIPE: GTAW/SMW/ECMAW: TF-1-1-HT, S-1-1-HT
 NOZZLE NECK TO VESSEL: SMAW/ECMAW/SMW: S-1-1-HT, M-1-1-HT, TF-1-1-HT
 COUPLINGS: SMAW/ECMAW/SMW: S-1-1-HT/TF-1-1-HT
 SUPPORTS: ECMAW/SMW: TF-1-1-HT, M-1-1-HT
 MISC: GMAW: M-1-1-HT

DWG NUMBER	DESCRIPTION	REV.	DESCRIPTION	DATE	BY	CK

TOLERANCES

CUTS: ±1/8"
 ANGLES: ±1/2"
 WELD ASS'Y: ±1/4"

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2415 W. DOOLIN AVE.
 BLACKWELL, OKLAHOMA 74631 (580) 363-1500

CUSTOMER DESCRIPTION

TITLE: FABRICATION DETAILS
 9'7"OD x 113'0.25" S/S HORIZONTAL VESSEL

DRAWN	DATE	APPROVED	SCALE	NO. REQ'D
JW	-		-	1

DRAWING NO. D-TEF-
 SHT. NO. 1 OF 1 REV. A