



**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.:   

1536

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: SA105B

WELD FITTINGS: SA105

STUDS: SA193-B7

NUTS: SA194-2H

**WELDING PROCEDURES:**

HEAD / SHELL: GMAW/ECMAW/SMW: GFA-1-1-HT

SHELL / SHELL: GTAW/ECMAW/GMAW/SMW: 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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BLACKWELL, OKLAHOMA 74631 (580) 363-1500

**CUSTOMER DESCRIPTION**

TITLE: FABRICATION DETAILS

9'7"OD x 113'0.25" S/S HORIZONTAL VESSEL

DRAWN: JW	DATE: -	APPROVED: -	SCALE: -	NO. REQ'D: 1
DRAWING NO.:	D-TEF-	SHT. NO.:	1 OF	REV.: