

PHYSICAL	
TANK SIZE	7.163m x 7.925m
CAPACITY	320 CUBIC METERS
SERVICE	OIL EMULSION SALES TANK
ESTIMATED TANK WEIGHT (EMPTY)	16000 KG
ESTIMATED TESTING TANK WEIGHT	407000 KG
ESTIMATED OPERATING TANK WEIGHT	329000 KG
ESTIMATED SHIPPING TANK WEIGHT (SHOP FAB.)	15500 KG
DESIGN DATA	
DESIGN CODES	API 650, 11TH ED., ADD 2 NOV 2009 MODIFIED ABC 2006 FOR WIND AND SEISMIC DESIGN GOOD ENGINEERING AND INDUSTRY PRACTICES
STAMP REQUIREMENTS	P. ENG. RECORD DRAWINGS
INTERNAL DESIGN PRESSURE	6.9 kPa (1.0 PSI)
INTERNAL DESIGN VACUUM	-0.215 kPa kPa (-0.502 PSI)
MIN DESIGN METAL TEMPERATURE	-11 °C
MAX DESIGN METAL TEMPERATURE	93 °C
JOINT EFFICIENCY	0.85
SPECIFIC GRAVITY	1.06
CORROSION ALLOWANCE	BOTTOM, SHELL, ROOF = 0mm
ROOF LIVE LOAD	2.63 kPa
ROOF SNOW LOAD	1.9 kPa
WIND LOADS	119 km/hr
SEISMIC LOADS	SEISMIC GROUP 1
FOUNDATION	GRAVEL FOUNDATION
MATERIALS	
BOTTOM SHELL	A36
ROOF	A36
STRUCTURAL	G40.21-44W
PIPE	SA106B (3165 S - FIRE TUBE DESAND)
MANWAYS	A36
FLANGES	SA105 B, FRP (SEE MATERIAL NOTES)
FITTINGS	SA105B, FRP (SEE MATERIAL NOTES)
REPADS	A36
FLANGE BOLTING	SA-193-B7 / SA-194-2H (SA193-B8M & SA194-BM S S FOR INTERNAL BOLTING)
STRUCTURAL BOLTING	GRADE 5 PLATED (S S FOR INTERNAL BOLTING)
MANWAY GASKETS	NON ASBESTOS FIBRE
PIPE FLANGE GASKETS	GARLOCK (FIBREGLASS/TON FOR FRP PIPING)
COUPLING	SA234 WPB (INTERNAL 316 S S)

GENERAL NOTES:

- TANK IS SHOP ERRECTED.
- ALL DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS ARE FOR REFERENCE ONLY.

DESIGN NOTES:

- THESE DRAWINGS ARE IN CONFORMANCE WITH DESIGN CALCULATIONS BY DALE EMERSON ENGINEERING.
- VENTING IN ACCORDANCE WITH API 2000.

MATERIAL NOTES:

- MIR FILES REQUIRED FOR MAIN STEEL, PIPES, FLANGES, AND FITTING.
- ALL INTERNAL CLIPS, BOLTS AND COUPLING SHALL BE 316 S S.
- A240 GRADE S16 FOR INTERNAL CLIPS/A192 GRADE F316 FOR COUPLINGS.
- TANK INTERNALS SHALL BE FIBREGLASS EXCEPT FUEL GAS LINE, FLOATING SKIMMER RISER AND SLUDGE COLLECTORS.
- SCH. 80 FOR INTERNAL CARBON STEEL PIPE DN ≤ 51, SCH. 40 FOR INTERNAL CARBON STEEL PIPE DN > 51.
- SCH. 40 FOR INTERNAL S.S. PIPE.

FABRICATION NOTES:

- ALL SHELL NOZZLES TO STRADDLE VERTICAL CENTERLINES.
- ALL ROOF NOZZLES TO STRADDLE TANK RADIAL CENTERLINES UNLESS OTHERWISE NOTED.
- ALL WELD PREPARATION ON INTERNALLY COATED TANK SHALL BE GROUNDED TO MEET NACE RP0178 DESIGNATION C.
- BOTTOM TO SHELL WELD SHALL BE 2 PASSES ON INSIDE AND OUT.
- ALL ROOF, FLOOR, SHELL, NOZZLES AND ATTACHMENT WELDS SHALL BE WELDED TO EMF'S PROCEDURES: EMF-2; EMF-3; EMF-5; INTERNAL S.S. PARTS WELDING AS PER EMF-8; EMF-9.

Q.A. NOTES:

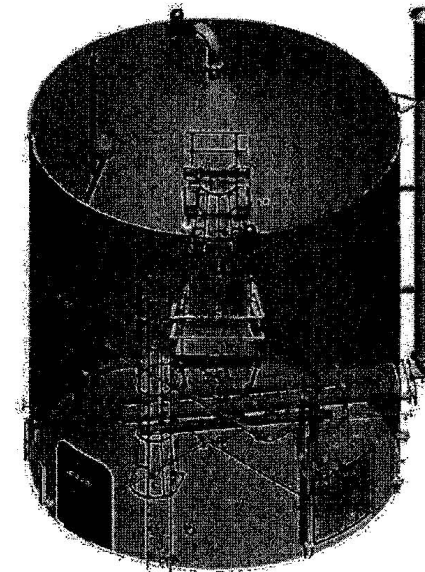
- CHECK ROUNDNESS 1/2" ABOVE SHELL TO BOTTOM WELD, REQUIRED TO STRAP EACH COURSE.
- CHECK PEAKING ON ALL VERTICAL JOINTS.
- CHECK BANDING ON ALL HORIZONTAL JOINTS.
- TO BE TESTED IN ACCORDANCE TO PROVISIONS LISTED IN API 650, 11TH EDITION, ADDENDUM 2 OF NOVEMBER 2009.
- TANK SHELL TO BE AIR SOAP LEAK TESTED.
- TANK FLOOR TO BE VACUUM BOX LEAK TESTED TO 3.0 PSIG (207 kPa).
- TANK SHALL HAVE SPOT RADIOGRAPHY PER API 650 FOR PENETRATION AND INTERPRETATION.
- TANK SHELL TO BOTTOM CORNER WELD SHALL BE DIESEL PENETRANT TESTED PER SECTION 7.2.4.1 OF API 650.

PAINTING & COATING NOTES:

- INTERIOR SURFACE PREP. = SSPG-SP5
- INTERIOR COATING = DEVME 283 (ALL INTERIOR TANK SURFACES)
DEVMAT 111 (floor bottom one meter of shell)
- ANY CHANGES OF COATING SPECS SHALL BE SUBMITTED FOR APPROVAL.
- PLATFORM GRATING TO BE DIP BLACK PAINTING.
- STRUCTURAL SURFACE PREP. = SSPG-SP6

INSULATION NOTES:

- TANK EXTERNAL INSULATION: 51mm (2") HIGH TEMP SPRAY FOAM URETHANE
- INSULATION ON ONK CLOATE OF BLACK ELASTOMERIC SEALER.
- TANK NOZZLE EXTERIOR SHALL RECEIVE ELASTOMERIC SEALER IN BLACK.



API 650M ED. 11 APP. F

SERIAL NO: T-103A YEAR BUILT: 2012

NOM DIA: 7.1 m NOM CAP: 320m³

NOM HT: 8m ROOF THK: 8 mm

BTM THK: 6 mm BTM TYPE: FLAT, BUTT WELD

S.G.: 1.06 D.P.: 6.9 kPa / 0.22 kPa

D.M.T.: +93 / -11 °C S.R.: -

D.L.L.: 7.3 m EQUIP NO.: T-103A

SERVICE: SALES TANK

FABRICATED BY: EMF

ERECTED BY: EMF

SHELL COURSE	MATERIAL
1,2,3,4	A36, 6mm THK.

- HUSKY CODES & STANDARDS:
- HUSKY PS-VT-03 SHOP FABRICATED TANKS SPECIFICATIONS
 - HUSKY PS-MW-01 WELDING SPECIFICATIONS
 - HUSKY PS-MW-05 PAINTING SPECIFICATIONS
 - HUSKY PS-MW-07 COATING SPECIFICATIONS

Rev.	Date	Rev Description	By
5	APRIL 3/12	LIFTING LUGS CHG. AS BUILT	G.J.
4	MAR 26/12	ITEMS ON NAMEPLATE CHG.	G.J.
3	DEC 19/11	BAR GRATING COATING AND INSULATION THICKNESS CHG.	G.J.
2	NOV 7	NOZZLES CHG.	G.J.
1	SEP 28/11	TEMPERATURE INDICATORS ADDED	G.J.
0	SEP 20/11	ISSUED FOR CONSTRUCTION	G.J.

ALSO USED FOR T-103B

	<p>STAMP: CHECKED AND APPROVED FOR CONSTRUCTION BY MANAGEMENT</p>
	<p>STAMP: CHECKED AND APPROVED BY ENGINEERING</p>
	<p>PURCHASER APPROVAL</p>

PO #: 8400315735 Description: SALES TANK

Tag #: T-103A Part Number: E0511-024-03-D00 Revision: 5

