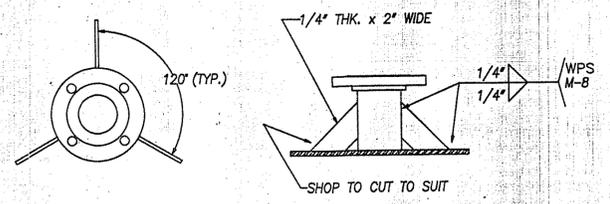
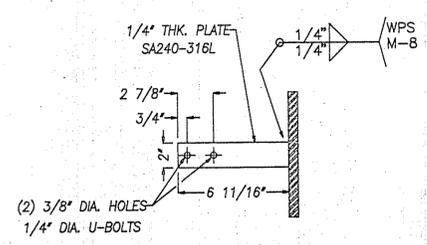


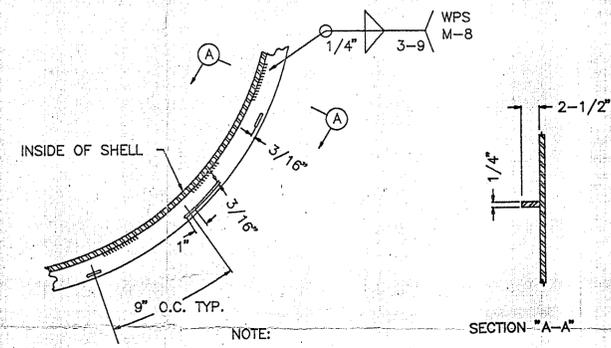
SUPPORT LUG DETAIL
(4) REQUIRED



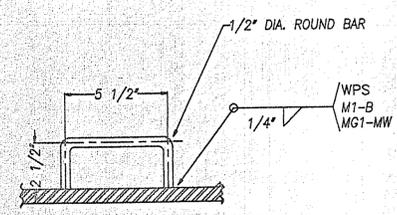
GUSSET DETAIL



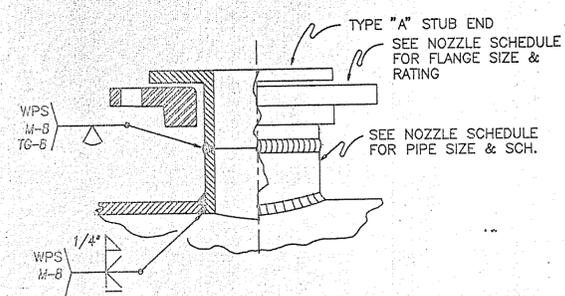
DIP TUBE SUPPORT DETAIL
FOR NOZZLE "01"
(2) REQUIRED SPACED AT 18"



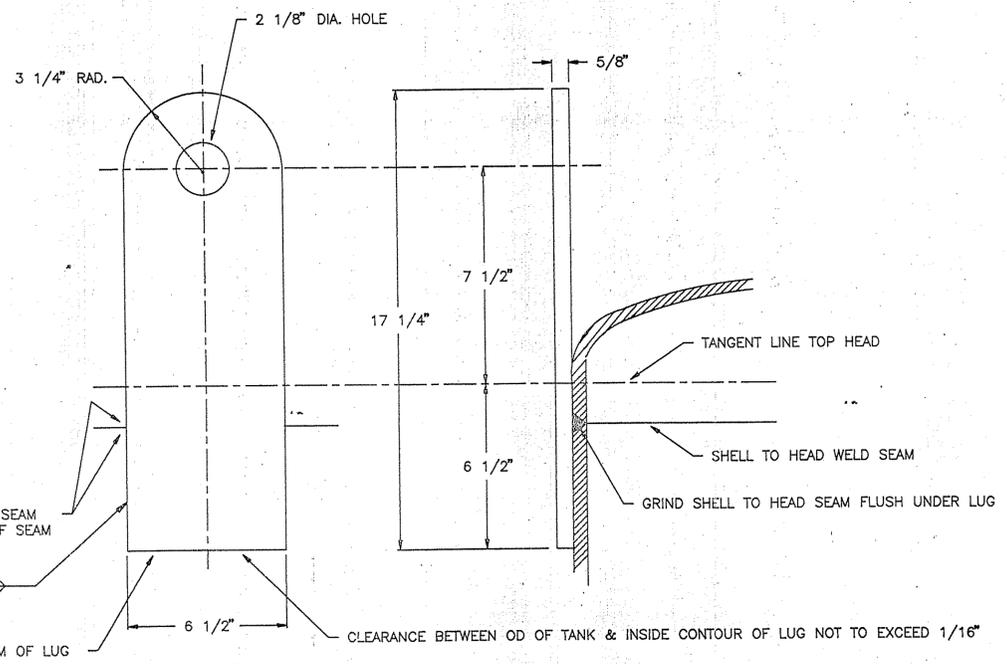
INSULATION SUPPORT DETAIL



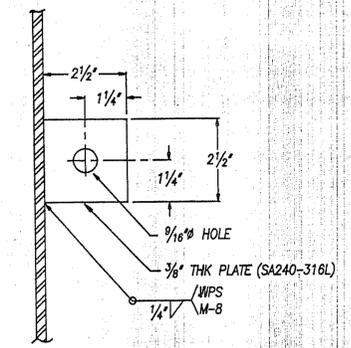
HANDLE DETAIL
(1) REQUIRED NOZZLE "H1"



LAP JOINT FLANGE DETAIL



LIFTING LUG DETAIL



GROUNDING CLIP DETAIL

DIMENSIONAL TOLERANCES FOR PRESSURE VESSELS AND TANKS

NOZZLES
THE CIRCUMFERENTIAL LOCATION OF NOZZLES SHALL BE WITHIN ±1/8 IN. OF THE SPECIFIED AXIS AS MEASURED CIRCUMFERENTIALLY AT THE FACE OF THE NOZZLE.

NOTE 1:
THE OUT-OF-SQUARENESS OF NOZZLE FACES, AS MEASURED JUST INSIDE THE BOLT HOLES, IN ANY PLANE SHALL BE WITHIN 1/16" FOR CONNECTIONS NPS 8 & UNDER & WITHIN 1/32" FOR CONNECTIONS OVER NPS 8. THE TOLERANCE ON THE OUTSIDE DIA. OF NOZZLES ROLLED FROM PLATE & WELDED SHALL BE ±1/16" FOR CONNECTIONS NPS 12 & UNDER, & ±1/8" FOR CONNECTIONS OVER NPS 12.

FLANGES, SHOP FABRICATED
BOLT CIRCLE DIA.: ±1/16" BOLT HOLE LOCATION: WITHIN 1/16" OF THEORETICAL LOCATION.
ECCENTRICITY OF THE BOLT CIRCLE IN RESPECT TO THE BORE:
1/32" IN. MAXIMUM, FOR NOMINAL DIAMETERS ≤ NPS 24
1/16" IN. MAXIMUM, FOR NOMINAL DIAMETERS > NPS 24
OUTSIDE DIAMETER: ±1/16" IN. FOR NOMINAL DIAMETERS ≤ NPS 24
OUTSIDE DIAMETER: ±1/8" IN. FOR NOMINAL DIAMETERS > NPS 24
THICKNESS: +1/8" IN. -0 IN.
RAISED FACE OUTSIDE DIAMETER: ±1/32" IN.
HEIGHT OF TONGUE, DEPTH OF GROOVE, & INSIDE & OUTSIDE DIA. FOR TONGUE & GROOVE OR MALE & FEMALE FACING: ±1/64".

NOTE 2:
FOR LOOSE FLANGES THE DIFFERENCE BETWEEN THE INSIDE DIAMETER OF THE FLANGE AND THE OUTSIDE DIAMETER OF THE NOZZLE OR SHELL NOT TO EXCEED:
1/16" IN. FOR NOMINAL DIAMETERS ≤ NPS 12
1/8" IN. FOR NOMINAL DIAMETERS > NPS 12 BUT ≤ NPS 48
3/16" IN. FOR NOMINAL DIAMETERS > NPS 48

INSULATION SUPPORT AND VACUUM STIFFENING RINGS
LOCATION FROM REF. LINE TO FIRST RING: ±3/16" DISTANCE BETWEEN ANY TWO: ±1/2".

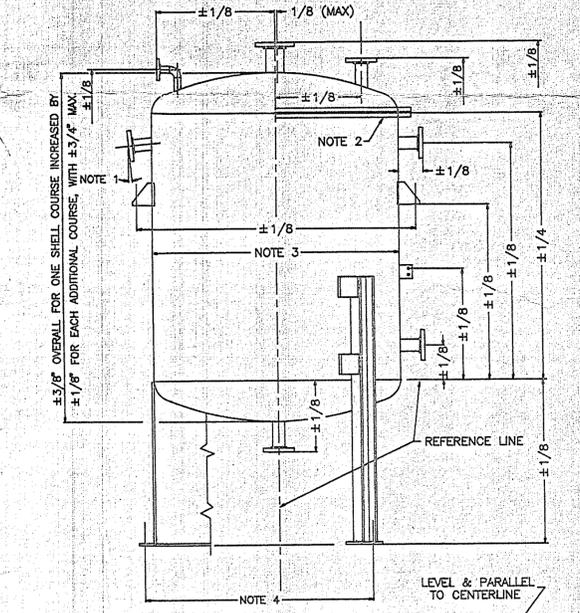
NOTE 3: SHELL
THE OUTSIDE CIRCUMFERENCE OF THE SHELL SHALL BE WITHIN THE FOLLOWING LIMITS:
±3/8" IN. FOR NOMINAL DIAMETERS 48 IN. AND UNDER.
±1/2" IN. FOR NOMINAL DIAMETERS OVER 48 IN. THROUGH 96 IN.
±3/4" IN. FOR NOMINAL DIAMETERS OVER 96 IN.

SHELLS SHALL BE STRAIGHT WITHIN 1/8" (±1/16") ALONG ANY LONGITUDINAL ELEMENT OVER A DISTANCE NOT LESS THAN THE LENGTH OF THE LONGEST SHELL COURSE, EXCEPT THAT AT CIRCUMFERENTIAL JOINTS & AT NOZZLES IN ADDITIONAL DEVIATION EQUAL TO THE OFFSET PERMITTED BY THE ASME CODE FOR CIRCUMFERENTIAL WELDED JOINTS WILL BE ALLOWED.

BASE OR SUPPORTS
CLEARANCE BETWEEN THE OUTSIDE HEAD & THE INSIDE OF SKIRT SHALL NOT EXCEED 1/16".

NOTE 4:
BASE OF SKIRT, OF LEGS, OR OF SUPPORT BRACKETS SHALL BE TRUE AND SQUARE WITH RESPECT TO THE REFERENCE LINES, WITHIN THE FOLLOWING LIMITS:
±3/32" IN. FOR NOMINAL DIAMETERS 84 IN. AND UNDER
±1/8" IN. FOR NOMINAL DIAMETERS 84 IN. THROUGH 120 IN.
±5/32" IN. FOR NOMINAL DIAMETERS OVER 120 IN.
±1/8" IN. FOR BOLT CIRCLE IN BASE OR LEGS.

NOTE:
ALL TOLERANCES NOT INDICATED SHALL BE IN ACCORDANCE WITH ASME CODE, SECT. VIII, DIV. 1. TOLERANCES SHOWN ARE INTENDED TO APPLY WITH BOTH VERTICAL & HORIZONTAL VESSELS & TANKS. TOLERANCES ON ANGULAR DIMS. EXPRESSED IN DEGREES SHALL BE BASED UPON THE EQUIVALENT INCHES OR ARC. THICKNESSES SPECIFIED FOR MACHINED PARTS ARE MINIMUM.
TOLERANCES ON CONSECUTIVE DIMENSIONS MAY NOT BE CUMULATIVE WHERE PROHIBITED BY THE TOLERANCE ON AN OVERALL DIMENSION, OR WHERE INTERFERENCE BETWEEN PARTS WOULD RESULT.



±1/16", -0
OD +1/32", -0 FOR ≤ NPS 8
OD +1/16", -0 FOR > NPS 8
OD +1/8", -0 FOR > NPS 24

SHOP-FABRICATED LAPS

PERMISSIBLE ROTATION OF FLANGES WITH RESPECT TO VESSEL CLS

		SISTERSVILLE TANK WORKS, INC. ENGINEERING DEPARTMENT 1942 McCOY STREET SISTERSVILLE, W. VA. 26175	
		CUSTOMER: LIFE SCIENCE	PURCHASE ORDER NO.: 8549-490028
DRAWN BY: M.P.S.	DATE DRAWN: 06-25-92	SHEET: 2 OF 2	DWG. NO.: 92-240

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