

FORM 1-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured by Industrial Alloy Fabricators, Inc. Richmond, Virginia
(Name and address of Manufacturer)

2. Manufactured for Hercules, Incorporated Wilmington, North Carolina
(Name and address of Purchaser)

3. Type vertical Vessel No. 29148 (Mfrs. Serial) () (State & State No.) Natl. Bd. No. 237 Yr. Built 1976
(Horiz. or Vert.)

4. SHELL: Material SA240T316L T.S. 70000 Nominal Thickness 1/2 in. Corrosion Allowance 1/4 in. Diam. 6 ft. 0 in. Length 11 ft. 10 in.
(Kind & Spec. No.) (Fig. or P.B. & lowest T.S.)

5. SEAMS: Long Welded Double S.R. no X.R. spot Sectioned no Efficiency 85 %
(Welded, Dbl., Single, Lap, Butt.) (Yes or No) (Spot or Complete) (Yes or No)

Girth Welded Double S.R. no X partial Sectioned no No. of Courses 1

6. HEADS: (a) Material SA240T316L T.S. 70000 (b) Material _____ T.S. _____
Location (Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure
(a) Top & Bot 5/8 72 4 3/4 --- --- --- --- Concave
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. Constructed for max. allowable working press. ² 75 psi at max. temp. 350 °F. Min. temp. (when less than -20°) _____ °F. Hydrostatic Test Press 120 psi.
Pneumatic or Combination

8. SAFETY OR RELIEF VALVE OUTLETS: Number 1 Size 6" Location top head

9. NOZZLES:
Purpose (Inlet, Outlet, Drain)

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
<u>Inlet</u>	<u>1</u>	<u>28" dia.</u>	<u>welded</u>	<u>SA240T316L</u>	<u>.375</u>	<u>SA240T316L</u>	<u>welded</u>
<u>Outlet</u>	<u>1</u>	<u>20" dia.</u>	<u>"</u>	<u>"</u>	<u>.375</u>	<u>"</u>	<u>"</u>
<u>Outlet</u>	<u>1</u>	<u>14" dia.</u>	<u>"</u>	<u>"</u>	<u>.375</u>	<u>"</u>	<u>"</u>
<u>Outlet</u>	<u>2</u>	<u>4" IPS</u>	<u>"</u>	<u>SA312T316L</u>	<u>.337</u>	<u>SA312T316L</u>	<u>"</u>

10. INSPECTION Manholes, No. 1 Size 20" dia. Location side, near bottom
OPENINGS: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

11. SUPPORTS: Skirt no Lugs ----- Legs 4 Other ----- Attached sides, welded
(Yes or No) (Number) (Number) (Describe) (Where & How)

12. REMARKS (List applicable special services in accordance with 1(G-120(d)): Chemical Process Vessel for Non-Lethal Service with two 1" 150 PSI Std.; two 2" 150 PSI Std.; and one 1 1/2" 150 PSI Std. Studding pads in addition to openings shown above

(Brief description of purpose of the vessel as Air Tank, Water Tank, L.P.G., Etc. - State Contents
If postweld heat-treated
List other internal or external pressures with coincident temperature when applicable

We certify that the statements made in this report are correct and that all details of design, material, construction and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

Date October 21 19 76 Signed Industrial Alloy Fabricators By W R Pithrew
(Manufacturer)

Certificate of Authorization No. 8351 Expires March 30, 1977

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Industrial Alloy Fabricators at Richmond, Virginia

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province Ohio & Pa and employed by Arkwright Boston Mfg. Mutual Ins. Co. of Waltham, Mass have inspected the pressure vessel described in this manufacturer's data report on October 21 19 76 and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date October 21 19 76

C W Bragg
Inspector's Signature

Commissions NB 4750

Natl. Board, State, Province and No.