

E-101-3

MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS

As Required by the Provisions of the A.S.M.E. Code Rules

#10404

1. Manufactured by Doyle & Roth Mfg. Co. Inc., Walster Corp, Simpson, Pa.
(Name and address of Manufacturer)
2. Manufactured for Hercules Incorporated, Wilmington, North Carolina
(Name and address of Purchaser)
3. Type Vert Kind Condenser Vessel No. M-7305-1 (Mfr. Serial) Nat'l Bd. No. 5955 Yr. Built 1967
(Horizontal or Vertical) (Tank, Jacketed, Heat Exch.) (State & State No.)

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL: Material SA240 316SS T.S. 75000 Nominal Thickness 1.25 in. Allowance 1.25 in. Diam. 2 ft. 0 in. Length 11-7/8
(Kind of Spec. No.) (Flg. or F.B. & Spec. Min. T.S.)
5. SEAMS: Long DWB H.T. No X.R. No Sectioned No Efficiency 70 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)
Girth Vapor Belt H.T. X.R. Sectioned No of Courses No
6. HEADS: (a) Material SA240 316SS T.S. 75000 (b) Material TS
(Top, bottom, ends) Location 36" OD 316SS Cyl 1/4" Tk with Flanged Only Heads 14" Tk Concave
(a) Thickness 36" Crown Radius OD 316SS Knuckle Radius Cyl 1/4" Tk Elliptical Ratio with Flanged Only Heads Conical Apex Angle 14" Tk Hemispherical Radius Concave Flat Diameter Side to Pressure
(b) Concave
If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)
7. STAYBOLTS: (Material) If hollow Attachment Pitch X Diam. (Nominal)
(Size of Hole) (Threaded, Welded) (Horiz.) (Vert.)
8. JACKET CLOSURE: (Describe as ogee & weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)
9. Constructed for max. allowable working press. 75 psi. at max. temp. 300 °F. Min. temp. (when less than -20°) Hydrostatic Test Press. 115 psi.

If riveted describe seams fully on reverse side of form.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240 316SS Diam. 28-3/8 Thickness 1-1/16 Attachment Welded
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)
Floating. Material SA249 Diam. in. Thickness in. Attachment (Welded, Bolted)
(Kind & Spec. No.)
11. TUBES: Material 316SS O.D. 3/4 in. Thickness 18 BWG inches or gage. Number 486 Type Straight
(Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL: Material SA53B St1 T.S. 60000 Nominal Thickness 3/8 in. Allowance 3/8 in. Diam. 2 ft. 0 in. Length 11-7/8
(Kind and Spec. No.) (Flg. or F.B. & Spec. Min. T.S.)
13. SEAMS: Long Seamless H.T. No X.R. No Sectioned No Efficiency 100 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)
Girth H.T. X.R. No Sectioned No of Courses No
14. HEADS (a) Material SA285C T.S. 55000 (b) Material SA285C T.S. 55000 (c) Material TS
(a) Location 3/8" (2) 24" OD ASME Semi Ellip Heads
(b) Channel with SA201B St1 Ring Flg 28-3/8" OD x 1-3/8" Tk
(c) Floating Concave
If removable, bolts used (a) Alloy SA193 B-7 5/8-24 (b) Alloy SA193 B7 5/8-24
(Material Spec. No., T.S., Size, Number) (c) with SA194 2H Hex Hvy Nuts Other fastening (Describe or Attach Sketch)
15. Constructed for max. allowable working press. 75 psi. at max. temp. 300 °F. Min. temp. (when less than -20°) Hydrostatic Test Press. 115 psi.

If riveted describe seams fully on reverse side of form.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 1 Size 1/2 Location Top
17. NOZZLES:
Purpose (Inlet, Outlet, Drain) SS-In&out (1) 1/4" 150# STD ASA Flg SA181 W/316 SS Sch 10 Stub End Welded
Number 1 Diam. or Size 1/2 Type SS-In&out (1) 1/2" 150# STD ASA SO Flg SA181 Faced W/316 SS & SS Pipe Welded
Material SS Thickness 1/2 Reinforcement See reverse side of paper How Attached See reverse side of paper
18. INSPECTION OPENINGS: Manholes, No. 1 Size 18" Location Top
Handholes, No. 1 Size 18" Location Top
Threaded, No. 1 Size 18" Location Top
19. SUPPORTS: Skirt 1 Lugs 1 Legs 1 Other 1 Attached 1
(Yes or No) (Number) (Number) (Describe) (Where & How)
20. REMARKS: Shell & Tube Heat Exchanger

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooler, etc. State contents of each part.)

(Over)

SS-vent&drain (2) 3/4" 3000# SS HG SA182 Welded
TS-in&out (2) 8" 150# STD ASA SO RF Flgs SA181 W/SA53B Sch 30 Pipe Welded
TS-vent&drain (2) 3/4" 3000# FS HG SA105 Welded

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

Date 7-13-67 19____ Signed Doyle & Roth Mfg. Co. Inc. By E. J. Zimmer
(Manufacturer)

Certificate of Authorization Expires 12-31-67 Walster Corp, Simpson, Pa.

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Doyle & Roth Mfg. Co. Inc. at Walster Corp, Simpson, Pa.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Penna. and employed by MBMIC FM Group of Ins. Co. of Norwood, Mass. have inspected the pressure vessel described in this manufacturer's data report on 7-13-67 19____, 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 7-13-67 19____
David J. Zimmer Commissions NB 5841, Pa. 1977
Inspectors Signature Nat'l Board or State and No.

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of _____ and employed by _____ of _____

_____ have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items _____ not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test of _____ psi.

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 _____ 19____

Inspectors Signature Commissions _____
Nat'l Board or State and No.

