MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS #90732

Form No. U-1 As Required by the Provisions of the A. S. M. E. Code Rule

1. Manufactured by Downingtown Iron Works, Inc., Downingtown, Pa. (Name and address of the manufacturer)

2. Manufactured for E.I. DuPont De Nemours & Co., Augusta, Georgia. (Name and address of the purchaser)

3. Type Vertical (Horizontal or Vertical) Unfired Pressure Vessel No. (5848) (Mfrs.' serial or A.S.M.E. No.) (N.B. 5088) (State and State No.) Year built 1952

4. Have mill test reports been checked on all the plates entering this unfired pressure vessel Yes

Do the chemical and physical properties of all plates meet the requirements of the Code Yes

5. SHELL OR DRUMS: No. 1 Diameter 5 ft. 0 in. I.D. (or width) Length over all ___ ft. ___ in. Height 58 ft. 2 in.

6. STAMPS on shell plates SA-264 Gr.11 Type 316 70000 T.S. (Brand and lowest tensile strength) Rivets, stays and braces Welded (Iron or Steel) Welded

7. SHELL PLATES (Outer) 13/16" in. (Thickness) Butt straps ___ in. (Thickness) Style of seams: Longitudinal Part UW Girth Part UW (Riveted, Forged Welded, Brazed, or Fusion Welded—Par No.)

8. Diameter of rivet holes ___ in. Pitch of rivets ___ X ___ X ___ Efficiency of joint 85 %

9. GIRTH JOINTS ___ (Single or double riveted) Diameter rivet holes ___ in. Pitch of rivets ___ in. No. of courses 2

10. INNER SHELL ___ (Thickness) in. Style of seams: Longitudinal ___ Girth ___ (Riveted, Forge Welded, Brazed, or Fusion Welded—Par. No.) Length of section or course ___ ft. ___ in.

11. HEADS: Elliptical 13/16" (Thickness) in. Radius of dish Ratio 2:1 in. Side to pressure Concave. (Concave or convex)

If removable, bolts used ___ (Number and size) or methods of fastening ___ (Describe or sketch)

12.

STAYS	No.	Size	Net Area	Welded or Weldless	Area to be Stayed	Maximum Allowable Working Pressure
(a) F. H.						
(b) R. H.				AUG 18 1952		
(c) Through						
(d) Diagonal and Gusset Stays				THE NATIONAL BOARD OF BOILER & PRESSURE VESSEL INSPECTORS		

13. STAYBOLTS ___ (Iron or Steel) If hollow ___ (Size of hole) 14. Maximum pitch ___ (Horizontal) X ___ (Vertical) Diameter ___ in. (Over the threads)

15. SAFETY VALVE outlets: No. ___ Size ___

16. FUSIBLE PLUG (if used): No. ___ Diameter and material of filling ___ Location ___

17. OUTLETS: No. 9 Size 2, 4, 6, 10 Material of nozzle or reinforcement Steel How attached Welded (Riveted, welded, etc)

18. DRAIN connection 2 (Size) in. HAND HOLES OR SIGHT HOLES ___ (Number, size and location)

19. MANHOLES: 3- (Number) 20" equally distributed on shell (Size and location of each) Reinforcement Welded (Riveted, welded, etc.)

20. NONPRESSURE PARTS (a) Supporting lugs ___ (Number) Supporting skirts 1 (b) Other Nonpressure parts ___ (Kind and number)

(c) Where and how attached Welded to bottom head.

21. Shell Bursting pressure 1584 psi Hydrostatic test 420-504 lb 22. Constructed for pressure of 310 psi Factor of safety 5:1

Remarks: Vessel constructed per 1950 ASME Code with 1/8" corrosion allowance, (Vessel to be used for air, gas, ammonia, etc.) shell and heads 15% stainless clad on SA-212 F.B., Gr.B Steel. Spot x-rayed and stress relieved.

We certify the above data to be correct and that all details of materials and construction and workmanship on this unfired pressure vessel conform to the A. S. M. E. Code for Unfired Pressure Vessels Cert. of Auth. No. 174 Expires Dec. 31, 1952

Date January 3, 1952 Signed Downingtown Iron Works, Inc. (Manufacturer) by E.E. Brown

D.I.W. #51-368 E.I. DuPont Co. #AXC-3165 Dwg. C-2434

CERTIFICATE OF SHOP INSPECTION

Insurance Company's Serial Number H.S.B.# 5220

VESSEL MADE BY Downingtown Iron Works, Inc., Downingtown, Pa.

I, the undersigned, holding a certficate of competency as an inspector of steam boilers in THE STATE OF Penna., and employed by THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY of HARTFORD, CONN., inspected internally and externally, the vessel specified in this report, on AUG / - 1952 19, and certify that the statements made on this report are correct, corresponding with the mill test reports of material as furnished by the builders, and measurements made of the vessel when completed; and that this vessel is constructed in accordance with the A. S. M. E. Code Rules for the Construction of unfired Pressure Vessels.

Commissions Nat. Board 1837

F. Gallagher
Inspector