|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **FORM P-4 MANUFACTURER´S PARTIAL DATA REPORT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **As Required by the Provisions of the ASME Code Rules, Section I** | | | | | | | | | | | | | | | | | | | | | | | | | Page | | |  | | | of | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | |  | | |  | | |  | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Manufactured by | | |  | | | | | | | | | | | | | | | | | , P-4 ID No. | | | | | |  | | | | | | | |
|  | | | (Name and address of manufacturer) | | | | | | | | | | | | | | | | |  | | | | | |  | | | | | | | |
| 1. Manufactured for | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | (Name and address of purchaser) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Identification of Part(s) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Name of Part | Quantity | Line  No. | Mfr`s. Identifying  Numbers | Manufacturer`s  Drawing No. | CRN | National Board  No. | Year  Built | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design (as indicated on line 14, Remarks) conforms to ASME Rules, Section I of ASME BOILER AND PRESSURE VESSEL CODE. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | , Addenda to |  | | | | | | | | (if applicable), and Code Cases | | | | | | | |  | | | | | | | | | | | | |
|  | (Year) | | |  | (Date) | | | | | | | |  | | | | | | | | (Numbers) | | | | | | | | | | | | |
| 6(a). Drums | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | No. | Inside Diameter | Inside Length | Shell Plates | | | Tubesheets | | Tube Hole Ligament  Efficiency, % | | | Material Spec. No., Grade | Thickness | Inside Radius | Thickness | Inside Radius | Longitudinal | Circum-ferential | | 1 |  |  |  |  |  |  |  |  |  | | 2 |  |  |  |  |  |  |  |  |  | | 3 |  |  |  |  |  |  |  |  |  | | 4 |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | No. | Longitudinal  Joints | | Circum.  Joints | | Heads | | | | | | Hydrostatic  Test | | No. &  Type\* | Efficiency | No. &  Type | Effi-  ciency | Material  Spec. No., Grade | Thickness | | Type\*\* | Radius  of Dish | Manholes  No. Size | | 1 |  |  |  |  |  |  |  |  |  |  |  | | 2 |  |  |  |  |  |  |  |  |  |  |  | | 3 |  |  |  |  |  |  |  |  |  |  |  | | 4 |  |  |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Indicate if (1) Seamless; (2) Fusion welded. | | | | | | | | | | \*\*Indicate if (1) Flat; (2) Dished; (3) Ellipsoidal; (4) Hemispherical. | | | | | | | | | | | | | | | | | | | | | | | |
| 6(b). Boiler Tubes | | | | | | | |  | 6(c). | Headers No. | | | | |  | | | | | | | or | |  | | | | | | | | | |
| |  |  |  | | --- | --- | --- | | Diameter | Thickness | Material Spec. No., Grade | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | | | | | | | |  |  |  | | | | | (Box or sinuous or round; Material spec. no.; Thickness) | | | | | | | | | | | | | | | | | | |
|  |  | Heads or Ends. | | | | | |  | | | | | | | Hydro. Test | | | | | | |  | | | |
|  |  |  | | | | | | (Shape; Material spec. no.; Thickness) | | | | | | |  | | | | | | |  | | | |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | |
|  | 6(d). | Staybolts | | | |  | | | | | | | | | | | | | | | | | | | |
|  |  |  | | | | (Material spec. no.; Diameter; Size telltale; Net area) | | | | | | | | | | | | | | | | | | | |
|  |  | Pitch | |  | | | | | | Net Area |  | | | | | | | |  | | MAWP | | |  | |
|  |  |  | | (Horizontal and vertical) | | | | | |  | (Supported by one bolt) | | | | | | | |  | | |  | |
| 6(e). Mud Drum | |  | | | | or |  | | | | Heads or Ends | | | | | |  | | | | | | | | Hydro Test, psi | | | | | | |  | |
|  | | (For sect. header boilers, state: Size; Shape; Mat’l. spec. no.; Thickness) | | | | | | | | |  | | | | | | (Shape; Material spec. no.; Thickness) | | | | | | | |  | | | | | | |  | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7(a). Waterwall Headers | | | | | | | | | | | | | | | | | | | | 7(b). Waterwall Tubes | | | | | | | | | | | | | |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | No. | Size and Shape | Material  Spec. No. | Thickness | Heads or Ends | | | Hydro.  Test | Diameter | Thickness | Material  Spec. No. | | Shape | Thickness | Material  Spec. No. | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | (07/15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **FORM P-4** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Manufactured by | | | | |  | | | | | | | | | | | | | | | | | | | | |  | Page: |  | of |  | | | Form P-4 ID No. | | | | |  | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | | |  | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 8(a). Economizer Headers | | | | | | | Heads or Ends | | | | |  | | 8(b). Economizer Tubes | |  | | | No. | Size and Shape | | Material  Spec. No. | Thickness | | | Shape | Thickness | | | Material  Spec. No. | Hydro.  Test | | Diameter | Thickness | Material  Spec.No. | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  | | | | | | | | | | | | | | | | | | | 9(a). Superheater Headers | | | |  | | |  |  | | |  |  | | 9(b). Superheater Tubes | | |  | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  | | | | | | | | | | | | | | | | | | | 10(a). Other Parts(1) | |  | | | (2) |  | | | (3) |  | | |  | 10(b). Tubes for Other Parts | | | | |  | | | | | | | | | | | | | | | | | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | |  |  | |  |  | | |  |  | | |  |  | |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 11. Openings (1) Steam | | | | | | |  | | | | | | |  | (2) Pressure Relief Valve | | | | | | | | |  | | | | | | | | |  | | | | | | | (No., size, and type of nozzles or outlets) | | | | | | |  | | | | | | | | | (No., size, and type of nozzles or outlets) | | | | | | | | | (3) Blowoff | | | | | | |  | | | | | | | (4) Feed | |  | | | | | | | | | | | | | | | |  | | | | | | | (No., size, and type of nozzles or outlets) | | | | | | |  | | (No., size, type, and location of connections) | | | | | | | | | | | | | | | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 12. |  | Maximum Allowable  Working Pressure | Code Para. and/or  Formula on Which  MAWP Is Based | Hydro. Test | Heating Surface | | a | Boiler |  |  |  |  | | b | Waterwall |  |  |  |  | | c | Economizer |  |  |  |  | | d | Superheater |  |  |  |  | | e | Other Parts |  |  |  |  | | | | | | | | | | | | | | | | | | | | |  |  |  | Heating surface to be  stamped on drum heads.  This heating surface not to be used for determining minimum pressure relief valve capacity. | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 14. Remarks | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **CERTIFICATE OF COMPLIANCE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | We certify the statements made in this Manufacturer’s Partial Data Report to be correct and that all details of design (as indicated on line 14, Remarks), | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | material, construction, and workmanship of this boiler part conform to Section I of the ASM BOILER AND PRESSURE VESSEL CODE. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Our Certificate of Authorization No. | | | | | | | | |  | | | to use the (PP) or (S) | | |  | | | | | Designator expires | | | | |  | | | | | | . | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Date |  | | | | | Signed | |  | | | | | | | | Name | | |  | | | | | | | | | | | | | |  |  | | | | |  | | (Authorized Representative) | | | | | | | |  | | | (Manufacturer) | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **CERTIFICATE OF INSPECTION** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | have inspected the part of the boiler described in this Manufacturer’s Partial Data | | | | | | | | | | | | | | | | | | | | Report on | |  | | | | | | | | | , and state that, to the best of my knowledge and belief, the Manufacturer has constructed this part | | | | | | | | | | | | | | | | | | | | | | 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 part described in this | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Manufacturer’s Partial 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 |  | | | | | Signed | |  | | | | | | | Commission | | |  | | | | | | | | | | | | | | |  |  | | | | |  | | (Authorized Inspector) | | | | | | |  | | | [National Board Commission Number and Endorsement] | | | | | | | | | | | | | | |  |  | | | | |  | |  | | | | | | |  | | |  | | | | | | | | | | | | | | | (07/15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |