|  |  |  |  |
| --- | --- | --- | --- |
| Mfr. Representative: |       | Date: |       |
| Authorized Inspector: |       | Date: |       |
| Page: |       | of |       |
| **FORM A-1 MANUFACTURER’S DATA REPORT** |
| **FOR PRESSURE VESSELS** |
| **As Required by the Provisions of the ASME Code Rules, Section VIII, Division 2** |
| 1. | Manufactured and certified by |       |
|  |  | (Name and address of manufacturer) |
| 2. | Manufactured for |       |
|  |  | (Name and address of purchaser) |
| 3. | Location of installation |       |
|  |  | (Name and address) |
| 4. | Type |       |  |       |  |       |  |       |  |       |  |       |
|  |  | Horiz. or vert. tank |  | Mfr’s. serial No. |  | CRN |  | Drawing No. |  | Nat’l Board No. |  | Year built |
| 5. | The chemical and physical properties of all parts meet the requirements of material specification of the ASME BOILER AND PRESSURE |
|  | VESSEL CODE. The design, construction, and workmanship conform to ASME Code, Section VIII, Division 2. |
|  |       |  |       |  |       |
|  | Year |  | Class |  | Code Case No. |
| ***Items 6 to 11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers*** |
| 6. | Shell |       |  |       |  |       |  |       |  |       |
|  |  | Material(Spec. No., Grade) |  | Nom. thk. |  | Corr. Allow. |  | Diameter |  | Length (overall) |
| 7. | Seams |       |  |       |  |       |
|  |  | Longitudinal |  | Heat treatment |  | Nondestructive Examination |
|  |       |  |       |  |       |  |       |
|  | Girth |  | Heat treatment |  | Nondestructive Examination |  | No. of Courses |
| 8. | Heads: (a) Matl. |       | (b) Matl. |       |
|  |  | Spec., No., Grade |  | Spec., No., Grade |
|  | Location (Top, Bottom, End) | Minimum Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (Convex or Concave) |
| (a) |       |       |       |       |       |       |       |       |       |       |
| (b) |       |       |       |       |       |       |       |       |       |       |
| 9. | If removable, bolts used (describe other fastenings): |       |
|  |  | Matl. Spec. No. Grade Size Number |
| 10. | Jacket closure |       | If bar, give dimensions |       | If bolted, describe or sketch. |
|  |  | Describe as ogee and weld, bar, etc. |  |  |  |
| 11. | MAWP |       |  |  | at max. temp. |       |  |       | Min. design metal temp. |       | at |       |
|  |  | (Internal) |  | (External) |  | (Internal) |  | (External) |  |  |  |  |
|  | Impact test  |       | At test temperature of |       |
|  | Hydro., pneu., or comb test pressure |       |
| ***Items 12 and 13 to be completed for tube sections.*** |
| 12. | Tubesheets |       |  |       |  |       |  |       |  |       |
|  |  | Stationary matl. (Spec. No., Grade) |  | Diam. (Subject to pressure) |  | Nom. Thk. |  | Corr. Allow. |  | Attach. (wld., bolted) |
|  |  |       |  |       |  |       |  |       |  |       |
|  |  | Floating matl. (Spec. No., Grade) |  | (Diam.) |  | Nom. Thk. |  | Corr. Allow. |  | Attach. (wld., bolted) |
| 13. | Tubes |       |  |       |  |       |  |       |  |       |
|  |  | Matl. (Spec. No., Grade) |  | O.D. |  | Nom. Thk. |  | Number |  | Type (straight or “U”) |
| ***Items 14 to 18 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchanger*** |
| 14. | Shell |       |  |       |  |       |  |       |  |       |
|  |  | Material (Spec. No., Grade) |  | Nom. thk. |  | Corr. allow. |  | Diameter |  | Length (overall) |
| 15. | Seams |       |  |       |  |       |
|  |  | Longitudinal |  | Heat treatment |  | Nondestructive Examination |
|  |       |  |       |  |       |  |       |
|  | Girth |  | Heat treatment |  | Nondestructive Examination |  | No. of Courses |
| 16. | Heads: (a) Matl. |       | (b) Matl. |       |
|  |  | Spec., No., Grade |  | Spec., No., Grade |
|  | Location (Top, Bottom, End) | Minimum Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (Convex or Concave) |
| (a) |       |       |       |       |       |       |       |       |       |       |
| (b) |       |       |       |       |       |       |       |       |       |       |
|  |  |
| 17. | If removable, bolts used (describe other fastenings): |       |
|  |  | Matl. Spec. No. Grade Size Number |
| 18. | MAWP |       |  |       | at max. temp. |       |  |       | Min. design metal temp. |       | at |       |
|  |  | (Internal) |  | (External) |  | (Internal) |  | (External) |  |  |
|   | Impact test |       | At test temperature of |       |
|  | Hydro., pneu., or comb test pressure |       |
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| Mfr. Representative: |       | Date: |       |
| Authorized Inspector: |       | Date: |       |
| Page: |       | of |       |
| **Form A-1** |
|  |
| Manufactured by |       |
| Manufacturer’s Serial No. |       | CRN |       | National Board No. |       |
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|  |
| *Items below to be completed for all vessels where applicable* |
| 19. | Nozzles inspection and safety valve openings |
| Purpose(Inlet, Outlet, Drain, etc.) | No. | Diam. Or Size | Type | Material | Nom. Thk. | Reinforcement Material | How Attached | Location |
|       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |
|  |  |
| 20. | Body Flanges |
| Body Flanges on Shells |
| No. | Type | ID | OD | Flange Thk. | Min Hub Thk. | Material | How Attached | Location | Bolting |
| Num & Size | Bolting Material | Washer(OD,ID,Thk.) | Washer Material |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
| Body Flanges on Heads |
| No. | Type | ID | OD | Flange Thk. | Min Hub Thk. | Material | How Attached | Location | Bolting |
| Num & Size | Bolting Material | Washer(OD,ID,Thk.) | Washer Material |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |       |       |       |       |       |
|  |
| 21. | Support Skirt |       |  Lugs |       |  Legs |       |  Other |       |  Attached |       |
|  |  | Yes or No |  | No.  |  | No |  | Describe |  | Where and how |
| 22. | Service: Fatigue analysis required |  | and |  |  |
|  |  | Yes or no |  | Describe contents or services |  |
|  Remarks: |        |
|       |
|       |
|       |
|       |
|  |
| **CERTIFICATION OF DESIGN** |
| User’s Design Specification on file at |       |  |
| Manufacturer’s Design Report on file at |       |  |
| User’s Design Specification certified by |       | PE State |       | Reg. No |       |  |
| Manufacturer’s Design Report certified by |       | PE State |       | Reg. No |       |  |
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|  |
| **CERTIFICATE OF SHOP COMPLIANCE** |
| We certify that the statements 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 2. |
| “U2” or “PRT” Certificate Authorization No. |       | expires |       |  |
| Date |       | Co. name |       | Signed |       |  |
|  |
|  |
| **CERTIFICATE OF SHOP INSPECTION** |
| Vessel made by |       | at |       |  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by |
|       | of |       | , |
| have inspected the part of a pressure vessel described in this Manufacturer’s Data Report on |       | , |
| and state that, to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with ASME Code, Section VIII, Division 2. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning that part 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 |       | Signed |       | Commissions |       |  |
|  |  |  | Authorized Inspector |  | National Board Authorized Inspector Commission number |
|  |
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|  |
| Mfr. Representative: |       | Date: |       |
| Authorized Inspector: |       | Date: |       |
| Page: |       | of |       |
| **Form A-1** |
|  |
| Manufactured by |       |
| Manufacturers’s Serial No. |       | CRN |       | National Board No. |       |
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| **CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE**  |
| We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 2of the ASME BOILER AND PRESSURE VESSEL CODE. |
| “U2” Certificate of Authorization No. |       | expires |       |  |
| Data |       | Co. name |       | Signed |       |  |
|  |  |  | Assembler that certified and constructed field assembly |  | Representative |
|  |
| **CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE** |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspector 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 ASME Code, Section VIII, Division 2.  |
| The described vessel was inspected and subjected to a hydrostatic test of  |       | . |
| 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 inspector.  |
| Data  |       | Signed |       | Commissions |       |  |
|  |  |  | Authorized Inspector |  | National Board Authorized Inspector Commission number |
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