

NBIC-2007

5.7.1 GENERAL:- The stamping of or attaching of a nameplate to a pressure-retaining item shall indicate that the work was performed in accordance with the requirements of this Code. Such stamping or attaching of a nameplate shall be done only with the knowledge and authorization of the Inspector. The "R" Certificate Holder responsible for the repair or the construction portion of the alteration shall apply the stamping. For a rerating where no physical changes are made to the pressure-retaining item, the "R" Certificate Holder responsible for design shall apply the stamping. Required stamping and nameplate information is shown in 5.9.6.

API-510

8.2 Rerating

8.2.1 Rerating a pressure vessel by changing its design temperature, minimum metal design temperature, or its MAWP may be done only after all of the following requirements have been met.

- a) Calculations performed by either the manufacturer or an owner/user engineer (or his/her designated representative) experienced in pressure vessel design, fabrication, or inspection shall justify rerating.
- b) A rerating shall be performed in accordance with the requirements of the vessel's construction code. Alternately, calculations can be made using the appropriate formulas in the latest edition of the applicable construction code provided all of the vessel's essential details comply with the applicable requirements of the ASME Code. If the vessel was designed to an edition or addendum of the ASME Code earlier than the 1999 addendum and was not designed to ASME Code Case 2290 or ASME Code Case 2278, it may be related to the latest edition/addendum of the ASME Code if permitted by Figure 8.1. Notice that for vessels built to a code earlier than 1968 the original design allowable stress (based on design factor of 4.0 or 5.0) shall be used.

**SAMPLE REPAIR ALTERATION OR
RERATING OF PRESSURE VESSEL FORM
API 510, 10th EDITION**

Form Date _____
Form No. _____
Owner or User Name _____
Vessel Name _____

| | |
|--|--|
| 1. Original Vessel Identification Number _____ | |
| 2. Original Vessel Location _____ | |
| 3. Manufacturer _____ | Serial No. _____ |
| 4. See attachments for additional data? <input type="radio"/> Yes <input type="radio"/> No | |
| 5. Original Construction Code _____ | |
| 6. Original Maximum Allowable Working Pressure _____ | Year Built _____ |
| 7. Original Design Temperature _____ | Year Built _____ |
| 8. Original Minimum Design Metal Temperature _____ | At Pressure _____ |
| 9. Original Test Pressure _____ | Fluid _____ Position _____ |
| 10. Shell Material _____ | Head Material _____ |
| 11. Shell Thickness _____ Head Thickness _____ | |
| 12. Original Joint Efficiency _____ | |
| 13. Original Radiography _____ | <input type="radio"/> Yes <input type="radio"/> No |
| 14. Original PWHT _____ | <input type="radio"/> Yes <input type="radio"/> No |
| If yes, _____ Temp (°F) _____ Time (Hrs) | |
| 15. Original Corrosion Allowance _____ | |
| 16. Work on Vessel Classified as: <input type="radio"/> Repair <input type="radio"/> Alteration <input type="radio"/> Rerating | |
| 17. Organization Performing Work _____ | |
| 18. Construction Code for Present Work _____ | |
| 19. New Vessel Identification Number (if Applicable) _____ | |
| 20. New Vessel Location (if Applicable) _____ | |
| 21. New Maximum Allowable Working Pressure _____ | |
| 22. New Design Temperature _____ | |
| 23. New Minimum Design Metal Temperature _____ | At Pressure _____ |
| 24. New PWHT _____ | <input type="radio"/> Yes <input type="radio"/> No |
| _____ Temp (°F) _____ Time (Hrs) | |
| 25. New Joint Efficiency, if Applicable E = _____ | |
| 26. Type of Examination or Inspection Performed: | |
| <input type="radio"/> radiographic | <input type="radio"/> ultrasonic |
| <input type="radio"/> magnetic particle | <input type="radio"/> penetrant |
| <input type="radio"/> visual | <input type="radio"/> other |
| 27. New Pressure Test if Yes, Pressure _____ Test Medium _____ Test Position _____ | |
| 28. New Corrosion Allowance _____ | |
| 29. Describe work performed (attach drawings, calculations, and other pertinent data): | |
| _____ | |
| _____ | |
| _____ | |
| Statement of Compliance | |
| We certify that the statements made in this report are correct and that all material and construction for and workmanship of this <input type="radio"/> repair <input type="radio"/> alteration, <input type="radio"/> rerating conform to the requirements of the _____ Edition of API 510, Pressure Vessel Inspection Code. | |
| Signed _____ <small>(repair, alteration, or rerating organization)</small> | |
| Date _____ <small>(authorized representative)</small> | |
| Statement of Inspection | |
| I, the undersigned, an inspector employed by _____, having inspected the work described above, state that to the best of my knowledge, the work has been satisfactorily completed in accordance with the _____ Edition of API 510, Pressure Vessel Inspection Code. | |
| Signed _____ | |
| API 510 Certification Number _____ | |
| Date _____ | |