



Technical Data Q&As

1. Is there any limit on the size of a boiler that fires with used oil?

Answer: There are no limit requirements in SPS 341, Boilers and Pressure Vessels Code. Note there are requirements for storage of oil in SPS 310, Flammable and Combustible Liquids Code. The US EPA and the Wisconsin DNR may have rules related to boilers and used oil.

2. Will Wisconsin accept a re-rating of a direct fired cooker from 15 psig to 30 psig that was built to the ASME Boiler and Pressure Vessel Code in 1960? The vessel was not stamped due to being a direct-fired vessel. This vessel would be re-rated using ASME Code Section VIII, Division 1. All ASME calculations support the re-rating with a design margin of 4.

Answer: Yes, it is possible. SPS 341.42 requires all boilers and pressure vessels installed in Wisconsin be ASME stamped or be proven equivalent by petition for variance and issued a "Wisconsin Special" status in accordance with SPS 341.05 and 341.43. The 1956 Wisconsin Boiler Code section IND 41.50 required ASME construction or approval by the commission at the time. Therefore, on or about 1960, it is probable that special approval was necessary. So, documentation would need to be provided to verify approval of previous or existing installation, or a petition of variance would need to be submitted proving ASME equivalency for possible issuance of a Wisconsin Special status.

SPS 341.10(2)b adopts the NBIC- 2004 Section RC-3000. Alterations, specifically RC 3022, have minimal requirements for re-rating. (Need to complete the re-rating process and submit re-rate info with petition for variance, as noted above)

SPS 341.71 and 341.72: Second hand vessels whether existing or out-of-state vessels as applicable: Provide inspection reports or registration number to prove vessel is existing and operating in this state or treat as a vessel from out of state. Include a legible MDR and any repair or alteration documents associated with the vessel.

3. Does the Wisconsin accept the 2007 ASME Section I code with the 2009 addenda? If not, what is the latest ASME edition and addenda accepted?

Answer: SPS 341.10, Adoption standards by reference, notes the current edition of the ASME code adopted by the state. Addenda are not adopted.

4. Where can I find information about Section IV, Tube sheet Ferules "O" rings with regards to making repairs?

Answer: The only place ferules or "O" rings are mentioned for tube to tube sheet attachments is ASME Section IV, New Construction - HG 360.2.

5. A supplier's proposal includes the use of two non-ASME Section I materials in the high-temperature section of the boiler. The materials are: SA213 Type 310HCbN (modified Type 310 SS) 2. SUS304J1HTB (Japanese material - Modified Type 347 SS). Both these materials have been approved for use in high-temperature steam service in ASME Section I applications via Code Cases 2115-1 and 2328-1. Can those materials be used?

Answer: Wisconsin will accept approved code case materials in the design or fabrication of ASME Section I boilers.

6. Does Wisconsin accept the current ASME Section VIII Div.1 Code Case 2429 (which accepts TEMA Tube sheet in lieu of using the new UHX section until the end of this year).

Answer: All ASME constructed vessels shall be stamped and registered with the National Board per SPS 341.42. Although the state of Wisconsin adopts the 2007 edition of ASME, the department accepts more current ASME editions. Code cases may be acceptable if properly documented - the code case shall be indicated in the remarks of the registered MDR for the vessel. A copy of the code case shall be made available upon request of any Wisconsin Certified Boiler Inspector.

7. A company has two boilers - a Johnston with two safety relief valves rated at 200 psi, and a Nebraska with one safety valve rated at 160 psi and the other at 165 psi. The boilers are tied to a common header, but only one boiler is in service at a time. Do both boilers have to have safety valves rated at the same psi?

Answer: National Board Inspection Code – 2007 Edition, Part2, Section 2.5.5.1a says if boilers are piped together with maximum allowable working pressure differing by more than six percent, additional protective devices may be required on the lower pressure units to protect them from overpressure from the higher pressure unit.

8. Can DIN 11850 material for glycol and ST37/35 material for steam be used in place of ANSI/ASME B31.1, if there are material certification and calculations provided?

Answer: Calculations, materials, and welding for steam piping that is 15 PSI or greater must be based on ANSI/ASME B31.1-2004 Edition, per SPS 341, Boiler and Pressure Vessel Code.