

API Standard 600

Steel Gate Valves - Flanged and Butt-Welding Ends, Bolted, and Pressure Seal Bonnets

Standard	Edition	Section	Inquiry #	Question	Reply
600	Ninth Edition, 1991	General		What is the definition of renewable and nonrenewable seats?	API Standard 600 does not address renewable or nonrenewable seats
600	Ninth Edition, 1991	2.1		Paragraph 2.1.3 requires that "the qualifications for the welding procedure and the welder or welding operator shall conform to ASME B31.3." Can these qualifications be performed in accordance with Section IX of the ASME Boiler and Pressure Vessel Code?	No. ASME B31.3 requires qualifications of welding procedures to be used and the performance of welders and welding operators to conform to the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, except as modified by B31.3. The modifications to the requirements of Section IX as stated in B31.3 shall be part of any qualifications for welding procedure, welder, or welding operator.
600	Ninth Edition, 1991	2.1		Are separate seat rings that are pressed in or welded in as permitted in paragraph 2.1.9 classified as "renewable seat rings"?	API Std. 600 does not define "renewable seat rings."
600	Ninth Edition, 1991	2.1		With reference to Paragraph 2.1.1 and Table 1A or Table 1B of API 600, what is the wall thickness that should cause an operating company to replace a valve?	API 600 does not address this issue.
600	Ninth Edition, 1991	3.1		With reference to Paragraph 3.7 of API 600, are stem nuts manufactured from carbon steel material in accordance with API 600.	No.
600	Ninth Edition, 1991	Table 1-A		In Table 1A, the minimum shell wall thickness is specified for NPS 20 and 24 in Class 900 and for NPS 18, 20, and 24 in Class 1500, but the minimum stem diameters for these sizes and pressure classes are not specified. For these cases shall the minimum stem diameters be per the manufacturers standard?	Yes.
600	Ninth Edition, 1991	Table 1-A		In Table 1A, the minimum shell thicknesses and the corresponding minimum stem diameters are not specified for NPS 14, 16, 18 and 24 in Class 2500. Are valves in these sizes and pressure class beyond the scope of API Std. 600?	Yes.
600	Ninth Edition, 1991	Table 3		Referring to footnote c of Table 3, which seat should have preferably higher hardness, body seat or gate seat?	The standard does not address which part should have the greater hardness.

600	Ninth Edition, 1991	Table 3		Is the flux core arc welding process permitted for weld overlay deposition on body and gate seat surfaces per Table 3?	API Standard 600 does not address the weld process that is to be used.
600	Ninth Edition, 1991	Table 3		Per Table 3, which weld overlay material is acceptable for trims No. 5 and No. 8 - R CoCr-A or E CoCr-A?	Either one may be used.
600	Ninth Edition, 1991	Table 3		With reference to Table 3 of API 600, 9th edition, is there a discrepancy between the hardness values required for trim #1 and for trim #8 and the use of cast ASTM CA15?	No.
600	11th edition	6	600-I-04/00	Question 1: In accordance with section 6 of the 11th edition, is it acceptable to use trim No 8 in lieu of trim No 1? Question 2: In the case of trim No 8, is it acceptable to use hardfacing on the seat ring and 13% Chrome overlay on the wedge for carbon steel body and wedge materials? Question 3: For 13% Chrome seating surface, is it required for the seat ring or wedge be made of solid 13% Chrome material? Question 4: In the case of hardfaced seat rings for carbon steel, is it required that a carbon steel seat ring be coated with 13% Chrome prior to hardfacing?	Reply 1: Yes, however it is always the responsibility of the purchaser to specify materials suitable for the intended service conditions. Reply 2: Yes. Reply 3: No Reply 4: No
600	Tenth Edition, 1997	2.8	600-I-03/00	Are body/bonnet flanges required to have through bolting using a stud plus two nuts?	Yes. See paragraph 2.2.4
600	Tenth Edition, 1997	2.6	600-I-05/00	API 600 10th Ed section 2.6 requires that the strength of the stem at the Tee connection to the wedge be greater that at the root of the threads. Is testing required to prove this?	API 600 does not define how to meet this requirement. Note that API 591 2nd Ed. Appendix B provides details of a stem-to-wedge connection test to confirm the failure location.
600	Tenth Edition, 1997	Table 3	600-I-01/01	What is the reason for listing a minimum and maximum hardness for stems, is it a concern about stem erosion from packing leaks or is there a mechanical strength concern?	We cannot comment on the basis for specified requirements.
600	11th edition	Table 13, Para 6.2	600-I-01/03	Which weld overlay material is acceptable for 13% CR (Trim - 1)?	API 600 does not address this question.

600	11th	5.6.5	600-I-01/04	What is the basis of minimum thickness of 1.6mm?	We cannot comment or respond to questions/inquiries that ask for consultation outside the standard "yes-no" format.
600	Eleventh Edition, October 2001	Clause 2.1.9	600-I-01/02	Paragraph 2.1.9, are renewable seat rings ones that are threaded or press fit which can be easily removed and non-renewable seat rings ones that are seal welded or welded in?	Yes.
600	11th	para 5.6.6, Table 5 and 5.8.12	600-I-01/05	Question 1 - Does the length of the stem projection include the length of the chamfer provided on top of the stem?	Yes
600	11th		600-I-01/05	Question 2 - If the wear travel given by the manufacturer is greater than the value specified in Table 5, can the length of the stem projection required by 5.8.12 be based on the wear travel given by the manufacturer?	Yes, Yes, provided that the manufacturer's wear travel meets the requirements of Table 5 and Section 5.8.12.
600	11th	para 5.6.6, Table 5, and 5.8.12			
600	11th	General	600-I-02/05	Question 1: Pressure Seal bonnet Gate valve is not covered in the scope of this edition, is it true?	Yes
600	11th	General	600-I-02/05	Question 2: Does it mean, for pressure seal valves 10th Edition of API 600 is still applicable and can be referred to ?	API Standard 600 10th Edition is no longer active as it has been superseded by API Standard 600 11th Edition. Previous editions of API Standards can be referred to for historical reference.