

Ballot	6471	623 3rd edition, First Ballot (comment only)	Report Date:	9/17/2024		Closing Date	10/31/2024	
Sort Key	Name	Clause Subclause Number	Paragraph	Type of Comments	Highlighted Text	Comments	Proposed Change	Comment Resolution
1	Davide Marcassoli	1	1	Technical		Scope: Specify that the scope of the standard don't cover Control Valve, and consequently CV value is not required Include in the scope also soft seat surfaces not only metallic sealing (see para 4.2)	Suggested to include accordingly in Scope	Agreed to write into standard that it does not cover Control Valve design. In regards to including the use of soft seats, TF agreed to align with wording in API 600 for Paragraph 4.2 where the term "soft seals or special trim materials" is used.
2	Masayuki Ono	2	2	General		MSS SP-91 is listed in both Clause 2 and the Bibliography. The MSS is referenced in 5.8.1 to specify the requirement. Hence, it is necessary in Clause 2.	Suggested to delete the MSS from the Bibliography.	Accepted. MSS SP-91 is included in Clause 2 and will be removed from the Bibliography.
3	Masayuki Ono	2	2	General		NACE MR0103 is listed, however it does not derive any requirement in this API and just a reference for example in Annex A.	Suggested to delete NACE MR0103 in Clause 2 and move it into "Bibliography".	Not Accepted. Will add para. 10.1 to reference NACE MR0103 & MR0175 and retain both standards in Clause 2.
4	Masayuki Ono	2	2	General		ASTM A320 is listed, however it does not derive any requirement in this API and just a reference for example in Annex C.	Suggested to delete ASTM A320 in Clause 2 and move it into "Bibliography".	Accepted with Comment. ASTM A320 will be removed from Clause 2 and not moved into "Bibliography".
5	Davide Marcassoli	2	2	Technical		Missing NACE MR0175 / ISO 15156	Suggested to add this reference document.	Accepted.
	API Contractor	3	3.1		It comprises "Class" followed by a dimensionless whole number. The number following "Class" does not represent a measurable value and is not used for calculation purposes except where specified in this standard. The allowable pressure for a valve having a class number depends on the valve material and its application temperature and is to be found in tables of	Per Annex E of the Style Guide, "Each definition should be a brief, self-contained description of the term in question, and shall not contain any other information, such as requirements and elaborative text. The term should not be used in its own definition. The form of a definition shall be such that it can replace the term in context. Additional information shall be given only in the form of examples or notes (see E.4.3).		No change at this time. The definition aligns with the definition in API 600. Recommend the common clause team address these definitions to fit the API Style Guide as these are common across different valve standards.

Classification: General Use

	API Contractor	3	3.2		The dimensionless number following "DN" does not represent a measurable value and is not used for calculation purposes except where specified .	See comment on 3.1		See comment on 3.1
	API Contractor	3	3.3		The dimensionless number may be used as a valve size identifier without the prefix "NPS." The dimensionless size identification number does not represent a measurable value and is not used for	See comment on 3.1		See comment on 3.1
6	Masayuki Ono	4	4.4	Technical		ASME B31.3 is unnecessarily referenced since ASME B31T calls "codes" in its stipulations. Further, the users of this API may specify other applicable codes (e.g., B31.1).	Suggested to delete the reference to ASME B31.3, or to add "or Purchaser Specification" at the end of the sentence similar to 5.3.1.2.1 of API 600 (14th).	Accepted. We will adopt API 600 E14 para. 4.4 language for this clause. Reference row 13 containing a comment from Ayman with the new wording.
	Ayman Cheta	4.4	4.4		For temperatures below the lowest temperature listed in the pressure/temperature tables, the service pressure shall be no greater than the pressure for the lowest-listed temperature. The use of valves at lower temperatures is the responsibility of the user, and consideration should be given to the loss of ductility and impact strength per ASME B31.3 and ASME B31T.			Revised as shown below: For temperatures below the lowest temperature listed in the pressure/temperature tables, the service pressure rating shall be no greater than the pressure for the lowest-listed temperature. NOTE: The minimum design temperature is governed by the piping design code such as ASME B31.3, and is not covered in this standard. For further guidance, see ASME B16.34, Appendix D.
	API Contractor	4	4.4		The use of valves at lower temperatures is the responsibility of the user, and consideration should be given to the loss of ductility and impact strength per ASME			Duplicate
7	Masayuki Ono	5	5	General		The requirement for cryogenic service valves is missing. Currently, MSS SP-134 is referred only for the bonnet length requirement in 5.4.3. However, the MSS also specifies other requirements.	Suggested to add a new subclause with the title of "Cryogenic service", and specify "When specified by Purchaser, the valves shall also conform to MSS SP-134."	Accepted. New Clause 10.2 has been added for Cryogenic Service.

8	Ayman Cheta	5.11	5.11	Technical		There is no dimensional limitations on handwheel diameter. This sometimes cause problems during construction / installation of valves due to clashes / interference with structure or piping	Add: The handwheel diameter shall not exceed the face to face or end to end dimension of the valve, or 800 mm (31.2 in), whichever is smaller.	Accepted. Clause 5.11.1 has been amended to add language to restrict operator diameters/lengths.
9	Ayman Cheta	5.11	5.11	Technical		There is no requirement for a position indicator when a gearbox is provided.	Add: Gearboxes shall be provided with a stem position indicator.	Accepted. Clause 5.11.7 has been added.
	API Contractor	5	5.13		The size, type, and location of auxiliary connections shall be indicated on the	Unauditable due to requirement placed on purchaser.		Revised for clarity
	API Contractor	5	5.13		The bypass valve shall conform to API 602 unless otherwise specified in the purchase order, and be of a pressure class equal to or greater than that of the	Potential conflict between API 602 and the purchase order. Consider either/or language.		Revised for clarity
10	Davide Marcassoli	5	5.2	Technical		Use same descriptions as for API 600	Suggested to Use same descriptions as for API 600	Agreed to match API 600 wording
	Wojciech Zmudzinski	5.2	5.2	Technical		As flat bonnets do not appear to be covered in API 623, suggest to add: "Flat bonnets or covers shall conform to the flat cover sections of EN 12516 Part 2 or ASME VIII Div 1."	Add: "Flat bonnets or covers shall conform to the flat cover sections of EN 12516 Part 2 or ASME VIII Div 1."	Do not agree. Design details shall be left to the manufacturer's discretion. Term 'flat bonnets' as it relates to globe valves is not clearly understood by the task group.
11	Ayman Cheta	5.7	5.7	Technical		It is a common practice to use carbon steel yoke with non-carbon steel body material. This can present process safety risk if the valve operates below the impact testing exemption limit or in the creep range.	Add: Carbon steel yokes shall not be used in design temperatures below -29C (- 20F) or higher than 400C (750F)	TF did not agree to change as the yoke does not see the same temperatures as the process flow.
12	Ayman Cheta	6	6	Technical		There is no requirement for materials in sour service.	Add: For sour service, the wetted parts and pressure-retaining fasteners shall comply with NACE MR0103 / ISO 17945 or NACE MR0175 / ISO 15156, as specified in the purchase order.	Agreed. Added section 10 Special Services where new paragraph 10.1 covers NACE requirements

13	Ayman Cheta	8.1	8.1	Technical		8.1 requires marking in accordance with ASME B16.34, however, there is no requirement in the entire API 623 that valves be in "full compliance" with ASME B16.34 (although several requirements refer to B16.34)1. If the intent is to limit applicability of ASME B16.34 to certain requirements (but not all the requirements), valves should not be marked as ASME B16.34 valves.2. Additionally, several important requirements from ASME B16.34 need to be added (e.g., anti-blowout stem design)	Add to the scope:This standard establishes additional requirements for globe valves that are otherwise in full conformance to the requirements of ASME B16.34, Standard Class.	Agree to add as follows in paragraph 1.2: This standard establishes additional requirements for globe valves that are otherwise in full conformance to the requirements of ASME B16.34, Standard Class.
14	Masayuki Ono	9	9.4	Technical		It is considered that the requirement for remining adjustment length of the packing gland is a design requirement but not part of "Preparation for shipment".	Suggested to move the 2nd sentence of 9.4 into 5.9.	Agree - reference para. 5.9.7
15	Masayuki Ono	Bibliography	[2]	General		API RP 615 is listed, however the API is not referenced in this API.	Suggested to add a new paragraph in Clause 1 and state like "Users of this standard should refer to API RP 615 for background and further guidance and definitions on API 623 valves."	Agree - reference para. 1.1
	Ayman Cheta	5.1	5.1.2		Additional metal thickness needed for assembly stresses, stress concentrations, and shapes other than circular shall be determined by individual manufacturers, since these factors vary widely.			Revised as shown below: The manufacturer shall determine if additional metal thickness is needed for assembly stresses, stress concentrations, and shapes other than circular.
	API Contractor	5	5.1.2		Additional metal thickness needed for assembly stresses, stress concentrations, and shapes other than circular shall be determined by individual manufacturers,			Duplicate

	API Contractor	5	5.1.3		The transition to the weld preparation shall be gradual and the section shall be essentially circular through the entire length of the transition. Sharp discontinuities or abrupt changes in section in areas that infringe into the transition shall be avoided, but test collars or bands, either welded or integral, are allowed.			Paragraph 5.1.3 is revised to reference ASME B16.34 butt weld end preparation requirements.
16	Masayuki Ono	5	5.10.1	Technical		The applicable standards for studs are missing. ASME B18.31.1M and B18.31.2 are potentially applicable.	Suggested to add the reference to ASME B18.31.1M and B18.31.2 for studs.	Agreed. Paragraph revised as follows: Bolting for the bonnet-to-body joint shall be continuous-thread stud bolts with heavy hexagon nuts. Bolting shall be standard inch series meeting the standards ASME B18.31.2 and ASME B18.2.2. Metric series bolting may be specified by the purchaser (see Annex A) meeting the standards ASME B18.31.1M and ASME B18.2.4.6M.
	API Contractor	5	5.10.1		Bolting shall be standard inch series bolting, except if the purchaser specifies metric series bolting .	Potential conflict with "except if" . Consider rewording to remove conflict by allowing both possibilities. (either/or text)	Bolting shall be standard inch series bolting. Metric series bolting may be specified by the purchaser (see Annex A).	Revised the paragraph for clarity.
	API Contractor	5	5.10.5		Bolting with diameters 25 mm (1 in.) and smaller shall have coarse (UNC) threads or the most nearly corresponding metric threads. Bolting with diameters larger than 25 mm (1 in.) shall be 8-thread series (8UN) or the most nearly corresponding metric threads .	Unauditable due to "most nearly corresponding" language. Consider a table of acceptable sizes.	Deleted Sentence on interference fit.	No changes to metric statements in the paragraph were made as this is useful guidance for manufacturers.
	API Contractor	5	5.11.1		Unless otherwise specified by the purchaser, the valve shall be supplied with a direct operated handwheel that opens the valve when turned in a counter-clockwise direction. "Hammer-blow" handwheels or gear operators may be provided at the manufacturer's option .	Potential conflict with purchaser options and manufacturers option. Consider either/or language.		Revised paragraph for clarity.

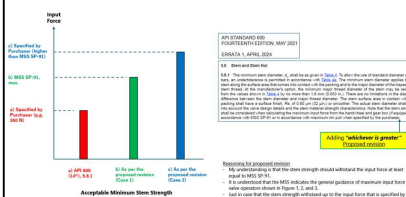
	API Contractor	5	5.11.2		Fabricated handwheels shall have strength and toughness characteristics comparable to that of handwheels made as one-piece castings or forgings .	Unauditable due to "comparable to" language.		Revised the paragraph: replaced "comparable" with "at least equal"
	API Contractor	5	5.11.3		The handwheel shall be marked with the word "OPEN" and an arrow pointing in the direction of opening, except when the handwheel size makes such marking impractical .	Potential conflict due to "except when" language.		Deleted the exception in the paragraph.
17	Masayuki Ono	5	5.11.5	Technical		Referring to the 4th hyphen, the basic requirement of full rated pressure and temperature" is required for the "pressure differential across the valve disc" specified. It is because of the following considerations:- Normally, gear operators are suggested by valve manufacturers to meet operation force requirements.- This paragraph is also applicable to manual gear operators (mostly non-tagged valves) for which Purchaser may consider same as direct handwheel operation but not recognize the need to specify the differential pressure.	Suggested to add "unless full rated pressure-temperature rating applies" at the end of the 4th hyphen.	Not accepted. TF did not want to add this so that manufacturer is made of aware of the intended operating pressure to assist with actuator sizing.
	API Contractor	5	5.11.5		If operation by a chain wheel, gearbox, or power actuator is to be added to the valve, the purchaser shall specify the following, as applicable: —for chainwheel operation, the dimension from the centerline of the valve stem to the bottom of the chain loop; —spur or bevel gear and the position of gearing handwheel relative to the pipe axis; —electric, hydraulic, pneumatic, or other actuator type; —maximum service temperature and pressure differential across the valve disc; —power supply attributes for power actuators .	Unauditable due to requirements placed on purchaser and "as applicable" lead-in.		Revised the paragraph for clarity and deleted "as applicable".

	Wojciech Zmudzinski	5.11	5.11.6	Technical		Remove reference to MSS-SP102, to provide default. Valve-to-gear-box or power actuator flange mating dimensions shall be according to ISO 5210 or MSS-SP-102 and shall comply with the purchaser's specifications.	Remove text in red: Valve-to-gear-box or power actuator flange mating dimensions shall be according to ISO 5210 or MSS-SP-102 and shall comply with the purchaser's specifications.	Do Not Agree. MSS SP-102 should be retained as an available option.
	API Contractor	5	5.11.6		Valve-to-gear-box or power actuator flange mating dimensions shall be according to ISO 5210 or MSS SP-102 and shall comply with the purchaser's specifications .	Potential conflict between SP-102 and purchaser specification. Consider either/or language.		Revised to either/or language.
	API Contractor	5	5.11.7		Consider the effects of severe operating conditions, and the effects of orientation in other than stem-vertical positions, in sizing handwheels.	"Considerations" are unauditable.		Original Paragraph 5.11.7 was deleted. Two new paragraphs were added to this section and consequently reused paragraph number 5.11.7 to start the newly added requirements.
	API Contractor	5	5.14.2		Packing that meets the valve qualification requirements of API 624 shall be used unless otherwise specified by the purchaser .	Potential conflict between API 624 and purchaser requirement.		Revised to avoid potential conflict and renumbered to 5.14 per API Style Guide requirements.
	API Contractor	5	5.3.1.1		The purchaser may specify a flange facing finish other than that specified in ASME B16.5.			Revised paragraph for clarity.
18	Davide Marcassoli	5	5.3.1.2	Technical		Specify that Welded flange material shall be same as body material , and NDE shall be in accordance with API 600 para 5.3.2.1.	Specify that Welded flange material shall be same as body material , and NDE shall be in accordance with API 600 para 5.3.2.1.	A note to table 5 was added: "Welded on flanges shall be of the same nominal composition of the body."
	API Contractor	5	5.3.1.2		However, flanges may be attached by welding when approved by the purchaser .			Revised paragraph for clarity.

19	Masayuki Ono	5	5.3.1.2.1	Technical		It is a concern for discrepancy between Table 3 and the referenced codes (ASME B31.3 and ISO 15649) including future revisions. For example, ASME B31.3 (2022 ed.) does not specify hardness limitation of alloy steels (Cr-Mo).	Suggested to delete the last sentence and Table 3, or replace the last sentence with the one in 5.3.1.2.1 of API 600 (14th).	Agreed to remove reference to ISO 15649, follow API 600 text and remove Table 3.
API Contractor					5	5.3.1.2.1	Unless otherwise specified, attachment welds shall conform to ASME B31.3 or ISO 15649 for normal fluid service, including weld quality acceptance criteria and qualifications for the weld procedure and welder or welding operator.	Revised as noted in Row 45 under the comment provided by Masayuki.
20	Davide Marcassoli	5	5.3.2	Technical		All BW ENDS must be X ray tested to prevent defect during welding in the plant Chemical restriction for BW are mentioned only for C.S material, what about other material group like S.S alloy etc ?	All BW ENDS must be X ray tested to prevent defect during welding in the plant Chemical restriction for BW are mentioned only for C.S material, what about other material group like S.S alloy etc ?	No changes were made. Customer can specify additional NDE. Chemical restrictions for other materials will not be added but customer can specify additional requirements.
	API Contractor	5	5.3.2.1			Conversion of a flanged end valve to a butt welding valve is not permitted except by agreement between the purchaser and manufacturer.		Revised paragraph for clarity.
	API Contractor	5	5.3.2.1			unless otherwise agreed:		Revised paragraph for clarity.
	API Contractor	5	5.3.2.1			$CE = C + \frac{Mn}{6} + \frac{(Cr + Mo + V)}{5} + \frac{(Ni + Cu)}{15}$	Per API Style Guide 6.4.2, equations shall be numbered.	Updated per the style guide.
21	Ayman Cheta	5.3.	5.3.3	Technical		Removable body seats are not adequately addressed	Add: Separate removable body seats shall be positively secured against loosening.	Revised paragraph 5.3.3.4 to address this

22	Davide Marcassoli	5	5.3.3.3	Technical		I suggest to put only this sentence “ where a separate seat ring is provided , all seat ring type Threaded or bottom seated shall be seal welded “.	Suggested to put only this sentence “ where a separate seat ring is provided , all seat ring type Threaded or bottom seated shall be seal welded “.	Revised paragraph 5.3.3.4 to address this
	API Contractor	5	5.3.3.3		Where a separate seat ring is provided, it shall be shoulder- or bottom-seated, and either threaded and seal welded or inserted and seal welded in place .	Unauditable due to possible combinations of seat type and attachment means.		Paragraph is now 5.3.3.4 and revised for more clarity.
	API Contractor	5	5.3.3.3		tack welding or stitch welding is not permitted .	Change to “shall not be used” to conform to API Style guide Table 1.		Agreed...see para. 5.3.3.4
	API Contractor	5	5.3.3.4		Body and disc seating surfaces shall be designed to prevent galling .	Unauditable due to design “intentions”.		Paragraph is now 5.3.3.5 and revised for more clarity.
	API Contractor	5	5.3.3.5		Sealing compounds or greases shall not be used when assembling seat rings; however, a light lubricant having a viscosity no greater than kerosene may be used to prevent galling of mating threaded surfaces .	Conflict in requirements between what constitutes acceptable lubrication and what might become a sealing compound (undefined).		Paragraph is now 5.3.3.6 and revised for more clarity.
	API Contractor	5	5.4.1		When designing the stem, gland, lantern ring or spacer ring (if supplied), and backseat, the manufacturer shall take into account stem guiding and the prevention of packing extrusion.			paragraph revised for clarity as follows: The stem, gland, lantern ring or spacer ring (if supplied), and backseat design shall minimize clearances to provide stem guiding and the prevention of packing extrusion.
23	Davide Marcassoli	5	5.4.2	Technical		On last sentece modify as below : an austenic stainless steel, Nickel alloy, or hardfaced weld deposit	On last sentece modify as below : an austenic stainless steel, Nickel alloy, or hardfaced weld deposit	Agreed to match API 600 wording
24	Davide Marcassoli	5	5.5.2	Technical		Remove Body bonnet joint raised face, this configuration has high potential of leak	Suggested to remove RF joint as body/bonnet joint option	Discussed to keep wording the same to allow for RF connection if manufacturer chooses to do so since RF flanges are fine for the vast majority of end flanges installed.

	API Contractor	5	5.5.3		to be used only in 'tongue and groove' or 'spigot and recess' joints that prevent the gasket from unwinding and from buckling damage.			Deleted "that prevent the gasket from unwinding and from buckling damage" as it did not add a requirement.
25	Davide Marcassoli	5	5.5.6	Technical		Bolting size and quantity shall be left to manufacturer calculation that take in to account : bolting material, pressure , service condition etc	Suggestd to revise accordingly	Not accepted. This clause is a minimum requirement, the manufacturer can still specify size and quantity of bolting taking into account restrictions of clause 5.5.6 and 5.5.7.
26	Michael Kupin	5.5.8	5.5.8	Technical		Consider removing : "A light coating of a lubricant, no heavier than kerosene, may be applied if needed to assist in proper gasket assembly." Applying any lubricant to help with gasket assembly would not be a "best practice". Sentence was removed in last rev API-600	Remove the sentence	Agree
	API Contractor	5	5.5.8		A light coating of a lubricant, no heavier than kerosene, may be applied if needed to assist in proper gasket assembly.			Deleted the last sentence.
	API Contractor	5	5.6.1		Typical disc and guiding configuration is illustrated in Figure 2 .	The API Style Guide in 5.3.4 requires headings when numbered subsections follow. Consider a heading and move the blue text to a NOTE.	Added the figure reference to paragraph 5.6.3	Agreed.
27	Davide Marcassoli	5	5.6.1.2	Technical		Specify that this para. is not applicable on stop check valve	Specify that this para. is not applicable on stop check valve	Not accepted. This para. Defines the requirement as for a globe valve, not a stop check.
	API Contractor	5	5.6.1.2		The means of disc-to-stem retention shall be of a design that allows the disc to align with the valve seat.			Revised as shown below: Changed paragraph number to 5.6.2 Revised paragraph as: The globe valve disc-to-stem retention (except stop-check valves) shall be such that the disc cannot become detached from the stem as a result of flow-induced vibrations or attached piping movement while the valve is in service. The disc to-stem retention shall be of a design that allows the disc to align with the valve seat.
	API Contractor	5	5.6.2		The disc shall be of a design to accommodate proper seating.			Agreed to delete this paragraph
28	Davide Marcassoli	5	5.6.3	Technical		Specify how Body guides can be, integral casted or welded ?	Specify how Body guides can be, integral casted or welded ?	Not accepted. The method of execution of the body guides will be left to the manufacturer.

29	Davide Marcassoli	5	5.6.4	Technical		Specify that disc to be minimum same material of the body	Specify that disc to be minimum same material of the body	Already covered in 6.2.3 & Table 5
	API Contractor	5	5.6.5		A hardened wear pad may be provided between the disc and stem to prevent wear and galling. The wear pad may be either a separate thrust plate or an integrally welded pad.			No changes were made as this is useful guidance for manufacturers.
	Wojciech Zmudzinski	5.6	5.6.6	Technical		Add the following to ensure flow direction and pressure differential orientation do not impact the design of the valve: "Normal flow direction is with flow beneath the disc, however valves shall be able to operate with full differential pressure applied above the disc."	Add: "Normal flow direction is with flow beneath the disc, however valves shall be able to operate with full differential pressure applied above the disc."	Agree in principle. This has been addressed in para. 5.8.11 but requires the purchaser to specify when the valve will be able to operate with pressure applied over the disc.
	API Contractor	5	5.7.1		The yoke may be either an integral part of the bonnet or a separate part.			Revised as shown below: The yoke shall retain the yoke bushing for rising and rotating stem valves or the stem nut for nonrotating rising stem globe valves. The yoke can be either an integral part of the bonnet or a separate component.
	Masayuki Ono	5.8	5.8.1				Note that the stem strength shall be considered when calculating the maximum input force from the handwheel and gear box (if equipped) in accordance with MSS SP-91 or in accordance with maximum rim pull when specified by the purchaser, <u>whichever is greater.</u> "	Agree in principal. Section 8 has been revised in structure as well as updated stem strength requirements per the intent of this comment. Handwheel sizing was relocated to section 5.11.

	API Contractor	5	5.8.1		However, the major diameter of the stem thread may be reduced, at the manufacturer's option, by no more than 1.6 mm (0.06 in.). [...] The actual stem diameter shall take into account the valve design details and the stem material strength characteristics. Note that the stem strength shall be considered when calculating the maximum input force from the handwheel and gear box (if equipped) in accordance with MSS SP-91 or in accordance with maximum rim pull when specified by the purchaser.			Revised Section 5.8.1 for clarity
	API Contractor	5	5.8.1 0		The stem-to-handwheel attachment shall be through a tapered square interface or another means of equivalent strength. A threaded extension shall be provided at the top of the stem for engaging a handwheel retainer nut. The stem-nut-to-handwheel attachment, where provided, shall be through a hexagonal interface, a round interface having a keyway or another means of equivalent strength .	Unauditable due to "equivalent" language.		Revised for clarity and it is now 5.8.14
	API Contractor	5	5.8.1 1		The stem shall be of sufficient length to ensure that the handwheel stands clear of the yoke bushing or stem nut when the valve is in the "worn closed" position and shall have adequate hand clearance between the handwheel and any part of the yoke .	Unauditable due to "stands clear", "worn closed", "adequate".		Revised for clarity and it is now 5.8.15
	API Contractor	5	5.8.1 2		—This requirement for nonrotating rising stems with nonrising handwheels is optional if another method to determine the disc position in both the open and closed positions is provided.			Revised for clarity and it is now 5.8.16

30	Masayuki Ono	5	5.8.1 3	Editorial		It is unclear the applicable sizes and pressure classes for the hammer-blow handwheel options referred to "DN 150 thru 300 (NPS 6 thru 12) Class 600 and higher valves". The following is example of potential queries:- Is there any background to restrict the use of hammer-blow handwheel particularly for the size ranges (NPS 6 thru 12)?- Is this option prohibited for DN 350 (NPS 14) of ASME class 600 valves?- Are the ball or roller bearings mandatory for the valves smaller than DN150 (NPS 6) and larger than DN 350 (NPS 14) of ASME class 600 valves?- Is the same size range applicable to up to ASME class 2500?	Suggested to re-word for more clarity.	Paragraph updated for clarity. Statement on hammer blow handwheel was deleted as it is covered in 5.11.1.
	API Contractor	5	5.8.1 3		Valves DN $\geq$ 150 (NPS $\geq$ 6) with pressure class $\geq$ 600, shall be furnished with stem nuts having ball or roller bearings. Use of a hammer-blow handwheel on DN 150 thru 300 (NPS 6 thru 12) Class 600 and higher valves is permitted as an option to the use of bearings .	Potential conflict with "option requirement". Consider rewording to remove conflict by allowing both possibilities. (either/or text)		Revised for clarity and it is now 5.8.17
	API Contractor	5	5.8.1 4		For rotating stem nut for nonrotating stem designs, consideration shall be given to chamfering or radiusing stem nut-bearing surfaces to minimize stress concentration.			Paragraph deleted
	API Contractor	5	5.8.2		Stems shall have a disc attachment means at one end and an external trapezoidal style thread form at the other. A yoke bushing on rising and rotating stems or a stem nut on nonrotating rising stems shall be provided.	See comment on 5.6.1		Revised paragraph numbering for 5.8.2 to remove numbered subsection...it is now 5.8.5
	API Contractor	5	5.8.2. 1		The yoke bushing shall be threaded internally to engage the stem, and it shall be threaded or otherwise suitably fitted into the yoke.			Revised paragraph number 5.8.6 and clarified the first sentence

	API Contractor	5	5.8.6		The stem-to-disc connection (except for stop-check valves) shall be designed to prevent disengagement of the stem from the disc in any position of the disc or orientation of the valve.	Unauditable due to design "intentions".		The paragraph was revised as follows: The stem-to-disc connection (except for stop-check valves) shall prevent disengagement of the stem from the disc in any position of the disc or orientation of the valve.
31	Davide Marcassoli	5	5.8.7	Technical		introduce the possibility to use a Double stage obturator to reduce load on stem /disc connection during opening of the valve against the full rate pressure with flow over the disc	introduce the possibility to use a Double stage obturator to reduce load on stem /disc connection during opening of the valve against the full rate pressure with flow over the disc	Paragraph is now 5.8.11 and it was revised to clarify the open and close with full rated pressure over and under the disc.
	API Contractor	5	5.8.7		The stem, yoke bushing/stem nut, disc connection, and bonnet shall be designed to withstand the closing of the valve against the full rated pressure under the disc and to withstand the opening of the valve against the full rated pressure with flow over the disc.	Unauditable due to design "intentions".		Revised paragraph for clarity. It is now 5.8.11
	API Contractor	5	5.8.8		The one-piece stem shall include a conical or spherical raised surface that seats against the bonnet backseat when the valve is at its full open position. Alternatively, the backseat may be integral to the disc retainer .	Potential conflict with "alternative requirement". Consider rewording to remove conflict by allowing both possibilities. (either/or text)		Revised for clarity and it is now 5.8.12
	API Contractor	5	5.9.3		$d_n + 2w + y$	Per API Style guide, equations shall be numbered and referenced in the text.		Revised to follow the API Style Guide
	API Contractor	5	5.9.3		See Table 6 for the required values .	The "see" language is not normative. Consider another statement that requires the clearance factor to be selected from Table 6.		Revised to follow the API Style Guide
	Wojciech Zmudzinski	5.9	5.9.4	Technical		Add the following to ensure split glands are not allowed: "Vertically split glands shall not be used."	Add: "Vertically split glands shall not be used."	Agree. Para. 5.9.4 revised to require a one piece gland.

	Wojciech Zmudzinski	5.9	5.9.4	Technical		Add the following to ensure packing can be accessed without operator removal: "Adjustment of stem packing shall be achieved without removing the actuator or gearbox."	Add: "Adjustment of stem packing shall be achieved without removing the actuator or gearbox."	Agree. Added para. 5.9.8 to address this requirement.
32	Michael Kupin	5.9.5	5.9.5	Technical		Consider adding: "Packing gland assembly shall have adequate strength to transmit load without permanent deformation under required packing load." Mirroring API-600.	Add sentence	Agree - added in 5.9.4
	API Contractor	5	5.9.5		The clearance between the packing box bore (inside diameter) and the outside diameter of the gland and the spacer ring (see Figure B.1) shall be nominally less than the diametrical clearance between the inside diameter of the gland and the stem diameter. The clearance between the spacer ring and the stem shall be sufficient to prevent galling .	Unauditable due to "nominally" and "sufficient"		Revised the paragraph for clarity. See 5.9.6
33	Ayman Cheta	6.2	6.2.1 c)	Technical		The entire disc is part of the trim, not just the seating surface.	Delete "seating surface"	TF does not agree as it is addressed in paragraph 6.1 & Table 5.
34	Masayuki Ono		6.2.2, e), Table 8	Technical		The requirement restricts the acceptable trim numbers in Table 8 of ASME class 900 and higher-rated valves.	Suggested to add a note "This trim number is not permitted for ASME class 900 and higher-rated valves." for the trim numbers not specifying hardfacing of both seating surfaces (e.g., Trim number 12).	Added connection reference in note e of paragraph 6.2.2. Suggest adding the following note q to trim table 6: q. This trim shall not be used for Class 900 and higher per paragraph 6.2.2.e. Note: Mani, ensure the note added is consistent with API 600 trim tables, if applicable to API 600.

	Wojciech Zmudzinski	6.2.2	6.2.2.f)	Technical		Hardness differential between seating surfaces shall be 50 HB minimum (including stainless steel valves), unless both seating surfaces are Stellite or hardfaced. Seat shall be the harder material.	Add new sub-paragraph 6.2.2.f): "Hardness differential between seating surfaces shall be 50 HB minimum (including stainless steel valves), unless both seating surfaces are Stellite or hardfaced. Seat shall be the harder material."	Do not agree. This is covered in Table 6 under note i.
35	Masayuki Ono		9.1.1 and 9.1.2	Technical		"Austenitic stainless steel valves" seems to be incomplete and other materials are also applicable to the same requirements.	Suggested to replace "austenitic stainless steel valves" with any of the following:- "The Group 2 and Group 3 material shells"- "The shells made of Group 2 and Group 3 materials"- "The valve parts made of Group 2 and Group 3 materials"	Agree
36	Masayuki Ono		9.2.1	Technical		It is better to use "gasket contact surfaces" instead of "gasket surfaces".	Suggested to replace "gasket surfaces" with "gasket contact surfaces".	Agree
	Wojciech Zmudzinski	Table 7	Bolting: gland and yoke	Technical		Gland and yoke bolting of austenitic stainless steel and corrosion resistant alloy steel valves shall be of comparable corrosion resistance to the valve body.	Add text in red: "Bolting material at least equal to ASTM A307—Grade B. For austenitic stainless steel and corrosion resistant alloy steel valves be of comparable corrosion resistance to the valve body."	Agree. Will amend Table 5 to require gland and yoke bolting to be of at least equal in corrosion resistance to the valve body.

	Wojciech Zmudzinski	5.11.5	first bullet	Technical		Add "or gear input shaft" to the sentence in the first bullet, as follows: "For chainwheel operation, the dimension from the centerline of the valve stem or gear input shaft to the bottom of the chain loop."	Add text in red: "For chainwheel operation, the dimension from the centerline of the valve stem or gear input shaft to the bottom of the chain loop."	Agreed. Amended para. 5.11.5 first bullet to clarify this requirement.
37	Masayuki Ono	General	General	Editorial		A circle marking stranding for degree (of temperature) seems to be double (2 circles), e.g., Table 7.	Suggested to correct.	Noted and will be addressed.
	Wojciech Zmudzinski	Table 7	Gland	Technical		Packing gland for carbon steel body valves it shall be type 316 stainless steel.	Add text in red: "Material having a corrosion resistance at least equal to that of the body material and with melting point above 955 °C (1750 °F). For carbon steel body valves it shall be type 316 stainless steel. "	Partially agree. Clarified to match the material of the stem.
	Wojciech Zmudzinski	Table 7	Gland flange	Technical		Gland flange shall be from the same material group in ASME B16.34 as the body or bonnet."	Add text in red: "Austenitic stainless steel or same material group in ASME B16.34 nominal chemical composition as the body or bonnet. "	Do not agree. This is already covered in Table 5 by the requirements of body.
	Wojciech Zmudzinski	Table 7	Pipe plugs	Technical		Welded plugs shall be of a material that has the same P-group as the valve body, as defined in ASME IX.	Add text in red: "Nominal composition shall be the same as the shell material. Welded plugs shall of same P group material as the valve body, as defined in ASME IX. Cast iron plugs shall not be used.	Agree.

	Wojciech Zmudzinski	Table 7	Pipe plugs	Technical		Removable plugs shall be of a corrosion resistant material.	Add text in red: "Nominal composition shall be the same as the shell material. Cast iron plugs shall not be used. Removable plugs shall be of a corrosion resistant material. "	Do not agree. The threads on the body are still susceptible to corrosion and this introduces the potential of galvanic corrosion.
	Wojciech Zmudzinski	Table 7	Stem nut or yoke bushing	Technical		If the stem nut (i.e., yoke bush) is held in place by a retaining nut, this shall be manufactured in steel.	Add text in red: "Austenitic ductile iron or copper alloy with melting point above 955 °C (1750 °F). Steel, if stem nut is held in place by a retaining nut. "	Added 13Cr Steel to match this with API 602.
38	Davide Marcassoli		Table 5.2	Technical		Where the minimum thickness on the bonnet shall be measured ?	Review if standard is clear regarding where the measurement is taken	Table 2 has been deleted. Revise paragraph 5.2 to match API 600 and reference bonnet thickness requirements to ASME B16.34.
39	Davide Marcassoli		Table 5.6	Technical		This table puts packing manufacturer on trouble to pass API 622 test, dimension shall be as for manufacturer std that are able to pass API 622 test	Evaluate table with TF to establish disposition.	Revised Table: Added "Maximum" y factor to align with API 600. Also revised paragraph 5.9.3 to specify "Maximum" vs "Nominal" Bore...also aligns with API 600.
40	Masayuki Ono		Table 6.7	Technical		The requirements for trim number of bypass valves is not specified.	Suggested to add ", and the trim material of bypass valves shall be equivalent to that of the primary valve." at the end of sentence.	Agree to revise accordingly. Change to Nominal composition of valve shell and trim material shall be the same as the primary valve.
41	Davide Marcassoli		Table 6.78	Technical		Trim 12 & 14, on seat surface remove reference to trim 5, 5 A and replace with Co-Cr-A	Trim 12 & 14, on seat surface remove reference to trim 5, 5 A and replace with Co-Cr-A	Trim tables have been updated to align with API 600.
42	Michael Kupin	5.14	title	General		"Fugitive Emissions" is a service not a design reference. Section refers to testing and compliance to API-624. Not really to the design of the valve.	Change title to "Fugitive Emissions Service Requirement"	Agree in principle. Revised the title by deleting the word "Design".

	Wojciech Zmudzinski	Table 7	Yoke, separate	Technical		Yoke shall be from the same material group in ASME B16.34 as the bonnet."	Add text in red: "Carbon steel, stainless steel, or same material group in ASME B16.34 as the bonnet.	Do not agree. This is already covered in Table 5 by the requirements of body / bonnet.
	API Contractor	2			ASME B31.3, Process Piping ASME B31T, Standard Toughness Requirements for Piping	These two standards are mentioned in section 4.4. The requirement is assigned to the user. Since requirements cannot be put on a user, these standards belong in the bibliography.		Paragraph 4.4 has been revised. Reference to ASME B31T is deleted.
	API Contractor	2			NACE MR 0103, Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments	Annex A 2 r) refers to this standard. The e.g. reference is not sufficient to make it normative. It belongs in the Bibliography.		Addressed: Added section 10 Special Services and this reference is normative.
	API Contractor	Table 3			b Except when materials being welded are L-Grades or stabilized grades.	The use of footnote a here is confusing. Consider another row to indicate the requirements for L-grades or stabilized grades of austenitic steels and remove footnote b.		Table 3 for Post Weld Heat Treatment of Flange to body welds has been deleted. Reference has been made to ASME B31.3 for Heat Treatment requirements.
	API Contractor	Table 4			NOTE Unlisted seat diameter shall be in agreement between the manufacturer and the purchaser .	NOTEs cannot contain shall, should, or may statements. See 6.7.1 in API Style Guide.		Note revised to remove shall statement.