

<b>Ballot</b>	<b>6830</b>	<b>Name</b>	<b>API 619, 6th Edition - REBALLOT</b>		<b>Report Date:</b>	9/19/2025	<b>Closing Date</b>	10/29/2025
		<b>Proposal</b>	This is a rebalot of API 619, 6th edition (Rotary-Type Positive-Displacement Compressors). This ballot will restart the balloting process; therefore, votes on previous ballots do not count. Both a clean and marked-up version are included to assist with your review. Also included are the comment resolutions from ballot 6664. Be sure to examine the document carefully and thoroughly, also checking for accuracy with any cited references, cross references, descriptions, terminology, and values. All formatting issues will be addressed by the API editors.					
<b>Sort Key</b>	<b>Name</b>	<b>Vote</b>	<b>Clause Subclause Number</b>	<b>Paragraph</b>	<b>Type of Comments</b>	<b>Comments</b>	<b>Proposed Change</b>	<b>Comment Resolution</b>
277	Albert Kuo	NonVoter	Table of Contents	Annex J	Editorial	Description does not line up with heading		Noted. TOC was only provided as a guide. Will be created by editors prior to publication.
4	Juan Suarez	Affirmative WithComment	1	Scope	Technical	The note indicates that standard air compressors are covered by ISO-10440-2, but this standard refers right back to API 619 2nd edition.	Suggest removing the note.	Not Accepted. ISO was based on, but is not identical to API 619 2nd ed.
52	Juan Suarez	Affirmative WithComment	2	Normative	Editorial	Noticed you deleted "Standard" from document ABMA 7	ABMA 7 not found in document - see par. 6.9.2.4.b where "ABMA Standard 7" is still used.	Noted. It's listed as ABMA 7 on their website. Updated 6.9.2.4.
53	Juan Suarez	Affirmative WithComment	2	Normative	Editorial	Noticed you deleted "Standard" from document ABMA 9	ABMA Standard 9 is only found in Table 4. As indicated in the SP, the ABMA and ISO standards are equivalent with respect to the referenced calculations (L10). We do not see a conflict in having the ABMA document as the base specification. ISO 281 is a recognized international standard and if API 619 TF prefers to use it, that is their prerogative.	Noted.
54	Juan Suarez	Affirmative WithComment	2	Normative	Editorial	ASME B16.1 Wrong title.	Use: "Gray Iron Pipe Flanges and Flanged Fittings Classes 25, 125, and 250"	Accepted

55	Juan Suarez	Affirmative WithComment	2	Normative	Editorial	footnotes with standards organization addresses missing IEC, ISO, ISPM	add these footnotes.	Noted. To be added by the API editors.
56	Juan Suarez	Affirmative WithComment	2	Normative	Editorial	ISPM Pub. No. 15 - March 2002, FAO, Rome should be modified	Suggest "ISPM 15" and title is "Regulation of Wood Packaging Material in International Trade"Footnote: "ISPM International Plant Protection Convention (IPPC), Viale delle Terme di Caracalla, 00100 Rome, Italy."	Accepted. API editors to add footnote.
63	Bob Eisenman	Affirmative WithComment	3.1.1	3.1.1	General	Correct terms for a VFD is either ASD = Adjustable Speed Drive or VFD and not AFD as stated in the Terms and Definitions section.	Change AFD - adjustable frequency drive to:ASD = adjustavble speed drive	Not accepted. Definition is from SP. VFD and AFD are interchangeable. ASD is a separate term.
57	Juan Suarez	Affirmative WithComment	3.1.8	Deleted 3.1.8	Editorial	The definition for buffer gas has been deleted bu the term still appears on data sheets.	either keep definition or update as required. Or change term on data sheets.Note for TF: on the data sheets where buffer gas is used a reference is made to Paragraph 5.6.2.1 which appears to be in error also.	Accepted. Check data sheets and remove.
64	Keith King	Affirmative WithComment	3.1.14	3.1.14	Technical	It seems that the definition is just the first sentence. The 2nd and third sentences are simply descriptive information that should be either in notes or in section 6	Delete 2nd and 3rd sentences and retain old note 2 as there is no rotor to rotor contact in dry screw compressors.	Accepted. Definition to be reformatted like 3.1.37.
58	Juan Suarez	Affirmative WithComment	3.1.15	3.1.15	Technical	the term "union" not correct, I think.	Suggest: "a device designed to absorb dimensional changes, such as those caused by thermal expansion, contraction, or other movements, in a pipe or duct. Normally installed on main process gas flanges."	Noted. TF decided to remove definition.

65	Keith King	Affirmative WithCom ment	3.1.15	3.1.15	Technical	suggest rewording for clarity	Flexible piping assembly designed to absorb temperature induced expansion and contraction of the piping.	Noted. TF decided to remove definition.
66	Mike Elliyoun	NonVoter	3.1.20	n/a	Technical	It doesn't make sense that the equipment chosen for a particular application should then determine the type of application. It's the other way around. The type of application determines what equipment is chosen. Whether the equipment is spared or not should have no bearing on what we decide to call the application. Also, are the terms 'application' and 'service' interchangeable?	As suggested to the SP committee, remove 'spared or' as there are many special purpose applications which do require even installed spares	Not accepted. Using SP definition.
67	Mike Elliyoun	NonVoter	3.1.24	n/a	Editorial	The term being defined says 'volume flow' and definition says 'volumetric flow'.	For consistency, either change the title to 'volumetric' or the definition to 'volume'.	Noted. Referred to SP committee.
68	Mike Elliyoun	NonVoter	3.1.27	n/a	Technical	The definition is not complete or sufficient. There is scope for confusion with the definition used by pressure vessel codes, which is different. The MAWP of a pressure vessel may exceed the maximum design pressure, whereas the MAWP of a machine may not.	Add a NOTE: "The MAWP of a pressure casing may exceed the MAWP of the compressor as a whole."	Not accepted. Note is not needed. SP definition is sufficiently clear.
59	Juan Suarez	Affirmative WithCom ment	3.1.28	3.1.28	Editorial	should add MAWT under definition	use MAWT, as applicable in document	Accepted

69	Albert Kuo	NonVoter	3.1.39	Note	Editorial	Note got put into title of 3.1.40	Move note back with 3.1.39	Accepted
70	Bob Eisenman	Affirmative WithComment	3.1.39	3.1.39	Editorial	The Note from 3.1.39 is out of position and included after the text 3.1.40 so need to be moved and reformatted.	Reword to:"3.1.39 panel Enclosure used to mount, display, and protect gauges, switches, transmitters and other instruments.NOTE A gauge board is not a panel since it is not an enclosure3.1.40pocket-passing frequencyPPF Frequency at which the gas is discharged from the rotor lobes into the discharge port."	Accepted
60	Juan Suarez	Affirmative WithComment	3.1.40	3.1.40	Editorial	Noticed term is hyphenated here. But elsewhere and on data sheets it is not.	search and make use the term consistently: "settle-out"	Accepted
71	Mike Elliyoun	NonVoter	3.1.40	NOTE	Editorial	The note should be part of 3.1.39.	Remove '3.1.40' from the beginning	Accepted
61	Juan Suarez	Affirmative WithComment	3.1.40	3.1.40	Editorial	Noticed term is hyphenated here. But elsewhere and on data sheets it is not.	search and make use the term consistently: "pocket-passing frequency"	Accepted
72	Keith King	Affirmative WithComment	3.1.48	3.1.48	Technical	This definition seems to be defining a term with itself Rotary lobe blower is a strait lobe rotary blower. Can TF find a better definition? The remainder of the clause "uses no liquid for sealing the rotor clearances and driving the non-coupled rotor" is really not part of definition, move to the notes	TF to clarify definition. And NoteNOTE: Liquid is not used for sealing the rotor clearances or driving the non-coupled rotor.	Accepted in principle. Incorporate the second part of the definition in the notes.

73	Mike Elliyoun	NonVoter	3.1.53	n/a	Editorial	Change 'sealing media'	Change to 'sealing medium'	Accepted
74	Mike Elliyoun	NonVoter	3.1.55	n/a	Technical	The bearing housing does not always see atmospheric pressure, e.g. high pressure recirculator machines like 150 psi	Remove 'atmospheric'	Noted. This term is not used in the standard and will be removed.
75	Mike Elliyoun	NonVoter	3.1.57	n/a	Technical	The definition is not sufficient	As suggested to the SP committee, add a NOTE: "Shutdown values must not exceed maximum allowable values."	Accepted in principle. Added definition for "shutdown set point" per SP recommendation. See comment 62.
62	Juan Suarez	Affirmative WithCom ment	3.1.5X	3.1.5X	Technical	Include definition from SP for "shutdown set point"	Suggest adding definition for "shutdown set point - preset value of a measured parameter at which automatic or manual shutdown of the system or equipment is required"this can be used in respective "Alarms and Shutdowns" for sections 10, 11, and 12 perhaps.	Accepted.
274	Mike Elliyoun	NonVoter	3.1.67	3.1.67	Technical	Turndown has been used multiple time and not defined, similar to similar to 3.1.68 , API 617 9th edition - Turndown needs to be defined	Suggested definition: Turndown: The ratio of maximum to minimum flow at which the equipment can operate stably and meet performance requirements.	Accepted in principle. Include the following definition: Operation at a reduced capacity which can be expressed as a ratio of rated to minimum flow or as a percentage of the rated flow.
76	Juan Suarez	Affirmative WithCom ment	4	Dimension s and Units	Editorial	Section 4 should be General and 4.1 is Unit Responsibility.	Update section. Dimensions and Units should be Section 5.1	Accepted

77	Juan Suarez	Affirmative WithCom ment	5	Requireme nts	Editorial	Sections mis-numbered	Section 5.1 should be Units of Measure Section 5.2 should be Statutory Requirements Section 5.3 should be Documentation Requirements	Accepted
78	Juan Suarez	Affirmative WithCom ment	6.1.1.1	6.1.1.1	Editorial	Update (SP next edition)	Update: "Only equipment that is field proven as defined by the purchaser is acceptable."	Accepted.
101	Bob Eisenman	Affirmative WithCom ment	6.1.1.1	NOTE	Editorial	Reference is incorrectly cited as API 691 in the NOTE	Change reference to API RP 691	Not accepted. It is referenced correctly. Formatted all other reference to 691 the same.
102	kenji Ohki	NonVoter	6.1.1.1	Note	Editorial	API 691	to be API RP 691	Not accepted. It is referenced correctly. Formatted all other reference to 691 the same.
79	Juan Suarez	Affirmative WithCom ment	6.1.1.2	6.1.1.2	Editorial	Update (SP next edition)	Update: "If specified, the vendor shall provide the documentation to demonstrate that all equipment and auxiliaries proposed qualify as field proven. "	Accepted. Adopted current SP wording.
80	Juan Suarez	Affirmative WithCom ment	6.1.1.7	6.1.1.7	Editorial	Update (SP next edition)	Update: "[●] The purchaser shall specify if equipment should be supplied in accordance with API RP 691."	Accepted. Adopted current SP wording.
81	Juan Suarez	Affirmative WithCom ment	6.1.1.7.1	6.1.1.7.1	Editorial	Update (SP next edition). Delete this paragraph. The previous paragraph 6.1.1.7 is already bulleted and invokes purchaser decision. So this is redundant and purchaser need not specify TRL.	Delete this paragraph: 6.1.1.7.1 [●] The purchaser shall specify the technology readiness level (TRL) for qualified equipment.	Accepted

82	Juan Suarez	Affirmative WithCom ment	6.1.1.7.2	6.1.1.7.2	Editorial	Update (SP next edition).	Make this paragraph 6.1.1.8. It follows that if purchaser invokes API RP 691 then the vendor needs to identify the components of interest and their readiness level.	Accepted
103	Keith King	Affirmative WithCom ment	6.1.3.4	6.1.3.4	Editorial	It seems that the requirement for purchaser to specify the maximum allowable sound pressure level is missing.	6.1.3.4 {•} The Purchaser shall specify the maximum allowable sound pressure level.6.1.3.4.1 The equipment furnished by the vendor shall conform to the maximum allowable sound pressure level specified6.1.3.4.2 The vendor shall provide expected values for maximum sound pressure level per octave band for the equipment.	Accepted.
83	Juan Suarez	Affirmative WithCom ment	6.1.5.2	6.1.5.2	Editorial	wrong referenced paragraph?	Believe that (see 6.1.5.5) ehihc does not exist should be (6.1.5.4)	Accepted
104	Keith King	Affirmative WithCom ment	6.1.5.2	6.1.5.2	Editorial	Reference to trip speed should be 6.1.5.4 rather than 6.1.5.5	Reference 6.1.5.4	Accepted
106	Mike Elliyoun	NonVoter	6.1.5.2	n/a	Editorial	6.1.5.5 doesn't exist. Presumably 6.1.5.4 is intended.	Change '(see 6.1.5.5)' to '(see 6.1.5.4)'	Accepted

105	Kevin Kisor	Affirmative WithCom ment	6.1.5.2	6.1.5.2	Technical	Add a note in the sequence:	Note: NOTE. This requirement concerns the mechanical integrity of the main components. It is understood that the driver may not have sufficient power to operate during the worst condition of combination of the above requirements, which could result in excessive overdesign of train components relative to normal and rated conditions.	Accepted in principle. Add: NOTE This requirement concerns the mechanical integrity of the equipment. The specified driver can have insufficient power to operate at these conditions.
84	Juan Suarez	Affirmative WithCom ment	6.1.5.3	6.1.5.3	Editorial	variable speed	for consistency use "variable-speed"	Accepted
85	Juan Suarez	Affirmative WithCom ment	6.2.2	6.2.2	Editorial	first use of maximum allowable working temperature.	Add "(MAWT)" and then use also in Par. 6.4.4.7	Accepted
1	Kevin Kisor	Affirmative WithCom ment	6.2.4	6.2.4	Technical	Add a note:	NOTE : The corrosion allowance corresponds to a mechanical requirement does not require the machine to be able to operate with 3 mm internal clearance.	Not accepted. TF did not consider suggested note is needed.
125	Mike Elliyoun	NonVoter	6.2.4	n/a	Technical	3 mm corrosion allowance for internal of compressors are not possible	Add a NOTE as suggested before and was accepted per below: "NOTE The corrosion allowance requirement does not require that machine be able to operate with 3 mm internal clearance."	Not accepted. TF did not consider suggested note is needed.



120	Keith King	Affirmative WithCom ment	6.2.10	6.2.10	Technical	The MAWP should be at least equal to the PSV set pressure regardless of whether the machine is to be designed to operate at normal suction pressure and discharge equal to PSV or not. Therefore the reference to 6.1.3.1 does not add anything and may add confusion since it could lead one to believe the MAWP could be lower if this clause were not invoked.	Remove (See 6.1.3.1) from the end of the clause.	Accepted.
121	Mike Elliyoun	NonVoter	6.2.11	n/a	Technical	Comments: "or purchaser-approved alloy steel" adds nothing, since alloy steel is already steel. The wording does not allow for nickel-based super alloys, which are not steels.	Suggested Change: Delete the second occurrence of 'steel' as follows: "Casings shall be made of steel or purchaser-approved alloy if the gas is flammable or toxic."	Accepted.
122	Mike Elliyoun	NonVoter	6.2.11	n/a	Technical	We should define the minimum criteria for material selection for flammable or toxic gases.	Add a NOTE: "The following mechanical properties represent the minimum requirements for acceptable materials used in compressor components: • Ultimate Tensile Strength (UTS): ≥ 65 ksi (450 MPa) • 0.2% Yield Strength: ≥ 30 ksi (205 MPa) • Elongation (2-inch gauge length) at fracture: ≥ 20% These criteria ensure adequate strength and toughness for reliable operation under typical process and mechanical loading conditions."	Not accepted. Refer to Annex F for suggested Materials.

123	Bob Eisenman	Affirmative WithComment	6.2.14	6.2.14, a), and b)	Editorial	The 3 requirements in 6.2.14 need to be rewritten to be standalone. Currently clauses 6.2.14.a) and 6.2.14.b) do not have sufficient context to be fully understood.	Rewrite 6.2.14 as 3 standalone requirements as follows: 6.2.14 The main joint of axially split casings shall use a metal-to-metal joint that maintains the pressure integrity by bolting. 6.2.15 The main joint of axially split casings shall be sealed with a compound that is compatible with the specified service. 6.2.16 The main joint of axially split casings shall not use gaskets (including string-type).	Accepted in principle. Rewrote a) and b) as 6.2.14.1 and 6.2.14.2, respectively.
124	Keith King	Affirmative WithComment	6.2.27	6.2.27	Editorial	These appear to be two separate subjects with shall statements. I suggest splitting the paragraph	6.2.27 [●] If specified, the equipment feet shall be provided with vertical jackscrews. 6.2.28 [●] If specified, the equipment feet shall be drilled with pilot holes that are accessible for use in final doweling.	Accepted.
290	Tim Grady	NonVoter	6.2.18 Pressure Casings	6.2.18 and 6.5.4	Editorial	These are the same requirement and almost exactly the same statement.	Delete 6.5.4 since 6.2.18 is more detailed.	Accepted. Deleted 6.5.4.
126	Albert Kuo	NonVoter	6.4.1.1	Note	Editorial	Colon after Note	Remove :	Accepted
127	Keith King	Affirmative WithComment	6.4.1.5 Note	6.4.1.5 Note	Editorial	this note does not appear to be related to the paragraph 6.4.1.5. Suggest move to dry gas seal section.	Suggest move to 6.7.4.5.4	Accepted
128	Keith King	Affirmative WithComment	6.4.2	6.4.2	Editorial	Rewrite Rearrange for clarity, correct references where applicable, etc.	See suggested rearrangement (if I can figure how to attach it)	Noted. Rearrangement was not received.

86	Juan Suarez	Affirmative WithCom ment	6.4.2.6	6.4.2.6	Technical	only ductile iron indicated. Elsewhere in the document you allow gray cast iron for some limited non-hazardous applications	Modify as follows: Gray cast and ductile iron flanges shall be flat-faced and conform to the dimensional requirements of ASME B16.1 or ASME B16.42 or ISO 7005-2 or EN 1092-2, as applicable. "Ordelete reference to ASME B16.1 which is for gray cast iron: "Ductile iron flanges shall be flat-faced and conform to the dimensional requirements of ASME B16.42 or ISO 7005-2 or EN 1092-2 as applicable."	Accepted in principle. Revert to 5th edition wording, use "Cast iron flanges ..."
129	Kevin Kisor	Affirmative WithCom ment	6.4.3.1	6.4.3.1	Technical	Quote:"A casing drain shall be provided.NOTE Process connections located at a low point in the casing can serve the purpose of a casing drain."- UnquoteFor dry screw compressors a direct drain connection in the casing, would considerably reduce volumetric efficiency. Since there is no points of liquid accumulation in the casing-. the draining of the casing is performed in the lowest point in the discharge piping.Therefore kindly update the note as following:	NOTE If the nozzle orientation allows liquid to drain without obstructions in to the process piping, the drain can be provided at a low point of the process piping.	Accepted in principle. TF to discuss
87	Juan Suarez	Affirmative WithCom ment	6.4.4.7	6.4.4.7	Editorial	maximum allowable working temperature	use MAWT	Accepted
291	Tim Grady	NonVoter	6.5.5 External Forces and Moments	6.5.5	Editorial	If deleting 6.5.4, change reference to 6.2.18	change reference to 6.2.18	Accepted

2	Kevin Kisor	Affirmative WithCom ment	6.5.8	6.5.8	Technical	As a manufacturer, we do not agree with the statement that "general industry practice does not accept expansion joint for dry screw compressors".Expansion joints are succesfully applied in cases, where necessary in flammable or toxic services, which are mostly the cases for dry screw compressors.Furthermore the note seems contradictory on allowing rotary blowers, while excluding dry screw compressors for this use.Therefore, kindly rephrase following. In Chapter 6.5.2 expansion joints are also mentioned as possible measures against high nozzles loads. We have expansion joints also in operation at several refineries around the globe, with proven successful operation.	Please add as per 5th Edition:"Expansion joints should not be used in flammable or toxic service unless specifically approved by the purchaser.And append the following note:(which is applicable for all types of compressor in operation with flammable or toxic fluids):"Note: In case expansion joints are considered, special care has to be taken in the design in order to ensure and adequate separation of natural frequency to pocket passing frequency or other excitation mechanisms."	Accepted in principle. Deleted 6.5.8. Deleted "to limit piping forces and moments is not recommended for screw compressors and" from 6.5.5. Moved Expansion Joints requirements from Section 12 to 7.8.4.
88	Juan Suarez	Affirmative WithCom ment	6.6	6.6	Technical	no consideration in the strandard for rotor cooling which some vendors use	Add new paragraph: 6.x.x The vendor shall define any requirements for rotor cooling (e.g., using oil injection through the center of the rotor).	Not accepted. No longer industry practice and outside 90/10.

89	Juan Suarez	Affirmative WithCom ment	6.6.6	6.6.6	Technical	Additonal requiremnts found in ABMA standards that make reference to the ISO standard.	SPTF Update to this paragraph: "Shaft shoulders against which rolling element bearings seat shall have fillets conforming to ABMA 20 or ABMA 19.1, as applicable and ISO 582. If inch series tapered roller bearings are used, the fillets shall be in accordance with ABMA 19.2 ." The Note can be deleted.	Accepted.
130	Keith King	Affirmative WithCom ment	6.6.10.2 Note	6.6.10.2 Note	Technical	similar to 6.6.6, what is the intent of this note if the AGMA standard is not included in the specification	see comment to 6.6.6	Accepted. Delete note and add to clause "or AGMA ..." Add AGMA 2015-1-A01 to the references.
292	Tim Grady	NonVoter	6.6.10.7 Timing Gears	6.6.10.7	Technical	The gas is not described. Is this seal gas, process gas, something else? Recommend adding the descriptor conveyed before gas.	Reword to: 6.6.10.7 [●] If specified, the gear enclosing chamber shall not be subject to contact with the conveyed gas.	Accepted in principle. Change "gas" to "process gas".
293	Tim Grady	NonVoter	6.7.1.1 Shaft Seals	6.7.1.1	Technical	Oxygen service does not cause oil dilution or condensation. Lubricating properties of the oil are reduced because special oil is required if elevated O2 content is present in the oil sump.	Delete "or oxygen"	Accepted in principle. Deleted the note.
131	Keith King	Affirmative WithCom ment	6.7.1.3	6.7.1.3	Technical	maybe I am missing something but this para allows the purchaser to specify an alternate sealing pressure. I am not finding the base conditions that this is the alternate to.	TF to clarify the intent of this paragraph.	Noted. TF decided to delete the clause

3	Kevin Kisor	Affirmative WithCom ment	6.7.3	6.7.3	Technical	Quote:"If either the process or seal-support fluid are hazardous, toxic, or flammable, an outer or secondary seal shall be provided in addition to the inner or primary seal to prevent leakage to the atmosphere or to the bearing housing. This outer or secondary seal shall be capable of acting as a backup seal should the inner or primary seal fail during operation"Comment: Oil cooled mechanical contact seals, for application in dry screw compressors, do not require a secondary barrier to separate the seal fluid to the oil lube oil, since the seal oil flowing outwards the seal towards oil tank is not contaminated. The use of this type of seal is common practice in Toxic and Flammable seivces, as well as Offshore Application.Therefore kindly add a note in the sequence as following:	"Note: Oil Cooled Mechanical seals for dry screw compressors do not require a separation seal barrier, since the sealing medium (oil) is the same as the lube oil.	Accepted in principle. Modified note added.
132	Bob Eisenman	Affirmative WithCom ment	6.7.4.2.4	6.7.4.2.4	Editorial	Is the hyphen in "-with" needed or is it a typo?	Delete the hyphen before "with".	Accepted.

133	Bob Eisenman	Affirmative WithComment	6.7.4.2.4	6.7.4.2.4	Editorial	The word "seals" is too general, it would be better to include a more specific descriptor so it is understood that it is clearance type seals that are referred to and not rely on the section header to provide that context.	Reword to:"6.7.4.2.4 Clearance seals may be operated with or without purge fluid.	Accepted.
90	Juan Suarez	Affirmative WithComment	6.7.4.2.6	Figure 3 Restrictive seal	Technical	Connection B indicates vent to atmosphere	Suggest this should be "vent to safe location" since windback laby is there to eliminate or minimize leak to atmosphere	Not accepted. A vent to safe location is still an atmospheric vent.
91	Juan Suarez	Affirmative WithComment	6.7.4.2.6	Figure 3 Restrictive seal	Technical	Item 8 spacer ring	Suggest: "spacer ring/lantern ring" which better implies there are holes for injection of a purge fluid.	Not accepted. Lantern ring is not commonly used term in the industry.
134	Bob Eisenman	Affirmative WithComment	6.7.4.3.2	6.7	Technical	Why are oil-free screw compressors not included in this requirement. Section 10 does not require that mechanical seals to conform to API 682 so the option should be available for users to select.Clause 6.7.4.3.6 does not make such an exclusion for the seal system so propose to follow same approach in this clause.	Reword to:"6.7.4.3.2 If specified, mechanical seals shall conform to API 682.	Not accepted. API 682 seals are not used on dry screw compressors.

135	Kevin Kisor	Affirmative WithCom ment	6.7.4.4	6.7.4.4	Technical	According to our understanding and that of seal suppliers, only non-contact mechanical seals are installed in dry screw compressors. According to the definition in API682 (3.1.56), the seal faces are designed in such a way that a sealing gap forms during operation. In this respect, the heading in 6.7.4.4 is incorrect and the "Contact" has to be removed. It is not clear if "Contact" should be used in the heading of 6.7.3.3 instead.	Delete "Contact" in the header and text of the section 6.7.4.4 or write in parenthesis, as done in the 5th Edition "Mechanical-(Contact-) Type Seals". One further suggestion to avoid misunderstanding would be to divide the seals under "Non-pressurized Mechanical (Contact) Seals, considering the current figure 4; and Pressurized Mechanical (Contact) Seals considering the figure 6 from the 5th Edition of API619.	Accepted in principle. Delete "contact" and replace with "wet". Added a definition for "wet mechanical seals". Agreed in principle to combine the sections.
136	Keith King	Affirmative WithCom ment	6.7.4.4	6.7.4.4	Technical	this entire new section seems to be general requirements for mechanical seals that belong in 6.7.4.3	move contents to 6.7.4.3	Accepted in principle to combine the sections.
294	Tim Grady	NonVoter	6.7.4.4 Shaft Seals	6.7.4.4	Technical	6.7.4.4 appears to duplicate 6.7.4.3 and to have been pulled in from the oil-flooded screw compressor section. Mechanical Seals and Mechanical Contact Seals should be the same section.	Delete 6.7.4.4.1, move 6.7.4.4.2, 6.7.4.4.3, and 6.7.4.4.4 to 6.7.4.3	Accepted in principle to combine the sections.
137	Bob Eisenman	Affirmative WithCom ment	6.7.4.4.1	6.7	Editorial	Typo in the clause "ttypical"	Correct typo in the clause. Should state "typical".	Accepted
138	Kevin Kisor	Affirmative WithCom ment	6.7.4.4.1- 6.7.4.4.4	6.7.4.4.1- 6.7.4.4.4	Technical	Consequential amendment from 6.7.4.4	delete "contact"	Accepted in principle. Use "wet" instead.



139	Kevin Kisor	Affirmative WithCom ment	6.7.4.5.4	6.7.4.5.4	Technical	As previously commented, for dry screw compressors (idependently of the size) it is practical to install dedicated drains to each seal cavity, which would result in 16 drains directly connected to the cavities. Due to the complexity of assembly this requirement is not feasible even for the largest machines with rotor diameter above 800mm. Therefore, please update the note excluding the reference to small machines.	Note: Depending on the amount of seal cavities and assessibility there may be insufficient space to install dedicated drain lines directly in the seal lines. In such cases, provisos for draining can be considered in the respective connecting piping to the the cavities or headers at low point, with better assessibility.	Accepted in principle. Delete "for small compressors" from the note.
92	Juan Suarez	Affirmative WithCom ment	6.8.3.1	6.8.3.1	Technical	Rotor balanced to G1.0 or less. Timing gears balanced to G2.5	In order to meet G1.0 for rotor the timing gears may also need to meet a tighter tolerance. Also note that later in paragrpah 6.8.3.7 there is a need to specifiy G1.0 again.	Not accepted. TF considers G2.5 sufficient for timing gears.
140	Bob Eisenman	Affirmative WithCom ment	6.8.3.1	6.8	Editorial	This clause has 2 requirements, one for the rotors and one for the timing gears. So propose to split into 2 separate requirements clauses.	Rewrite as 2 separate clauses: "6.8.3.1 Rotors shall be individually dynamically balanced to ISO 21940-11, grade G1.0 or less. 6.8.3.2 Timing gears shall be individually dynamically balanced to ISO 21940-11, grade G2.5 or less."	Accepted.
141	Albert Kuo	NonVoter	6.8.3.1	6.8.3.1	Technical	Rotors is ambiguous. Is bare shaft or other compoents mounted to the shaft included here?	Remove "individually" from first sentence. Consider other components mounted to the shaft.	Accepted. "Screw compressor rotors shall be dynamically" and Delete note.

93	Juan Suarez	Affirmative WithCom ment	6.8.3.7	6.8.3.7	Technical	Trying to follow logic. Start by balancing rotor to G1.0. Then timing gears to G2.5. Then assembly check balance with no specified limit.	define rotor versus assembled rotor. Add pass/fail criteria for assembly check balance.	Accepted in principle. Rotor assembly is optional to G1.0 or 4W/N.
296	Tim Grady	NonVoter	6.9 Bearings and Bearing Housings	Table 4	Editorial	dm is used in the table, but Dm is used for the note A definitions.	Replace Dm in the definitions with Dm from the table.	Accepted in principle. Use dm in both places, rather than Dm.
297	Tim Grady	NonVoter	6.9 Bearings and Bearing Housings	Table 4	Editorial	D is used twice in note A's definitions to describe both inner and outer diameter.	Replace the inner bearing diameter with a lower case 'd'	Accepted
298	Tim Grady	NonVoter	6.9 Bearings and Bearing Housings	Table 4	Technical	Directed jet lubrication is used for rotary lobe blowers. The note is incorrect and should be deleted.	Delete the superscript "c" on Directed Jet and the note "c Directed jet lubrication is not an option for rotary lobe blowers"	Accepted.
299	Tim Grady	NonVoter	6.9 Bearings and Bearing Housings	Table 4 Note 2	Technical	L1m can also be used for rotary lobe blowers. For example, it can differentiate between splash, circulating, and forced lube bearing life.	Delete "oil-flooded screw compressors" since L1m applies to any rolling element bearing compressor covered by this standard.	Accepted.
142	Albert Kuo	NonVoter	6.9.1.3	Table 4, Footnote a	Editorial	There are two "D" and symbols do not match column headings.	Use "Nd(subscript m)"	Accepted
276	Keith King	Affirmative WithCom ment	6.9.1.4	Table 4	Technical	Rolling element bearing life - refer to both ISO 281 and ABMA 9	Basic rating, L10 in accordance with AGMA 9 or ISO 281b of at least 50000 h .....	Accepted
143	Bob Eisenman	Affirmative WithCom ment	6.9.2.4	6.9	Editorial	Nested Shall	Revise clause	Accepted.
144	Bob Eisenman	Affirmative WithCom ment	6.9.2.6	6.9	Editorial	Nested Shall	revise clause	Accepted.

145	Caleb Friend	NonVoter	6.9.2.6 e)	6.9.2.6 e)	Technical	<p>This clause imposes an unnecessary restriction and introduces bias against a compressor design that has been proven to be both effective and reliable. The use of stacked (tandem) rolling element thrust bearings is a well-established method that is supported by design guidelines from major bearing manufacturers. Load capacity calculations for tandem bearing sets are well defined and have consistently proven reliable in real-world applications. Tandem sets of angular contact ball bearings are used in screw compressors by numerous manufacturers, and my company has successfully used this design in our largest screw compressors for decades. Note: it is critical that tandem mounted bearings be “universally ground” to ensure equal load sharing.</p>	Delete item e	Accepted in principle. Add "unless approved by the purchaser."
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300	Tim Grady	NonVoter	6.9.3.1 Hydrodynamic bearings	6.9.3.1. (all)	Technical	The net result of extensive inspection of hydrodynamic bearing machines may be more purchasers buying rolling element bearing machines. This likely has the opposite impact of the intent of this requirement. Since all of these tests and requirements are new to API 619, recommend making them bullet points and then part of the datasheet. Then the purchaser can choose to witness these, receive reports for the measurements, or just trust the bearing OEM as they do for rolling element bearings.	Make 6.9.3.1.1, 6.9.3.1.2, and 6.9.3.1.3 "if specified" and add a bullet.	Not accepted. From SP. Bearing manufacturers are already doing it. Moved to end of 6.9.3.
301	Tim Grady	NonVoter	6.9.3.3 Hydrodynamic bearings	6.9.3.3	Technical	"split for ease of assembly" was added to the last revision, but a huge number of oil-free and oil-flooded screw compressors do NOT use split hydrodynamic radial bearings. In fact, I'm not aware of a single one of our compressors that does use split hydrodynamic radial bearings.	Delete "split for ease of assembly"	Accepted.
146	Kevin Kisor	Affirmative WithComment	6.9.3.3	6.9.3.3	Technical	QUOTE:Hydrodynamic radial bearings shall be split for ease of assembly, precision-bored and of the sleeve or pad type, with steel-backed, babbitted, replaceable liners, pads, or shells.UNQUOTEIt is not the case that a splitted bearing makes the assembly easier (e.g. vertical splitted casings of dry screw compressors).	delete: "split for ease of assembly"	Accepted.

147	Kevin Kisor	Affirmative WithCom ment	6.9.3.4	6.9.3.4	Technical	QUOTE:The bearings shall be positively secured in the axial direction against a shoulder.UNQUOTEThe expression 'against a shoulder' is unclear. It probably refers to against a shoulder of the housing.	delete: against a shoulder	Accepted.
148	Keith King	Affirmative WithCom ment	6.9.4.10.2	6.9.4.10.2	Editorial	para number should be 6.9.4.9.2	para number should be 6.9.4.9.2	Accepted.
149	Mike Elliyoun	NonVoter	6.9.4.5	n/a	Technical	Why restricting only to these two option? This is not practical as there are other possibilities like a pumped lube oil system with a heat exchanger	Remove	Accepted.
150	Keith King	Affirmative WithCom ment	6.9.4.8	6.9.4.8	Technical	Does anyone really make cooling coils for bearing housings out of pipe? Wall thickness and OD seem to relate to tubing only.	delete "or piping" to read Cooling coils made from tubing shall have .....	Accepted in principle. Delete 6.9.4.5, 6.9.4.7 & 6.9.4.8. Modify 6.9.4.6 to read, "If water cooling is required, water jackets shall have ..."
110	Mike Elliyoun	NonVoter	6.11.1.7	NOTE 1	Technical	The list of agents is not complete.	Add "halogens, non-metal oxides and non-metal sulfides" to the list. This would include chlorine, fluorine, carbon dioxide, oxides of nitrogen, oxides of sulfur, ammonia bisulfide, carbon disulfide, carbonyl sulfide and hydrogen sulfide.	Accepted.
111	Mike Elliyoun	NonVoter	6.11.1.7	NOTE 3	Editorial	Shouldn't these be included in NOTE 1?	Add them to the NOTE 1. Either delete NOTE 3 or NOTE 3 should be a subset of NOTE 1.	Not accepted. Note 3 describes environmental cracking.

112	Keith King	Affirmative WithCom ment	6.11.1.8	Note 1	Editorial	There is no pare 6.11.1.12.3	Correct reference to 6.11.1.8.3	Accepted
113	Kevin Kisor	Affirmative WithCom ment	6.11.1.8.3	6.11.1.8.3	Editorial	Item 6.11.1.8.3 (including notes) seems to be related to item 6.11.1.8. Therefore for clarity it is suggested to move item 6.11.8.3 (including notes), directly below 6.11.1.8.	move item 6.11.1.8.3 (including notes), directly below 6.11.1.8.	Not accepted. 6.11.1.8.3 is "If specified", so it is placed below the default requirement.
114	Bob Eisenman	Affirmative WithCom ment	6.11.1.8.3	NOTE 2	Editorial	There is a "may" in Note 2 wording that is incorrectly used. "May" is reserved for permission statements and not possibility statements.	Reword to:"NOTE 2 A survey conducted of units built in accordance with NACE MR0175/ISO 15156 in previous API 617 editions has indicated no failures. The more restrictive requirements of NACE MR0103/ISO 17945 might therefore not be required to provide sufficient protection against corrosion.	Accepted in principle. Reworded based on Comment 151.
151	Keith King	Affirmative WithCom ment	6.11.1.8.3	Note 2	Editorial	Per the style guide may implies permission and therefore cannot be used in a note. Reword to eliminate (SP also needs correction)	The more restrictive requirements of NACE MR0103 can be unnecessary to provide protection against corrosion.	Accepted
94	Juan Suarez	Affirmative WithCom ment	6.11.1.13.2	6.11.1.13.2	Technical	Offline request for clarification made regarding vacuum-degassed steel to be included here	SPTF agrees: Suggest - "6.11.1.13.2 Steel pressure-containing parts shall be fully killed, normalized, or vacuum-degassed and made to fine-grain practice."	Accepted.
107	Keith King	Affirmative WithCom ment	6.11.1.14	Note 1	Editorial	Acronym "R" is incomplete. Should be RGD	Susceptibility to RGD depends on .....	Accepted

302	Tim Grady	NonVoter	6.11.1.14 Materials	6.11.1.14 Note 1	Editorial	The note appears to be using the abbreviation RGD, but the GD are missing. "NOTE 1 Susceptibility to R depends on the gas to which the O-ring is exposed, the compounding of the elastomer, temperature of exposure, the rate of decompression and the number of cycles."	Change R to RGD.	Accepted
108	Kevin Kisor	Affirmative WithCom ment	6.11.1.15 - 6.11.1.20	6.11.1.15 - 6.11.1.20	Editorial	We could name equivalent materials by alternative Standards in Annex F	Bolting for cast iron casings = ASTM A307 Grade B = EN 10269, 25CrMo4 / 1.7218HT bolting for steel casings = ASTM A193 Grade B7 = EN 10269, 42CrMo4 / 1.7225Nuts =ASTM A194 Grade 2H = EN 10269, 25CrMo4 / 1.7218Nuts cased hardened = ASTM A563 Grade A = EN ISO 898-2LT bolting + nuts = ASTM A320 = EN 10269NACE bolting = ASTM A193 B7M = EN 10269, 42CrMo4 / 1.7225NACE nuts = ASTM A194 Grade 2HM = EN 10269, 25CrMo4 / 1.7218	Not accepted. Moved paragraphs to 6.2 Pressure Casings and used SP 6.2.24.3 as go-by. TF still considering, but Annex F is not usable as formatted since it is divided by parts, not by service.
109	Mike Elliyoun	NonVoter	6.11.1.16	n/a	Technical	Other materials are also possible for other casing material, e.g. B8 for stainless steel casings. Why is this note so specific, relating only to carbon steel casings?	add a NOTE: "Other bolting material grades can be used for other casing materials."	Accepted in principle. Use SP 6.2.24.3 wording with "minimum".

96	Juan Suarez	Affirmative WithCom ment	6.11.2.6.a	6.12.2.6.a	Editorial	minor clean up of reference to ASME BPCV	suggest: "Weldable grades of steel castings shall be repaired using a qualified welding procedure based on the requirements of the ASME BPCV,Section VIII, Division 1, and Section IX or other internationally recognized standard as approved by the purchaser	Accepted
95	Juan Suarez	Affirmative WithCom ment	6.11.2.6.d	6.11.2.6.d	Editorial	the term "carefully examined" is not useful	delete "carefully" (SPTF)	Accepted
115	Bob Eisenman	Affirmative WithCom ment	6.11.2.12	a), b), c)	Editorial	The 3 requirements in 6.11.2.12 are a nested shall list and need to be rewritten to be standalone. Currently clauses 6.11.2.12.a), b) and c) have relative formats and do not have sufficient to context to be fully understood.	6.11.2.12 Brinell hardness tests per ASTM E10 shall be made on the actual casting at feasible critical sections, such as section changes, flanges, casing bores and other accessible locations.6.11.2.13 Brinell hardness tests per ASTM E10 shall also be made at the extremities of the casting at locations that represent the sections poured first and last.6.11.2.14 Sufficient surface material shall be removed before performing Brinell hardness tests per ASTM E1 to eliminate any skin effect. 6.11.2.15 Brinell hardness tests per ASTM E10 shall be made in addition to the hardness test on keel or Y-blocks in accordance with 6.11.2.9.	Accepted in principle. Made into three subclauses.
97	Juan Suarez	Affirmative WithCom ment	6.11.2.12.a	6.11.2.12.a	Editorial	the term "sufficient not useful	delete "Sufficient" (SPTF)	Accepted



98	Juan Suarez	Affirmative WithCom ment	6.11.4.6	6.11.4.6	Technical	Notification of weld repairs and characteristics of major repairs moved to section 8. for example the 50% wall thickness is now 20%	Delete from this section, perhaps with exception of any moving part. For pressure containign parts the criteria is defined in paragraph 8.2.2.6.5	Accepted.
116	Bob Eisenman	Affirmative WithCom ment	6.11.4.6	a), b), c)	Technical	Missing required for foundry level welding and repairs.	Add wording from API 610 13th edition for foundry level welding and repair.	Accepted in principle. Covered in 8.2.2.6.5
99	Juan Suarez	Affirmative WithCom ment	6.11.5.5.3 Note	6.11.5.5.3 Note	Editorial	clean up reference to ASME BPCV	Suggest: "... requirements of the ASME BPCV, Section VIII, Division I, Section UG-20F, for example."	Accepted. Also corrected generally.
100	Juan Suarez	Affirmative WithCom ment	6.11.6.2	6.11.6.2	Technical	SPTF update	USE: "Pressure containing, pressure retaining, rotating parts and components in contact with the process manufactured by additive manufacturing ("3D Printing") shall be approved by the purchaser. "	Accepted.
117	Kevin Kisor	Affirmative WithCom ment	6.11.6.3	6.11.6.3	Technical	Include reference to alternative standard	6.11.6.3 [●] If specified, the vendor shall provide a listing of the technical information in accordance with Section 4.2 of API 20S, 1st edition, or with Section 5 of DNV-ST-B203, October 2022 edition.	Not accepted. Vendor may propose alternative standards with the offer for purchaser acceptance.

118	Kevin Kisor	Affirmative WithCom ment	6.11.6.4	6.11.6.4	Technical	Update and add note	6.11.6.4 Feedstock for critical parts (pressure containing, highly loaded) shall meet the requirements of Additive Manufacturing Specification Level (AMSL) 3, per API 20S or of Additive Manufacturing Category (AMC) 3, per DNV-ST-B203.Add a NOTE:A test of feedstock for uncritical parts in accordance with API 20S ASML1 und 2 is acceptable.	Not accepted. Refer to SP.
119	Keith King	Affirmative WithCom ment	6.11.6.5	6.11.6.5	Technical	use the latest Std Paragraph 6.11.6.4. wording to more clearly define this equivalent material	Any part that is manufactured by additive manufacturing shall meet or exceed the mechanical properties and tests required to meet the ASTM equivalent material.	Accepted.
154	Keith King	Affirmative WithCom ment	7.1.2.6	NOTE	Editorial	Per design guide, might should not be used. In addition this implies permission which cannot be used in a note. Reword the 2nd sentence.	After testing, this margin can be unavailable to performance tolerances of the driven equipment	Accepted
155	Keith King	Affirmative WithCom ment	7.1.4	7.1.4	Technical	since there is no preference for API 677 or API 613 gears in section 10, both should be specified and note 1 deleted	External gear units shall conform to All 677 or API 613.	Not Accepted. API default is 677.
152	Juan Suarez	Affirmative WithCom ment	7.2 section	7.2 section	Editorial	Variable Speed	use Variable-Speed	Accepted. Also corrected generally.
157	Mike Elliyoun	NonVoter	7.3.2	NOTE 2	Technical	The statement is incorrect, for rotary-lobe blowers at least. API 671 is commonly applied and is often mandatory from end-users in oil & gas.	Delete "and rotary lobe blowers".	Not accepted.

303	Tim Grady	NonVoter	7.6.1.1 Baseplates and soleplates	7.6.1.1	Technical	Does Note 2 add anything? Oil-free screw compressors and oil-flooded screw compressors can also be installed on elevated steel structures to allow on-skid discharge piping, height above the oil separator, or mounting of a discharge silencer to the bottom of the compressor.	Delete Note 2 or make it more generic. The design of blower baseframes isn't fundamentally different from screw compressors.	Accepted in principle. Replace "rotary lobe blowers" with "compressors". Add "baseplate" as a default.
304	Tim Grady	NonVoter	7.6.1.3 Baseplates and soleplates	7.6.1.3 and 7.6.2.16	Technical	7.6.1.3 requires machined surfaces on the bottom of a baseplate, but 7.6.2.16 makes machined mounting pads on the bottom of the baseplate optional. Since many baseplates are designed without machined mounting surfaces on the bottom of the baseframe, recommend rewording and splitting these requirements.	Revise to: 7.6.1.3 The upper surfaces of baseplates and soleplates and any separate pedestals mounted thereon shall be machined parallel. 7.6.1.4 When applicable, the lower surfaces of baseplates and soleplates and any separate pedestals mounted thereon shall be machined parallel. 7.6.1.5 The surface finish of any machined surfaces from 7.6.1.3 and 7.6.1.4 shall be 6 µm (250 µin.) Ra or better.	Accepted in principle. Deleted 7.6.1.3 since this is already covered in 7.6.2.13.
161	Kevin Kisor	Affirmative WithComment	7.6.1.3	7.6.1.3	Technical	- Quote 6th Edition Draft:"The upper and lower surfaces of baseplates and soleplates and any separate pedestals mounted thereon shall be machined parallel. The surface finish shall be 125 µm (0.005 in.) Ra (arithmetic average roughness) or better"- UnquoteComment:it does not bear any advantages if the machine pedestals have such a finish. Grindes	Request:Add the following note:"Note: As an alternative, grinded shims can be used to ensure requirements by the machine.	Not accepted. The clause is deleted, but the requirement remains in 7.6.2.12. API practice is for machinery mounting surfaces to be machined smooth, regardless if shims are used or not.
162	Keith King	Affirmative WithComment	7.6.1.3	7.6.1.3	Technical	delete the second sentence. This requirement for surface finish is mpt related to the requirement for parallel faces and is repeated provided in 7.6.1.10 f	Delete the 2nd sentence	Accepted in principle. Deleted 7.6.1.10f.

163	Bob Eisenman	Affirmative With Comment	7.6.1.4.6	7.6	Editorial	Relative term (such) used here that needs to be explained to make this clause fully understandable. Add point that this refers to the "Alternative methods" from clause 7.6.1.4.5 above. Also recommend upgrading the "should" to a "shall" statement as it needs to be a requirement if jackscrews are not sufficient to move/lift the equipment.	Reword to: "7.6.1.4.6 Alternative methods of lifting equipment for the removal or insertion of shims or for moving equipment horizontally shall be proposed for equipment that is too heavy to be lifted or moved horizontally using jackscrews."	Accepted.
164	Bob Eisenman	Affirmative With Comment	7.6.1.4.7	7.6	Technical	Recommend replacing the word "rust" with the word "corrosion" which is the word usually used in such circumstances.	Reword to: "7.6.1.4.7 Alignment jackscrews shall be plated for corrosion resistance."	Accepted.
158	Bob Eisenman	Affirmative With Comment	7.6.1.10	a) thru f)	General	This specification uses a number of different formats for managing lists of requirements. Some use a), b), c)... and others use xx.1, .2, .3 etc. Propose using former for lists of items in a list and the latter for lists of requirements on similar topic. Reword using same format as 7.6.2.10.	Reword 7.6.1.10 to: "7.6.1.10 Baseplates and soleplates shall be designed per 7.6.1.10.1 to 7.6.1.10.6 and renumber rest of the section from: 7.6.1.10 a) thru f) to 7.6.1.10.1 thru 7.6.1.10.6."	Accepted.

159	Kevin Kisor	Affirmative WithCom ment	7.6.1.10 c)	7.6.1.10 c)	Technical	Quote:"Outside corners of baseplates and soleplates that are in contact with the grout shall have 50 mm (2 in.) minimum radiused outside corners (in the plan view)."- Unquote:Comment:outside corners of the baseframe do not need to have a 50mm radius. The baseframe is mounted on jacking spindles. Grouting is applied below the baseframe and around the spindles. The outer edges of the baseframe are only partly touched by grout and do not have mechanical function.	delete 7.6.1.10 c	Not accepted. Non-radiused outside corners in contact with the grout can create a stress concentration which can crack the grout.
160	Kevin Kisor	Affirmative WithCom ment	7.6.1.10 c) & f)	7.6.1.10 c) & f)	Technical	Baseplates can be designed to be supported supported by levelling devices and anchor bolts, and, if available, shear brackets. Groutingis not necessary for this design which means an additional 50 mm radius on the outside corner is unnecessary. Additionally, providing a 50 mm radius on the outside corner would increase the free surface area, making it more vulnerable to dynamic excitation.	Re-word c): add "When baseplats are grouted, outside corners . . ." and then make f) a bulleted para.	Not accepted. The wording indicates this requirement only applies to grouted baseplates.
165	Bob Eisenman	Affirmative WithCom ment	7.6.2.10	7.6.2.10.1 thru 7	General	Mnay of the requirements included in section 7.6.2.10 are already included in API RP 686. Do they need to be included in API 619	Remove the items that are already covered in API RP 686.(Chapter 5 section 2,6, inc 2.6.9)	Not accepted. Since API 686 is being revised, TF is hesitant to deviate from SP.

305	Tim Grady	NonVoter	7.6.2.10 Baseplate s and soleplates	7.6.2.10	Technical	<p>7.6.2.10 says the baseplate must be designed per the 7.6.2.10.1 to 7.6.2.10.7, but then 7.6.2.10.2 says "If the baseplate is designed for grouting." This means grouting is optional, but some grout specific requirements are mandatory. 7.6.2.10.1 and 7.6.2.10.7 don't appear to be grout specific and could apply no matter what. There's also a fundamental difference between designing for perimeter grout versus filling with grout. Recommend splitting out generic requirements from fill grout specific requirements and revising the order of these to clarify the requirement. Earlier parts of 7.6.1 cover perimeter grout.</p>	<p>Reword to:</p> <p>7.6.2.10 If the baseplate is designed to be filled with grout, it shall follow 7.6.2.10.1 to 7.6.2.10.7.</p> <p>7.6.2.10.1 The baseframe shall be provided with at least one grout hole having a clear area of at least 130 cm<sup>2</sup> (20 in<sup>2</sup>) and no dimension less than 75 mm (3 in.) in each bulkhead section.</p> <p>7.6.2.10.2 The grout holes shall be located to permit grouting under all load-carrying structural members. Where practical, the holes shall be accessible for grouting with the equipment installed.</p> <p>7.6.2.10.3 The holes shall have 13 mm (0.5 in.) raised-lip edges, and if located in an area where liquids can impinge on the exposed grout, metallic covers with a minimum thickness of 1.5 mm (0.060 in.) shall be provided.</p> <p>7.6.2.10.4 Grout hole covers shall be convex and extend to the deck surface per Figure 8.</p> <p>7.6.2.10.5 Vent holes at least 13 mm (0.5 in.) in diameter shall be provided at the highest point and located to vent the entire cavity in each bulkhead section of the baseplate.</p>	Accepted.
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306	Tim Grady	NonVoter	7.6.2.10 Baseplates and soleplates	7.6.2.10	Technical	7.6.2.10 says the baseplate must be designed per the 7.6.2.10.1 to 7.6.2.10.7, but then 7.6.2.10.2 says "If the baseplate is designed for grouting." This means grouting is optional, but some grout specific requirements are mandatory. 7.6.2.10.1 and 7.6.2.10.7 don't appear to be grout specific and could apply no matter what. Recommend splitting out generic requirements from grout specific requirements and revising the order of these to clarify the requirement.	Revise to: 7.6.2.11 The bottom of the baseplate between structural members shall be open unless an oil reservoir integral with the base plate is supplied. 7.6.2.12 Non-skid metal decking covering all walk and work areas shall be provided on the top of the baseplate. NOTE Nonskid surfaces can be obtained by non-skid coatings or grating over the metal decking.	Accepted.
166	Kevin Kisor	Affirmative WithCom ment	7.6.2.10.1.	7.6.2.10.1.	Technical	- Quote 6th Edition Draft:"The bottom of the baseplate between structural members shall be open unless an oil reservoir integral with the base plate is supplied."- Unquoteplease reconsider deleting the phrase. There is not benefit to have a baseframe open to the ground level	delete	Not accepted. Standard API practice is open bottom baseplates.
167	kenji Ohki	NonVoter	7.6.2.10.7	7.6.2.10.7 & Note	Editorial	Non-skid and Nonskid are using	use one of Non-skid or Nonskid.	Accepted. Note corrected.
168	Kevin Kisor	Affirmative WithCom ment	7.6.2.12	7.6.2.12	Technical	It is possible to design the baseplate without machining mounting surfaces and still align using jacking screws when installation is on a single-level foundation.	Make this para a bulleted option.	Accepted in principle. Clause has been modified. There is no longer a requirement for the flatness of the underside.

169	Kevin Kisor	Affirmative WithCom ment	7.6.2.13	7.6.2.13	Technical	it is not acceptable to remain the requirement of machined mounting surfaces of the baseframe. It makes no sense at all. Baseframe is not in direct contact to the foundation. It is always aligned with jacking spindles or wedges. No flat surfaces needed	delete	Not accepted. Your philosophy is fundamentally different from API standard practice.
153	Juan Suarez	Affirmative WithCom ment	7.7.1.8	Note 2	Editorial	last part of sentence in parentheses should not be part of note.	SPTF: delete: "(NEMA Publication “A brief comparison of NEMA 250 and IEC 60529”)" I think this is a cut paste error that came from Discussion below in SP.	Accepted.
170	Bob Eisenman	Affirmative WithCom ment	7.7.1.8	a), b)	Editorial	Not clear why 7.7.1.8 clauses a) and b) are subclauses and not standalone. Recommend reformatting a) and b) to be standalone and moving the 3 notes so they apply to 7.7.1.8.	Move Notes 1, 2 and 3 to 7.7.1.8. Renumber 7.7.1.8 a) and b) to: "7.7.1.8.1 If IP 66 protection level is specified, the terminal boxes shall conform with the construction requirements of IEC 60079 “Electrical apparatus for explosive atmospheres”. 7.7.1.8.2 Terminal boxes shall be 316 SS.	Accepted.
171	Kevin Kisor	Affirmative WithCom ment	7.7.4.3.1	7.7.4.3.1	Technical	The way items 7.7.4.3.1 and 7.7.4.3.2 are written leads to the interpretation that both Shaft Vibration Measurements and Casing vibration transducers are mandatory for all applications.	Add "If specified" in the beginning of the sentence; similarly as in the 5th edition.	Accepted in principle. Delete 7.7.4.3.1. Keep 7.7.4.3.2 since casing vibration transducer are required for all machines. Reword 7.7.4.3.3 to say "Monitors for radial ..."
172	Kevin Kisor	Affirmative WithCom ment	7.7.4.3.2	7.7.4.3.2	Technical	The way items 7.7.4.3.1 and 7.7.4.3.2 are written leads to the interpretation that both Shaft Vibration Measurements and Casing vibration transducers are mandatory for all applications.	Add "If specified" in the beginning of the sentence; similarly as in the 5th edition.	Accepted in principle. Keep 7.7.4.3.2 since casing vibration transducer are required for all machines. Reword 7.7.4.3.3 to say "Monitors for radial ..."



173	Albert Kuo	NonVoter	7.7.4.4.1	7.7.4.4.1	Editorial	Typo	"10 and"	Accepted
307	Tim Grady	NonVoter	7.7.4.4.1 Bearing Temperatu re Detector	7.7.4.4.1	Editorial	Missing space between 10and	Correct to 10 and 11.	Accepted
174	kenji Ohki	NonVoter	7.7.4.5.4	7.7.4.5.4	Editorial	The vendor's quotation shall be ,,,	May be changed to "The vendor's proposal shall be ,,, "	Accepted
175	Mike Elliyoun	NonVoter	7.7.4.5.9	n/a	Technical	The statement is incomplete and not valid for cases below 30 psig set pressure	In line with 3.1.41 and 3.1.47 - API 520, Part 1, tenth edition, please add: "Or 3 psi above set pressure, for set pressures below 30 psi g."	Accepted.
176	Keith King	Affirmative WithCom ment	7.7.5.1	7.7.5.1	Editorial	Since there is no paragraph 7.7.5.2. I suggest deleting this general heading and thus simplifying the numbering	Delete 7.7.5.1 General. And renumber subsequent paragraphs	Accepted
177	Keith King	Affirmative WithCom ment	7.7.5.1.7	7.7.5.1.7	Editorial	suggest splitting the paragraph and numbering the last sentence as 7.7.5.1.8	Reword to provide sensing devices without locking the valves open: 7.7.5.1.8 If isolation valves are specified for shutdown, sensing devices shall be provided with means of locking the valves in the open position.	Accepted.
178	Bob Eisenman	Affirmative WithCom ment	7.8.1.1	7.8	Editorial	As written the clause is ambiguous and not clear whether application of API 692 is required as well as, or instead of API 614 for applications with DGS. I think it should be as well as because API 692 does not cover all auxiliary pipe types.	Reword to remove ambiguity:"7.8.1.1 Auxiliary piping shall be in accordance with API 614 and also API 692 when dry gas seals are specified."	Accepted in principle. Made into two separate clauses.

308	Tim Grady	NonVoter	7.8.1.1 Auxiliary piping	7.8.1.1	Editorial	Recommend splitting this into two parts. Right now, it looks like API 614 only applies when dry gas seals are supplied.	7.8.1.1 Auxiliary piping shall be in accordance with API 614. 7.8.1.1 When dry gas seals are specified, auxiliary piping related to the seals shall be in accordance with API 692.	Accepted.
179	kenji Ohki	NonVoter	7.8.1.2	7.8.1.2	Technical	Stainless Steel material is specified; however, Carbon steel material is commonly used at Oil flooded oil piping.	add " Note: For oil flooded screw compressor, see 11.3.2.1"	Not accepted. Delete clause. Already covered by API 614. See 11.3.2.1 for other changes.
180	Albert Kuo	NonVoter	7.8.4	7.8.4	Editorial	Should not be part of 7.8 Piping	Make separate section 7.9	Accepted. Made separate section for 7.8.4 - 7.8.7.

181	Keith King	Affirmative WithCom ment	7.8.4.1	7.8.4.1	Editorial	The list should be a common format per style guide.	For the protection of rotating equipment during the initial operation, the vendor shall provide a temporary removable strainer meeting the following criteria.a) The strainer shall be made from a corrosion resistant material.b) The mesh size shall be adequate to stop all objects that can be damaging to the equipment with a maximum strainer hole size shall be 3 mm (1/ 8 in.).c) The open flow area shall be at least 150% of the cross-sectional area of the suction pipe.d) The removable strainer shall be identified by a protruding tab.e) The piping arrangement shall permit the removal of the strainer without disturbing alignment.f) Strainers shall be installed in spool pieces to minimize piping removed.NOTE Strainer can be cone, basket, or T-type.	Accepted
182	Keith King	Affirmative WithCom ment	7.8.4.2	7.8.4.2	Technical	I suggest TF refer to API 686 for requirements for permanent strainers.	Possibly add a NOTE Permanent strainer requirements can be found in API 686	Accepted.
183	Albert Kuo	NonVoter	7.8.5	7.8.5	Editorial	Should not be part of 7.8 Piping	Make separate section 7.10	Accepted.
184	Albert Kuo	NonVoter	7.8.6	7.8.6	Editorial	Should not be part of 7.8 Piping	Make separate section 7.11	Accepted.

185	Albert Kuo	NonVoter	7.8.7	7.8.7	Editorial	Should not be part of 7.8 Piping	Make separate section 7.12	Accepted.
190	Keith King	Affirmative WithCom ment	7.8.7.5	7.8.7.5	Editorial	Split paragraph and eliminate should from the last sentence	7.8.7.x If diffusers or devices that split the gas flow through small orifices are provided, such devices shall be easily accessible for cleaning.	Accepted in principle. Changed "should" to "shall".
186	Kevin Kisor	Affirmative WithCom ment	7.8.7.13	7.8.7.13	Technical	The most important factor for mechanical endurance is that the pressure-bearing components are fully welded.	The most important factor for mechanical endurance is that the pressure-bearing components are fully welded.	Noted. See Comment 187.
187	Kevin Kisor	Affirmative WithCom ment	7.8.7.13	7.8.7.13	Technical	It is not possible to execute all welds as full penetration welds	Rephrase as following:"all welds of the pressure bearing part shall be continous full penetration"	Accepted in principle. All welds that are part of or inside of the pressure boundary shall be ...
188	Kevin Kisor	Affirmative WithCom ment	7.8.7.18	7.8.7.18	Technical	temperature measurment at this position is increasing the risks of failures and does not bring beneficial information.Industry practice is to perform the temperature measuremnt in the piping, which also subjects the instruments to less vibrations.	item to be removed	Accepted.
189	Keith King	Affirmative WithCom ment	7.8.7.20	Note	Editorial	might should not be used in a note and preferably is not used at all.	Inspection openings can be impractical on some silencer designs	Accepted.

156	Mike Elliyoun	NonVoter	7.11.13	n/a	Technical	This is a very complex subject that has been condensed, incorrectly, into a single line. If any general principle is to be applied regarding positive or negative pressure, it is that the less hazardous area should be at a higher pressure than the more hazardous area to prevent cross-contamination. A positive-pressure design prevents ingress of dust and hazardous gases into the enclosure. The position of the ventilation inlet must carefully selected to ensure this. It has the added benefit that the vent' fan motors are only exposed to site ambient temperature, not the hotter temperature inside the enclosure.	Inline with 7.11.10. in SP change this to read as 'Fans shall be redundant and positive or negative pressure design'	Accepted.
309	Tim Grady	NonVoter	8.1.8 Testing General	8.1.8	Editorial	Extra period.	Delete the extra period and spaces between the first and second sentence.	Accepted.
191	Juan Suarez	Affirmative WithCom ment	8.2.1.3.b	8.2.1.3.b	Editorial	SPTF update. This section is general in nature and reference to ASME inspection is not applicable.	Delete "(see Table 6 for ASME inspection standards)."and delete table 6. The table is essentially repeated in Table 8 where it does apply to pressure containing part inspections.	Accepted

195	Kevin Kisor	Affirmative WithCom ment	8.2.2.4	8.2.2.4	Editorial	Other API standards (e.g. API 613 6th ed. / 6.5.4.7) refer to comparable paragraph in order to define the maximum gauss level for the components.X.X.X.X To prevent buildup of potential voltages in the shaft, residual magnetism (free air gauss levels) of the(rotating) elements or components shall not exceed the limits specified in 8.2.2.4.	suggested change: add a new paragrph with reference to 8.2.2.4X.X.X.X To prevent buildup of potential voltages in the shaft, residual magnetism (free air gauss levels) of the(rotating) elements or components shall not exceed the limits specified in 8.2.2.4.	Accepted in principle. Created new subsection, "Residual Magnetism."
192	Juan Suarez	Affirmative WithCom ment	8.2.2.6.3	Table 8	Editorial	references to ASME BPVC shoul all be cleaned up	Suggest (typ.) CHANGE - "SectionV, Articles 2 and 22 of the ASME BPCV" to"ASME BPCV, SectionV, Articles 2 and 22"	Accepted
196	Kevin Kisor	Affirmative WithCom ment	8.2.2.6.5	8.2.2.6.5	Editorial	Compare 8.2.2.6.5 a) and c) with 6.11.4.6 b) and c)		Accepted. Deleted 6.11.4.6 since requirements are duplicated here.
193	Juan Suarez	Affirmative WithCom ment	8.2.2.7	8.2.2.7	Editorial	SPTF recommendation is to move paragraph on PMI up - after other inspection methods in general section	Move PMI to Paragraph 8.2.2.6 following Liquid-penetrant inspection.	Accepted

194	Juan Suarez	Affirmative WithCom ment	8.3.2.4	8.3.2.4	Editorial	Offline request to SPTF for reference to ASME BPCV and emphasis on temperatures above 600F	SPTF agrees in principle but since some materials exhibit reduction in strength at temperature below 600F, this should not be used. Suggest: "If the part tested is to operate at a temperature at which the strength of a material is below the strength material at the testing temperature, the hydrostatic test pressure shall be multiplied by a factor obtained by dividing the allowable working stress for the material at the testing temperature by that at the rated operating temperature. The requirements of ASME Section VIII paragraph UG-101(k) shall apply."	Accepted.
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197	Bob Eisenman	Affirmative WithComment	8.3.3.3.3.5	a) to d)	Editorial	The 4 listed items (a) to d) in this section are not linked to the context. Suggest renumbering and rewriting so they are standalone. Upgrade "should" in 8.3.3.3.5 d) to "shall".	Reword to: 8.3.3.3.5.1 Lube-oil and seal-oil inlet pressures and temperatures shall be varied during the 4 h test. 8.3.3.3.5.2 Selecting the option to vary lube-oil and seal-oil inlet pressures and temperatures option does not constitute a waiver of the other specified test requirements. 8.3.3.3.5.3 The combination of lube-oil and seal-oil inlet pressure and temperature variations shall be agreed by purchaser and vendor. 8.3.3.3.5.4 Lube-oil and seal-oil operating conditions shall be held until bearing temperatures have stabilized within 1 °C (2 °F) over 10 minutes.	Accepted in principle. Made separate subclauses and reworded.
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198	Kevin Kisor	Affirmative WithComment	8.3.4.3	8.3.4.3	Technical	<p>Quote -"Test gas mole weight shall be equal to or less than the specified gas mole weight"- Unquote</p> <p>A equal match of molecular weight during to the leak test is hardly feasible, during a leak test for the following reasons:- For Hydrogen application (Electrolysis), a perfect match is only feasible with Hydrogen, which is flammable and cannot be safely used in the factory for a leak test. Also no mixing is feasible to achieve a "Lower molecular weight". - Other application (e.g. Offshore) present a wide range of molecular weights, mostly high molecular weight, which would require the use of refrigerants to match the molecular weight of process gas. This is under environmental point of view, as well as for costs and practicality not a desired solution. Therefore a similar wording as per 5th Edition is suggested.</p>	<p>Update the text as following (Aligned with 5th Edition): "Test-gas relative molecular mass should approximate contract-gas relative molecular mass. Helium for low relative-molecular-mass contract gas and nitrogen for high relative molecular mass should be considered." -&gt; Option "or R22 refrigerant gas" is suggested to be removed</p>	Accepted in principle. Reworded to exclude use of hydrogen during the leak test.
310	Tim Grady	NonVoter	8.3.4.3 Assembled Compressor or Gas Leakage Test	8.3.4.3	Technical	<p>"8.3.4.3 Test gas mole weight shall be equal to or less than the specified gas mole weight." would require the use of hydrogen for any leak tests where the process MW was &lt; 4. Recommend revising. Helium is used nearly exclusively to leak test hydrogen compressors.</p>	<p>"8.3.4.3 For process MW &gt; 4 kg/kmol, test gas mole weight shall be equal to or less than the specified gas mole weight. For process MW &lt; 4, helium shall be used."</p>	Accepted in principle. Reworded to exclude use of hydrogen during the leak test.

311	Tim Grady	NonVoter	8.3.4.6 Assembled Compressor or Gas Leakage Test	8.3.4.6	Technical	The wording here is slightly unclear and does not guarantee a leak free assembly at site. Recommend revising.	Reword to: 8.3.4.6 In cases where instrumentation sensors penetrate the pressure boundary, the job sensor assembly shall be installed and included in the assembled compressor gas leakage test of 8.3.4.	Accepted.
199	Kevin Kisor	Affirmative WithComment	8.3.5.1	8.3.5.1	Technical	According to ASME Association the ASME PTC-9 Standard (year 1970): "is no longer an American National Standard or an ASME-approved standard. It is available for historical reference only." Therefore, remove reference to ASME PTC-9 in the section, since this does not correspond to a valid standard.	Remove reference to ASME PTC-9 in the section.	Not accepted. PTC-9 is expected to be published before API 619, 6th edition.
200	Kenji Ohki	NonVoter	8.3.5.1	8.3.5.1	Editorial	Add "If specified," at beginning of this paragraph.	Add "If specified,"	Not accepted. TF intends each machine to be performance tested.
312	Tim Grady	NonVoter	8.3.5.3 Performance Test	8.3.5.3	Editorial	Recommend adding the word guarantee after performance.	Reword to: 8.3.5.3 If hardware modifications are needed to meet performance guarantees, the performance test shall be repeated.	Accepted in principle. Replace with "performance" with "acceptance criteria"
201	Kevin Kisor	Affirmative WithComment	8.3.6.1	8.3.6.1	Editorial	QUOTEIf specified, the shop tests described in 8.3.5.2 to 8.3.5.12 shall be performed. Test details shall be mutually agreed upon by the purchaser and the vendor.UNQUOTE Suggested change: 8.3.5.2 to 8.3.5.12 should be 8.3.6.2 to 8.3.6.10	suggested change: 8.3.5.2 to 8.3.5.12 should be 8.3.6.2 to 8.3.6.10	Accepted

313	Tim Grady	NonVoter	8.3.6.8 Post-test inspection	8.3.6.8 (all)	Technical	This does not mandate repeating the MRT or the performance test. When a machine is completely disassembled to check the bearings and seals and then put back together, clearnaces could change considerably and mistakes may not be found without a repeat of the performance test, leak test, and other tests. With that said, the entire MRT including heat run generally does not need to be repeated.	Add a note requiring repeating the performance test and revise as follows: 8.3.6.8.2 The performance test required by 8.3.5 shall be performed again after the post-test inspection. 8.3.6.8.3 The gas test required by 8.3.4 shall be performed again after the post-test inspection.	Not accepted. TF does not intend for testing to be repeated.
202	Bob Eisenman	Affirmative WithComment	8.4.14	a) thru g).	Editorial	This specification uses a number of different formats for managing lists of requirements. Some use a), b), c)... and others use xx.1, .2, .3 etc. Propose using former for lists of items in a list and the latter for lists of requirements on similar topic. Reword using same format as 7.6.2.10.	Renumber 8.4.14 as:"8.4.14 A spare rotor set shall be prepared and packed according to8.4.14.1 through 8.4.14.7.Renumber 8.4.14 a) through g) to:8.4.14.1 through 8.4.14.7.	Accepted.

203	Kevin Kisor	Affirmative WithCom ment	8.4.14 e)	8.4.14 e)	Technical	- Quote:"e) The rotor shall not be supported on the journals. - UnquoteComment.As already mentioned, it is not a disadvantage to mount the rotors on the journals (bearing area) if horizontal storage is planned. If it is not permissible to support the rotor on the journals, this means that the rotor is supported, for example, on the (uncoated) sealing area of a dry gas seal. This carries a higher risk of damage than in the bearing area, which is usually coated.Even if vertical bearing of the rotors is intended, the rotors must first be supported horizontally. Doing this on the coupling and synchroniser seats, for example, is not ideal.It is therefore requested that this point be deleted.	Remove item.	Accepted.
6	Keith King	Affirmative WithCom ment	10.2.3.4	10.2.3.4	Editorial	seems to be word missing in the revision	...provided such bar stock meets all quality and ...	Accepted

7	Kevin Kisor	Affirmative WithCom ment	10.2.4.1	10.2.4.1	Technical	After clarification with the seal suppliers, it has been confirmed that the Mechanical Contact Seals, in reality do not have contact in normal operation due to the internally designed grooves or special seal face geometrie, which provide an oil film avoiding contact. Therefore correct the term to "Oil Cooled Mechanical Seal", instead of mechanical contact seal.	Correct the term in this section as well as in the legend to "Mechanicals Seal" or Mechanical (Contact) Seals, as per Nomenclature from the 5th Edition..	Noted. Will be updated based on changes to the seal section.
5	Juan Suarez	Affirmative WithCom ment	10.2.7.1	10.2.7.1	Editorial	ISO 8068 referenced here but not in section2	Review Normative references and add missing standards	Noted. It is in the normative reference section.
8	Bob Eisenman	Affirmative WithCom ment	10.3.1.1	10.3	General	Why is permission being given for a steam turbine driver here. Not a Supplier decision. Propose to delete the clause and rely on 10.3.1.2 as the means for purchasers to specify steam turbine drivers.	Suggest deleting 10.3.1.1	Accepted.
9	Kevin Kisor	Affirmative WithCom ment	10.3.1.4.2	10.3.1.4.2	Technical	The way items 10.3.1.4.2 is written leads to the interpretation that axial-position tansducers are mandatory for all applications.	Add "If specified" in the beginning of the sentence.	Not accepted. TF intended for axial-position probes to be mandatory.
10	Kevin Kisor	Affirmative WithCom ment	10.3.1.4.3 (new)	10.3.1.4.3 (new)	Technical	Casing vibration measurement is missing from the list of possible instrumentation.	suggested change: Add new point regarding casing vibration measurement.If specified, casing vibration transducers shall be supplied, installed, and calibrated in accordance with API 670.	Not accepted. Casing vibration is covered in 7.7.4.3.2.

11	Kevin Kisor	Affirmative WithCom ment	10.3.4.2	10.3.4.2	Technical	QUOTE:Hydrodynamic thrust and radial bearings shall be fitted with bearing-metal temperature sensors installed in accordance with API 670.UNQUOTE	Rephrase:If specified, hydrodynamic thrust and radial bearings shall be fitted with bearing-metal temperature sensors. Sensors shall be installed in accordance with API 670.	Not accepted. Hydrodynamic bearing RTD's are mandatory.
12	Kevin Kisor	Affirmative WithCom ment	10.3.4.3	10.3.4.3	Technical	Definition and diferentiation between "Shutdown" and "Trip" not made in the standard. Therefore it is suggested either to present this diferentiation under the nomenclature section, or merge both columns as "Trip/ Shutdown".	either to present this diferentiation under the nomenclature section, or merge both columns as "Trip/ Shutdown".	Noted. "Shutdown" and "trip" are already defined in the Definitions section.
13	Kevin Kisor	Affirmative WithCom ment	10.3.4.3	10.3.4.3	Technical	Section is named as "recommended alarms" however some clients may understand as mandatory requirements instead of recommendation.The definition of alarm and trip values is highly dependant of the application, and for most of the projects is defined in a case-to-case base. Therefore it is suggested to a add a related note below.	Add Note:Modifications of the suggested alarm and trip philosophy can be defined in a project basis, upon agreement of supplier and purchaser also expressed in the data-sheets.	Not accepted. It is always the perogative of the purchaser to modify the table.
275	Bob Eisenman	Affirmative WithCom ment	10.3.4.3	Table 11, Row 2	General	Not all dry screw compressors will require an overspeed trip.. Suggest adding a Note to this row to make it clear that reuirement for Overspeed only applies to variable speed applications.	Add note to the row "Overspeed", such as:"Overspeed (1)1 Overspeed is only required for compressors driven by variable speed drivers."	Not accepted. No need to overcomplicate the table.
14	Albert Kuo	NonVoter	11.2.3.1	Figure 13	Editorial	Provide English equivalent of "Oltraum" and "Atmosphere"		Accepted

15	Albert Kuo	NonVoter	11.2.3.1	Figure 14	Editorial	Provide English equivalent of "Olraum" and "Atmosphere"		Accepted
314	Tim Grady	NonVoter	11.2.5.1 Bearing Housings	11.2.5.1	Technical	"6.9.4.4 For pressurized or circulating oil systems, the bearing oil drain temperature shall not exceed 28 °C (50 °F) above oil supply temperature." appears to cover the exact same thing as the later oil-flooded requirements. "11.2.5.2 The predicted oil temperature rise across the bearings shall not exceed 28 °C (50 °F). "	Delete 11.2.5.2	Not accepted. Oil drain temperature and temperature rise across the bearing are different variables.
16	Bob Eisenman	Affirmative WithCom ment	11.2.6.1	11.2	Editorial	Clause contains 2 requirements so propose to split them into 2 separate clauses.	Reword to:11.2.6.1 The compressor vendor shall specify the lubricant type, grade, and required properties.11.2.6.2 A lubricant compatible with the process gas shall be used. Compatibility issues can include, but not be limited to, the following: .....	Accepted

17	Bob Eisenman	Affirmative WithComment	11.2.6.1	2nd sentence	Editorial	<p>This specification uses a number of different formats for managing lists of items and requirements. Some use a), b), c)... and others use xx.1, .2, .3 etc., and some use hyphens as bullets. Propose using former for lists of items in a list and the latter for lists of requirements on similar topic. Reword using a), b), c) format as this is a list of items. format as 7.6.2.10.</p>	<p>Beyond separate comment and proposal for clause 11.2.6.1, reword 2nd sentence and reformat list to: 11.2.6.1 The compressor vendor shall specify the lubricant type, grade, and required properties 11.2.6.2 A lubricant compatible with the process gas shall be used. Compatibility issues can include, but not be limited to, the following: a) dilution; b) degassing; c) corrosion; d) viscosity changes; e) moisture absorption; f) oil affecting the process; g) shaft-seal type; h) lubricant additive reactions; i) process gas temperature; j) oil supply temperature; k) elastomer compatibility; l) toxicity; m) seal oil compatibility; NOTE Refer to Annex K for oil selection guidelines.</p>	Accepted
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18	Bob Eisenman	Affirmative WithComment	11.2.6.3	Section	Editorial	This specification uses a number of different formats for managing lists of items and requirements. Some use a), b), c)... and others use xx.1, .2, .3 etc., and some use hyphens as bullets. Propose using former for lists of items in a list and the latter for lists of requirements on similar topic. Reword using combination of the 2 formats; xx.1, xx.2 etc for requirements and a), b), c) ... for item lists	... a) Combined lubrication, control and seal flush ... b) Combined lubrication, control and seal oil ...l. c) Externally supplied pressurized barrier oil ... NOTE11.2.6.3.2 A pressurized oil system ...: a) bearings ...;b) seal-oil system, if ...; c) rotors sealing ...d) slide valve11.2.6.3.3 Oil-flooded screw compressors shall utilize ...: 11.2.6.3.4 Oil systems for oil-flooded ...: a) Lube oil is. b) Lube-oil system. c) Lube-oil system . d) Lube oil is pressurized.11.2.6.3.5 The discharge temperature shall be maintained ... NOTE11.2.6.3.6 The oil temperature shall be maintained .....NOTE11.2.6.3.7 The gas pipe ...	Accepted
19	Kevin Kisor	Affirmative WithComment	11.2.6.3	d) NOTE 2	General	Delete reference to API 614, Fig. H.10 since all lube oil schematic figures will be moved from 614 to their respective standards. Reason: to avoid cross-referencing errors that will inevitably occur when various standards are updated/published at different times than API 614.	Delete reference to API 614, Fig. H.10	Accepted.
315	Tim Grady	NonVoter	11.2.6.5.5 Oil coolers	11.2.6.5.5	Editorial	11.2.6.5.1 requires a single cooler. 11.2.6.5.5 allows a dual cooler if specified. Move 11.2.6.5.5 to follow 11.2.6.5.1.	Move 11.2.6.5.5 to 11.2.6.5.2	Accepted

20	Bob Eisenman	Affirmative WithComment	11.2.6.7.1	11.2	Editorial	This introductory clause does not link well with the requirements that follow which all are standalone so don't need an introductory clause.Suggest deleting	Delete clause 11.2.6.7.1.OrRewrite clause in format similar to other clauses fulfilling same purpose:"11.2.6.7.1 An oil-separation vessel or vessels shall be supplied in conformane to 11.2.6.7.2 through 11.2.6.7.12."	Accepted. Deleted clause.
316	Tim Grady	NonVoter	11.3.1.1 Vibration and position detectors	11.3.1.1	Technical	No minimum level of vibration monitoring is specified. Recommend specifying a minimum and providing allowances to increase beyond there. Accelerometers and thrust monitoring are very common optional or even default features depending on frame size and application. Radial proximity probes are rare, but are possible and have been provided in a few of the largest oil-flooded screw compressor frame sizes.	11.3.1.1.1 A pair of seismic sensors (accelerometers) shall be provided, one per bearing housing to monitor radial vibration. 11.3.1.1.2 When hydrodynamic thrust bearings are provided, axial-position transducers shall be supplied, installed, and calibrated in accordance with API 670. 11.3.1.1.3 [●] If specified, axial-position transducers for rolling element thrust bearings shall be supplied, installed, and calibrated in accordance with API 670. 11.3.1.1.4 [●] If specified, non-contacting radial vibration transducers for hydrodynamic bearings shall be supplied, installed, and calibrated in accordance with API 670. NOTE Some smaller machines cannot accommodate radial shaft proximity probes due to space limitations.	Not accepted. Defaults are specified in General and Section 11 intentionally.
317	Tim Grady	NonVoter	11.3.1.2 Bearing temperature detectors	11.3.1.2	Technical	Currently worded so that if any bearing is hydrodynamic, then all bearings must have bearing RTDs. Recommend revising as noted at right so that this only applies to hydrodynamic bearings.	[●] If specified, hydrodynamic bearings shall be fitted with bearing-metal temperature sensors installed in accordance with API 670.	Accepted.

21	kenji Ohki	NonVoter	11.3.1.3	Table 13	Technical	Low oil/gas differential pressure	Low oil / compressor discharge gas pressure	Accepted in principle. Change to "Low oil (differential) pressure"
22	Albert Kuo	NonVoter	11.3.1.3	Table 13	Editorial	Delete blank lines		Accepted
318	Tim Grady	NonVoter	11.3.2.1 Auxiliary piping	11.3.2.1	Editorial	Since this is a decision point, should this be bulleted?	Add a bullet	Not accepted. However, TF gave permission for carbon steel if approved by the purchaser.
24	Albert Kuo	NonVoter	12.1.1	Figure 15	Editorial	Key - Item 5 should read "Shaft extension - driven rotor"		Accepted
319	Tim Grady	NonVoter	12.2.1 Performance	12.2.1	Technical	"The party having unit responsibility per 5.2 shall confirm the driver of the unit is capable of start-up at settle-out or other elevated suction pressure specified. " is much more relevant to screw compressors than to rotary lobe blowers. This should be moved to general. Suction pressure does not change starting torque, only pressure difference does. For screw compressors, suction pressure directly impacts starting torque due to internal compression.	Move 12.2.1 to General.	Accepted.
25	Albert Kuo	NonVoter	12.2.2.1	12.2.2.1	Editorial	Two-lobe is proper term	Change "2-lobe" to "two-lobe"	Accepted
26	Albert Kuo	NonVoter	12.2.2.3	Note	Editorial	Typo and color	Remove "." in first line and change color to black	Accepted

278	Tim Grady	NonVoter	12.2.2.4 General Requireme nts	12.2.2.4	Technical	Filtering requirements are not specific to rotary lobe blowers. Even 3 lobe blowers allow up to 3x larger particulate sizes and increased liquid loading vs. oil-free screw compressors. Recommend moving this to General.	Move 12.2.2.4 to General.	Accepted.
27	Keith King	Affirmative WithCom ment	12.2.4	12.2.4	Technical	there is no text related to External forces and moments. All text following is related to expansion joints.	Retitle as expansion Joints, delete 12.2.4.1 and renumber subsequent paragraphs appropriately.	Accepted.
28	Keith King	Affirmative WithCom ment	12.2.4.1.1	12.2.4.1.1	Editorial	Items a and c should be reformatted as complete sentences	a) design parameters and test requirements shall be same as those of process piping.c) Expansion joints shall comply with the requirements of Expansion Joint Manufacturers Association (EJMA) standards.	Accepted
29	Bob Eisenman	Affirmative WithCom ment	12.2.4.1.1	a), b), c)	General	Clause 12.2.4.1.1 is redundant and does not link well to the whole Expansion Joints section, only clauses a), b) and c).Suggest deleting 12.2.4.1.1. and rewriting a), b) and c) as individually numbered, standalone requirements	a), b), and c) to be rewritten as:"12.2.4.1.1 Expansion joints shall be subject to the same design parameters and test requirements as process piping.12.2.4.1.2 Bellows and flanges shall be made of stainless steel 321 or 316Ti. 12.2.4.1.3 Expansion joint design shall conform to EJMA Expansion Joint Manufacturer standards"	Accepted

30	Mike Elliyoun	NonVoter	12.2.4.1.1	b	Technical	This is not always the case. Flange material can be as per the piping spec. Other bellows materials are available and in use. As an example see ' <a href="https://www.bellows-systems.com/materials">https://www.bellows-systems.com/materials</a> '.	Change (b) to read as "Bellows material in contact with the process shall be made of a corrosion-resistant alloy. NOTE 1: If bellows are lined, only the lining needs to be made of a corrosion-resistant alloy. NOTE 2: This is typically an austenitic stainless steel in the 300 series, such as 321 or 316Ti, or a nickel-based super alloy."Add (c) "Flange material does not need to match the bellows material, but must comply with the piping specification."	Accepted in principle. However, Note 1 and 2c is not accepted. TF added "nickel-based super alloy" to the list of acceptable materials.
279	Tim Grady	NonVoter	12.2.4.1.5 External forces and moments	12.2.4.1.5	Technical	Expansion joints are engineered components. Project specific information is not typically available in the proposal stage.	Proposed wording: "12.2.4.1.5 Manufacturer shall advise the design criteria of loading and pressure pulsation cycles from atmospheric pressure to rated process pressures of expansion joints. "	Accepted.

31	Bob Eisenman	Affirmative WithComment	12.2.4.1.8	a), b), c)	General	Clause as written does not link well with the listed requirements - "When tie bars are provided, they shall be:" would be better. However, even better to rewrite these 3 clauses so they are standalone requirements.	Reword to: "12.2.4.1.8 When provided, tie bars shall conform to 12.2.4.1.8.1 through 12.2.4.1.8.3. 12.2.4.1.8.1 When tie bars are provided, they shall meet the following requirements: 12.2.4.1.8.1 Tie bars shall be painted OSHA safety red to prevent them from being inadvertently left in place. 12.2.4.1.8.2 Tie bars shall be labelled with steel tags stating they are to be removed prior to operation. 12.2.4.1.8.3 Tie bars shall be made of a compatible material if they are temporarily welded to the expansion joint.	Accepted.
32	Keith King	Affirmative WithComment	12.2.4.1.8	12.2.4.1.8	Editorial	Should be if rather than when, formatting of requirements should be lower case to start and comma rather than period.	If tie bars are provided, they shall be a) painted OSHA safety red to prevent them from being inadvertently left in place, b) labelled with steel tags stating they are to be removed prior to operation, and c) made of a compatible material if they are temporarily welded to the expansion joint.	Accepted
289	Tim Grady	NonVoter	12.2.4.1.8 External forces and moments	12.2.4.1.8	Editorial	Is specifying OSHA safety red too much detail? The goal is just that they're clearly marked as temporary. Some manufacturers may use yellow or other colors.	Proposed wording: "a) Painted OSHA safety red or other obvious color to prevent them from being inadvertently left in place."	Accepted in principle. Reword to say "Painted or marked"

33	Mike Elliyoun	NonVoter	12.2.5.1	n/a	Technical	Casting rotors are accepted and used for many OEMs and end-users. Also, what is the basis for the size threshold? In principle, any rotor size can be either forged or cast, depending on the OEM's design and engineering considerations.	Add "If specified" and remove the size threshold.	Not accepted. TF decided to keep a size threshold as a default. However, the requirement for forged rotors was made "if specified."
34	Keith King	Affirmative WithComment	12.2.5.3	12.2.5.3	Editorial	delete as from the sentence to more correctly show simply as to prevent	.....shrunk to the shaft to prevent relative motion	Accepted
35	Mike Elliyoun	NonVoter	12.2.5.4	n/a	Technical	Delete "or liquids". For liquids, caps are not required and a drain hole on hollow rotors will suffice.	Delete "or liquids"	Not accepted. The clause only applies to dirty, fouling and polymerizing services.
36	Mike Elliyoun	NonVoter	12.2.5.4	n/a	Technical	This contradict 6.11.2.7. This is also not inline with Clause 6.10.3.1 of API 618, 6th Edition.	Delete	Accepted in principle. Changed "should" to "shall" and adopted API 618 approach for capped lobes to be self-venting.
37	Mike Elliyoun	NonVoter	12.2.5.6	n/a	Technical	What is it that is "specified"? Capped hollow lobes or the leak test? Leak test up to 1.1 times the highest operating pressure should not be optional for a capped hollow rotor.	"If capped hollow lobes are specified, these shall be leak tested..."	Not accepted. TF deleted this clause. Added requirement for self-venting.
38	Albert Kuo	NonVoter	12.2.6.1	12.2.6.1	Technical	Redundant - repeats general requirement	Delete clause	Accepted.
39	Albert Kuo	NonVoter	12.2.6.3	Note	Editorial	Remove blue color	Make black	Accepted

281	Tim Grady	NonVoter	12.2.6.3 Shaft Seals	12.2.6.3	Technical	<p>This note doesn't mean anything. All blowers include "seal cavities" between the oil sump and the process. There are many other ways to achieve oil-free design, and there are ways to comply with the note but not be oil free.</p> <p>"NOTE Oil-free designs can be achieved either by using internal seals with a purge fluid set to a higher pressure than the process and lube oil pressure or by incorporating a seal cavity between the lube oil sumps and the process gas stream. To ensure lube oil never reaches the process chamber, the seal cavity is designed in such a way that the oil sumps are never subject to process pressure"</p>	Delete the note. It is redundant since the requirement states "Purchaser and vendor shall agree on the type of internal seals and machine design required to meet this requirement."	Accepted.
40	Mike Elliyoun	NonVoter	12.2.6.4	n/a	Technical	Definition of 'liquid film seal' is missing.	Suggestion for liquid film seal "A liquid film seal is a type of wet seal used in a blower or compressor that relies on a thin, layer of liquid (typically oil fed from atmospheric tank) to prevent process gas from leaking around the rotating shaft."	Accepted in principle. Add to the definitions "A liquid film seal is a type of wet seal that relies on a thin, layer of liquid to inhibit process gas from leaking around the rotating shaft or atmospheric air into the machine.
41	Albert Kuo	NonVoter	12.2.7.2	12.2.7.2	Technical	The word "individually" implies component balance	Delete "individually"	Accepted in principle. Reword to separate single piece and multi-piece rotors.



282	Tim Grady	NonVoter	12.2.7.2 Dynamics	12.2.7.2	Technical	Delete "individually". This is no longer applicable since the rotors are being balanced as an assembly rather than individual parts.	Reword to: The assembled rotors (including shafts and lobes) and timing gears shall be dynamically balanced to ISO 21940-11 grade G2.5.	Accepted in principle. Reword to separate single piece and multi-piece rotors.
295	Tim Grady	NonVoter	12.2.7.2 Balancing	6.8.3 (all)	Technical	The split between General and Section 12 doesn't appear to be correct. Section 12 balances as an assembly, not independently, and to lower balance grade, but still needs to meet the keyway / half-key requirements here.	Add a reference to 6.8.3.2, 6.8.3.3, and 6.8.3.9 in 12.2.7.2	Not Accepted. These clauses on individual shaft balancing will be deleted from General and not applied here.
283	Tim Grady	NonVoter	12.2.8.3.2 Bearing Housings	12.2.8.3.2	Technical	Sight glasses rated for the MAWP and full vacuum are only required when the oil sump is under process pressure. This is not applicable to blowers with external bearing housings.	Reword to: "If the oil sump can be subject to process pressure, then sight glasses shall be rated to meet the maximum allowable working pressure and the full vacuum pressure specified."	Accepted.
42	Mike Elliyoun	NonVoter	12.2.8.3.3	n/a	Technical	Why? Is this reasonable if the ambient temperature is -50 °C and the process gas temperature is 60 °C at the inlet and 140 °C at the outlet? Why not make this the same as 12.2.8.3.5?	Delete or use similar wording as 12.2.8.3.5	Accepted. Make the wording similar to 12.2.8.3.5.

284	Tim Grady	NonVoter	12.2.8.3.3 Bearing Housings	12.2.8.3.3	Technical	At 41 C ambient and below, this requirement is more stringent than 12.2.8.3.5 for circulating oil systems. 39 C or 70 F above the ambient temperature with splash lube does not match >80% of all blower applications and could have the impact of requiring forced lube or cooling coils for nearly all applications. Cooling coils largely went away with the advent of modern synthetic oil because they were no longer required to achieve reasonable oil life and bearing life. Additionally, this requirement allows considerably higher oil temperatures in hot ambient conditions than in cold ambient conditions..	Either delete or Revise to: "2.8.3.3 For splash lubricated bearings, the sump oil temperature rise shall not exceed 70°C (126 °F) above the ambient temperature. " This puts rotary lobe blowers on an even playing field with oil-flooded screw compressors (~110 C oil temp at 40 C ambient) and it's still FAR below the actual limits for splash lube.	Accepted. Make the wording similar to 12.2.8.3.5.
285	Tim Grady	NonVoter	12.2.8.3.4 Bearing Housings	12.2.8.3.4	Technical	"6.9.4.4 For pressurized or circulating oil systems, the bearing oil drain temperature shall not exceed 28 °C (50 °F) above oil supply temperature." appears to cover the exact same thing as the rotary lobe blower requirements.  "12.2.8.3.4 For circulating oil systems, the rise in oil temperature through the bearing and housings shall not exceed 28°C (50 °F) under the most adverse specified operating conditions. "	Delete 12.2.8.3.4	Accepted.

43	Keith King	Affirmative WithCom ment	12.2.8.3.9	12.2.8.3.9	Editorial	format the list to number a,b,c and start each item with lower case letter	a. located on each bearing housing,b. located on plane perpendicular to the axis of rotation, andc. aligned per in-line axis of bearing, or in between two bearings.	Accepted
44	Albert Kuo	NonVoter	12.2.9.1	Note	Editorial	Inferior to, not than	Change "than" to "to"	Accepted
45	Keith King	Affirmative WithCom ment	12.2.9.10	12.2.9.10	Accepted	I believe the correct reference should be 12.2.9.8	Correct the reference	Accepted
46	Mike Elliyoun	NonVoter	12.2.9.7	a	Technical	What's the reasoning behind this threshold? A lube oil system is not the only remedy for this concern. As an example, proper and proven track design of oil thrower can satisfy the requirement also.	Delete	Accepted in principle. After two special TF meetings, TF came to consensus. Please see new ballot for agreed changes.
47	Mike Elliyoun	NonVoter	12.2.9.8	n/a	Technical	Mandating 1000 cSt is not practical, this means more than 90% of machines shall require lube oil heating. Table D.1 from AGMA 9005-F16 shall be governed here, which says an ISO viscosity grade of 150 is suitable for splash lubrication systems down to an ambient temperature of -10 °C. This suggests an actual kinematic viscosity of ~3400 cSt at -10 °C. Our recommendation is to change this to 3500 cSt or round up to 5000 cSt which is more sensible.	Change 1000 cSt to 3500 cSt	Accepted in principle. After two special TF meetings, TF came to consensus. Please see new ballot for agreed changes.

48	Keith King	Affirmative WithCom ment	12.2.9.8.a	12.2.9.8.a	Editorial	Reference should be 12.2.9.3	Reference should be 12.2.9.2	Accepted.
49	Bob Eisenman n	Affirmative WithCom ment	12.3.1.1.2	12.3.1.1.2	Editorial	Better to use "For" rather than "On".	Reword to:"12.3.1.1.2 For vacuum or steam services, instrumentation for casing metal surface temperature indication shall be provided."	Accepted
50	Albert Kuo	NonVoter	12.3.1.2	Table 15	Editorial	Delete blank line		Accepted
51	Keith King	Affirmative WithCom ment	12.4.1.1.1	12.4.1.1.1	Editorial	this paragraph requiring a retest if hardware modifications have been required to meet the test requirements, does not seem to belong in this section titled Requirements prior to the mechanical running test	TF to review where to more appropriately locate this requirement, possibly after 12.4.1.2	Accepted in principle. Deleted. Already covered in General.
23	Bob Eisenman n	Affirmative WithCom ment	12.8.3.9	Item list	Editorial	Better for the list of items in the list in this section to have references; a), b) , c) etc.	Reformat/number to:"12.2.8.3.9 Provisions for mounting accelerometers shall be:a) Located on each bearing housing, b) Located on plane perpendicular to the axis of rotation, c) Aligned per in-line axis of bearing, or in between two bearings.	Accepted in principle. Made into separate clauses.
206	kenji Ohki	NonVoter	A.1	Page 2/7~7/7 SI Units, US Customary unity	Editorial	Data sheet	Dry Screw Data sheet	Accepted in principle. "Dry Screw Compressor Data Sheet" added.

207	kenji Ohki	NonVoter	A.1	Page 2/7	Editorial	line 54/L: Elect. Area Classification line 58/R: Instruments & Controls	To be bold letter	Accepted.
208	Kevin Kisor	Affirmative WithComment	A.1	Annex A - Page 6 line 7 & 8	Technical	The term 'annunciator' refers to outdated technology that is rarely or no longer specified in new compression systems. Please change the wording to Human-Machine-Interface (HMI) or Display (device)	Change the word 'annunciator' to Human-Machine-Interface (HMI)	Accepted.
209	Kevin Kisor	Affirmative WithComment	A.1	Annex A.1 - Page 1 line 44	Editorial	Line of "Certified Point" has moved to last line of operating conditions. It is suggested to keep the line to mark the certified point as first line. Especially for applications with many specified operating cases, this facilitates to find the case of most importance.	Move line 44 ("Certified Case" to position of Line 10.	Accepted.
210	Kevin Kisor	Affirmative WithComment	A.1	Annex A.1 - Page 2 line 37 left	Technical	The range of ambient temperature is linked to site data without consideration of a different temperature, if items are (partly) located indoors. This might have an impact on e.g. different freezing protection requirements	Add column for ambient temperatures 'indoor'	Not accepted. Purchaser can specify indoor on Line 31. They should add data in PO for indoor conditions.

211	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 2 line 47	Technical	Item written as "copper and copper alloys prohibited" may lead to the interpretation that copper in all areas of the package or machine (including bearings) is prohibited. Therefore it is suggested to rewrite the point as "copper and copper alloys in contact with process gas prohibited (6.9.2.5)"	Rewrite as "copper and copper alloys in contact with process gas prohibited" and add reference to item 6.9.2.5	Accepted.
212	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 2 line 54 left	Editorial	Only applicable, if different from classification in line 34. Please add 'if deviating from line 34' or 'for equipment that requires a different classification than in line 34'	add 'if deviating from line 34' or 'for devices requiring a classification other than that specified in line 34'	Accepted in principle. Deleted Line 34.
213	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 2 line 57 right	Editorial	Does it refer to IP/NEMA Enclosure Protection Ratings? Please add	add 'IP/NEMA Enclosure Protection Ratings'	Accepted in principle. Added "(Enclosure Protection Rating)."
214	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 2 line 60 right	Technical	If requirement is linked to 'IP/NEMA Enclosure Protection Ratings': "Control enclosure" is a very general term. It can refer to a control panel enclosure or an electronic transmitter enclosure, although the requirements for each are usually different.	change 'Control Enclosure' to 'Control Panel' add additional row: 'Instrument'	Accepted.

215	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 2 lines 55 & 58	Technical	Two separate classifications are mentioned. One for equipment and one for control panels.The requirements in line 34 generally apply to equipment. However, stricter regulations often apply to instruments.	Change 'Equipment' to 'Instruments'	Accepted in principle. Added "(Instruments)".
216	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 3 line 44	Technical	Line duplicated.Information already present in line 40	Delete line 44.	Accepted.
217	Kevin Kisor	Affirmative WithCom ment	A.1	Annex A.1 - Page 7 lines 1 to 5	Editorial	The requirements in lines 1 to 5 are repeated and can already be found on page 6, lines 55 to 59.	Delete lines 1 to 5	Accepted in principle. Deleted page 6, lines 55 to 59.
204	Mike Elliyoun	NonVoter	A.3.1	Alram & Shutdown	Editorial	Squares and circles are not aligned with the functions	Align the functions with the squares and circles in the 'ALARM & SHUTDOWN' section	Accepted.
269	Mike Elliyoun	NonVoter	A.3.1	Line 1 - Page 158	Technical	Nitrogen is missing	Add nitrogen to the utility conditions section	Accepted.
270	Mike Elliyoun	NonVoter	A.3.1	Line 14 - Page 126 (Data Sheet)	Editorial	There are 36 occurrences of "/hr" in the standard. The abbreviation of "hour" is "h", according to the S.I.	Change all occurrences to 'kg/h'	Accepted.
271	Mike Elliyoun	NonVoter	A.3.1	Line 33 - Page 154 (Data Sheet)	Editorial	"K 2" looks like K squared. "K [2]" would be better	Change "K 2" to "K [2]"	Accepted in principle. Changed 2 to subscript.

272	Mike Elliyoun	NonVoter	A.3.1	Line 43 - Page 154 (Data Sheet)	Technical	Why only silencer $\Delta p$ ? There could be more than one silencer. There could be coolers and valves also. Why not simply "Pressure losses"?	Change 'Silencer $\Delta p$ ' to 'Pressure Losses'	Not accepted. Discharge silencer is required by the standard.
273	Mike Elliyoun	NonVoter	A.3.1	Line 9 - Page 159	Technical	Gas detectors and horn/beacon are missing	Add gas detectors and horn/beacon to the list of instrument suppliers.	Not accepted. Enclosures are optional. Purchaser to provide specifications if required.
264	Keith King	Affirmative WithComment	B.7	B.7	Technical	Why is there a tolerance on the negative side of power? As a purchaser I don't want the power to be higher than expected but am perfectly happy if the machine is more efficient than predicted.	I would suggest supply a tolerance of +4% on power..	Not accepted. The negative tolerance comes from ISO 1217.
265	Mike Elliyoun	NonVoter	B.7	B7. - Page 166	Editorial	This is ambiguous, because an electric motor has an electric power input and a mechanical power output, both of which are "at" the driver.	Change to "Mechanical power output from driver..."	Accepted.
218	Kevin Kisor	Affirmative WithComment	B.8	Annex B Item B.7	Editorial	Correct to +4%, Aligned with item 6.1.2.9.b)	"The tolerance on the manufacturer's certified shaft power is +4 %..."	Not accepted. The negative tolerance comes from ISO 1217.
220	Albert Kuo	NonVoter	C.4.1	Figure C.2	Editorial	Make figure bigger and more legible		Noted.
221	Albert Kuo	NonVoter	C.4.2	Figure C.3	Editorial	Make figure bigger and more legible		Noted.



266	Mike Elliyoun	NonVoter	C.6.1	C.6.1 Page 170	Editorial	Delete “volume”. The volume of gas in the discharge line cannot be increased unless something in the discharge line can expand like a balloon. In fact, the whole sentence is redundant because it has already been covered with much better wording in C.5.2.	Delete “volume”.	Accepted in principle. Deleted last sentence.
267	Mike Elliyoun	NonVoter	C.6.3	Figure C.5	Technical	The pressure doesn’t necessarily drop to zero during the cycle.	Use PV diagram from <a href="https://ww1.prweb.com/prfiles/2010/06/29/4204174/0_TechnicalWhitepaperLobevsscrew.pdf">https://ww1.prweb.com/prfiles/2010/06/29/4204174/0_TechnicalWhitepaperLobevsscrew.pdf</a>	Not accepted. Pressure goes from P1 to P2. Zero pressure is not shown.
219	Albert Kuo	NonVoter	C.7.3	C.7.3	Editorial	V subscript i, not Vi		Accepted.
224	Juan Suarez	Affirmative WithComment	D.2	Figures D.1, D.2, D.3	Editorial	Figure D.1 shows the x-axis positive direction being from driven end (inboard) to outboard. Figures D.1 and D.2 are correct, but oriented "right to left"	So that positive X is to the right, flip the images of Figures D.2 and D.3 so X is positive to the right.	Not accepted. The figures are technically correct.
223	Juan Suarez	Affirmative WithComment	D.2	Table E.2	Editorial	Wrong Table numbering	Tables in Annex D should be D.1, D.2, etc.	Accepted
286	Tim Grady	NonVoter	D.2	Table E.2	Editorial	Table is in Annex D and should be table D.2	Rename to table D.2	Accepted.
222	Albert Kuo	NonVoter	D.3	Table D.3	Editorial	Values over 10,000 are not shown together on one line		Accepted. API editors to fix.
287	Tim Grady	NonVoter	D.3	Table D.3	Editorial	correct wrap of 5 digit values. This does not seem to be an issue in Table D.1 or D.2. Also, in table D.1 and D.s, the flange sizes are bold.	Fix wrap of values and make flange sizes bold	Accepted. API editors to fix.

288	Tim Grady	NonVoter	D.4	Table D.4	Editorial	In table D.1 and D.s, the flange sizes are bold.	Make flange sizes bold	Accepted
226	Albert Kuo	NonVoter	E	Title	Editorial	1m should be a subscript		Accepted
227	Albert Kuo	NonVoter	E.4	E.4	Editorial	10 should be a subscript of L		Accepted
228	Albert Kuo	NonVoter	E.7.2	E.7.2	Editorial	Remove " after bearing.		Accepted
225	Juan Suarez	Affirmative WithCom ment	E.12	E.12	Technical	The example is confusing. Equation for modified life is multiplication of basic life by a1 (reliability), also (lubrication etc..) yet example shows L1m/0.25	Provide better example of how the factors impact the modified life	Not accepted. This is the best that TF could do.
229	Albert Kuo	NonVoter	E.14.1	E.14.1	Editorial	Check that format of ndm is same as Table 4		Noted. Annex will be deleted per SOME direction.
230	Albert Kuo	NonVoter	E.14.2	E.14.2	Editorial	Check that format of ndm is same as Table 4		Noted. Annex will be deleted per SOME direction.
233	Kevin Kisor	Affirmative WithCom ment	F.1	Table F.1	Technical	Add the following materials	ASTM A240/A276, AISI 304 = EN 10088, X5CrNi18-10 / 1.4301 ASTM A240/A276, AISI 316 = EN 10088, X5CrNiMo17-12-2 / 1.4401 ASTM A240/A276, AISI 316L = EN 10088, X2CrNiMo17-12-2 / 1.4404 ASTM A240/A276, AISI 316Ti = EN 10088, X6CrNiMoTi17-12-2 / 1.4571 ASTM A240/A276, AISI 321 = EN 10088, X6CrNiTi18-10 / 1.4541	Noted. Please provide the category of material and type of machine for which each material applies.

234	Kevin Kisor	Affirmative WithCom ment	F.1	Table F.1	Technical	Modify and add the following equivalent materials to "ASTM 829M / SAE 4340"	ASTM A646/829M, AISI 4340 = EN 10250, 34CrNiMo6 / 1.6582ASTM A646/829M, AISI 4340 = EN 10250, 30CrNiMo8 / 1.6580	Noted. Please provide the category of material and type of machine for which each material applies.
235	Kevin Kisor	Affirmative WithCom ment	F.1	Table F.1	Technical	Change material name of "X4CrNiMo16-5 / 1.4418"	X4CrNiMo16-5-1	Not accepted. The material numbers are important.
236	Kevin Kisor	Affirmative WithCom ment	F.1	Table F.1	Technical	Change material name of "GS-21Mn5 / 1.1138"	G21Mn5	Not accepted. The material numbers are important.
231	kenji Ohki	NonVoter	F.1	Table F.1	Technical	SEW 685, GS-21Mn5/1.1138	To be: EN 10213 G 20 Mo 5	Accepted. Kept the original and added the new EN.
232	Juan Suarez	Affirmative WithCom ment	F.1	Table F.1	Editorial	use of grey	Change to gray as in gray cast iron consistent with the standards.	Accepted.
237	Kevin Kisor	Affirmative WithCom ment	F.1	Table F.1 Columns (Compon ent)	Editorial	In some of the fields under Column "Component" ist is currently also wiritten machine type, which can lead to confusion.The machine types are already written in the last columns "Material Application".	Delete reference to machine types in columns "Component".	Accepted
205	Juan Suarez	Affirmative WithCom ment	J.2	Figure J.2	Editorial	The hydraulic positioner is shown on DA hydraulic piston	Sugest adding Item 10 - servo positioner or something similar.	Noted. Will be discussed on next ballot.
238	Albert Kuo	NonVoter	J.3	Figure J.3	Editorial	Item 12 is not aligned in the Key		Accepted

268	Mike Elliyoun	NonVoter	J.3	Figure J.3	Editorial	Alignment for "12 External Seal" is not correct	Correct the alignment.	Accepted.
289	Tim Grady	NonVoter	J.3	Figure J.3	Editorial	the key for Figure J.3 is not formatted correctly. Items are out of order. Is there a version of this cross section that actually shows internal seals? Not all blowers have or need a driveshaft bearing, but some do. Recommend deleting reference to component 10.	Fix key formatting. Delete driveshaft bearing reference.	Accepted in principle. Formatting will be fixed, but driveshaft bearing reference will be retained.
239	kenji Ohki	NonVoter	L.4	Fig. L.3	Technical	21: demister pad	demister pad is not commonly used for oil separator. Fig. L.3 may be changed or removed.	Not accepted. Some oil separators may still use them.
240	Juan Suarez	Affirmative WithCom ment	L.4	Figure L.1	Technical	Some items not labeled. Also block valve show on relief valve vent.	Add oil heater to component list. Suggest removal of the block valve on oil pump relief valve vent. Or add note that it is car-sealed open (CSO). Add ABC to TCVItem 10 PCV: show sensing line to downstream of oil filters	Not accepted. Oil heater is already shown on separator drawings. Agree with removing block valves on oil pump relief vent. No need to add ABC to TCV - too much detail.
241	Juan Suarez	Affirmative WithCom ment	L.4	Figure L.2 and L.3	Technical	Connection 13 usually has some sort of impingement plate or baffle as part of separation	Show dotted lines as impingement plate.	Not accepted. This level of detail is not necessary.
242	kenji Ohki	NonVoter	M.1.1	M 1.1	Editorial	See 11.2.7.7	to be "see 11.2.6.7.2"	Accepted in principle. New paragraph is 11.2.6.8.1.

243	kenji Ohki	NonVoter	N.1.2	N 1.2 Inlet Process Gas	General	Para N 1.2 is applied for not only Oli flooded screw comp.	To be re-located in General section	Not accepted. Good comment, but there is no other packaging section for other types of machines.
244	kenji Ohki	NonVoter	N.1.2.4.5	Table N.1	Technical	Inlet separator/Additional Requirement: Drain (may be negative pressure)	to be "Drain pump" (for negative pressure case)	Not accepted. Too much detail.
245	kenji Ohki	NonVoter	N.2.1.1.5 c) 2)	N.2.1.1.5 c) 2)	Technical	May expect < 1 ppm	Oil Carry over expectation, see table M.1	Accepted. Add "See Table M.1."
246	kenji Ohki	NonVoter	N.2.1.3 a)	N.2.1.3 a)	Technical	Each of these vessels will have liquid accumulation that has to be periodically drained	to be: Each of these Oil Separator vessels will have Oil outlet/drain lines that has to be continuously removed/drained.	Accepted. Replace "periodically" with "continuously".
247	kenji Ohki	NonVoter	N.2.1.6.1	N.2.1.6.1	Editorial	The systems illustrated in Annex N Figures N.1, N2 and N3,,,,,	to be : The systems illustrated in Annex N Figure N2 ,,,,,	Accepted
248	kenji Ohki	NonVoter	N.2.1.6.3	N.2.1.6.3	Editorial	(see 11.2.7.7)	to be: (see 11.2.6.7.2)	Accepted in principle. New paragraph is 11.2.6.8.1.
249	kenji Ohki	NonVoter	N.2.1.6.3	N.2.1.6.3	Editorial	Typical oil separator arrangements are shown in Annex N, Figures N2. and N3,,,	to be: Typical oil separator arrangements are shown in Annex N, Figure N2.	Accepted
250	kenji Ohki	NonVoter	N.3.2.1.1	N.3.2.1.1	Technical	Locate ,, off skid to reduce tripping hazardous	Off skid location may not to reduce tripping hazardous ,, ,,,	Accepted. Deleted clause. Equipment needs to stay on-skid as part of the package.
251	kenji Ohki	NonVoter	N.3.2.1.4	N.3.2.1.4	Technical	Design lube pump installation is per the requirements of API-686.	may be: Lube pump design & installation are per Para 11.2.6.6. & Annex N 3.2.5	Accepted. Delete clause. Refer to N.3.2.5.1.

252	kenji Ohki	NonVoter	N.3.2.1.6	N.3.2.1.6	Editorial	Reference Annex L,,,	to be: Reference Annex K,,,	Accepted
253	kenji Ohki	NonVoter	N.3.3.3	N.3.3.3	Technical	add note	Note: Face mounted motor & magnetic coupling may use. (see N.3.2.5.1)	Not accepted. Rename N3.3 to Compressor Mechanical Seals.
254	kenji Ohki	NonVoter	N.5	N.5	General	N.5 Packaging section is not only for Oil Flooded screws.	This section to be re-located to General section.	Not accepted.
255	kenji Ohki	NonVoter	O	2.4 a	Editorial	Please note:	to be: Note	Accepted
256	kenji Ohki	NonVoter	O	2.4 a	Technical	Oil Filters should never be used as Process particulate filters.	Oil Filters are designed for lubricant filtration only & should never be used as Process particulate filters.	Accepted. Should NOT be used as ...
257	kenji Ohki	NonVoter	O	3.5	General	This section to be applied not only for Oil Flooded screw comp.	This section may be re located to General section or removed.	Not accepted.
258	kenji Ohki	NonVoter	O	3.6g	Technical	Review location of discharge check valve,,,	Reviewing location of suction & discharge check valve,,,	Accepted.
259	kenji Ohki	NonVoter	O	3.7, 3.8, 4.2, 4.3.1	General	these sections to be applied not only oil flooded screw comp.	Re-located to General section.	Not accepted. Good comment, but there is no other packaging section for other types of machines.
260	kenji Ohki	NonVoter	O	4.3.2	Editorial	"Intermediate Separator"	to be Bold letter	Accepted

261	kenji Ohki	NonVoter	O	4.3.2, Reference	Editorial	P.2.1.5 is not existing	"P.2.1.5" should be removed	Accepted
262	kenji Ohki	NonVoter	O	4.3.3l, Reference	Editorial	Carbon bed	add "M3.3"	Accepted
263	kenji Ohki	NonVoter	O	6.1.5, 7, 8, 9, 10, 11, 12	General	These sections to be applied not only for Oil flooded screw comp.	Re-locate at General section of removed.	Not accepted. Good comment, but there is no other packaging section for other types of machines.