



## REQUEST FOR INTERPRETATION OF 3-A SANITARY STANDARDS OR 3-A ACCEPTED PRACTICE CRITERIA

Requester Name and Address: TPV Coordinating Committee c/o 3-A Sanitary Standards, Inc. 1451 Dolley Madison Blvd., Suite 210 McLean, Virginia 22101	Standard/Practice Name and Number 3-A Sanitary Standards for Centrifugal and Positive Rotary Pumps, Number 02-09
Requester Telephone No.: 703-790-0295	Criteria Paragraph Number: D7, D2.1.1, D2.1.2, and D11.2.2.

Specific wording requested for interpretation:

1. Should the water side of a water flushed mechanical seal be considered a product contact surface (D.7)? In the past, this seal type has been considered a nonproduct contact surface for 3-A Symbol authorizations. However, because this type of seal uses water to cool and lubricate the carbon or ceramic parts of the seal it also allows some water to enter the product. The consensus of the CCE group is that there is no cleanability issue and the water side should be considered non-product.

**VRC Response:** The water side of water flushed mechanical seal, would not be considered a product contact surface.

**Justification:** A properly designed and installed sanitary seal is considered to be adequate separation between product and non product contact surfaces and would prevent the entrance of water into the product. If water is drawn into the product, this would be considered a failure of the seal and would warrant seal replacement.

2. D2.1.1 allows silver solder be used to join bushings, internal bearings, pins, and mechanical seal components. But D2.1.2 allows the use of silver solder around pins and for producing fillets for minimum radii. Is the use of solder restricted to pins and fillets for minimum radii or can it be used in bushings, bearings, and seal components also? At the CCE meeting there was discussion as to the 3-A committee's intent as to what the criteria actually allows.

**VRC Response:** When necessary for essential functional reasons, soldering is allowed in those cases where welding is impractical and it is not restricted solely to pins and fillets for minimum radii. It may also be used in applications such as bushings, internal bearings, pins and mechanical seal components.

**Justification:** Sections D2.1.1 and D2.1.2 are stand alone sections and are to be interpreted as such. Section D2.1.1 specifically allows soldering where welding is impractical and when needed for essential functional reasons (such as bushings, internal bearings, pins and mechanical seal components). Section D2.1.2 specifically allows soldering around pins for sealing joints and producing fillets for minimum radii.

3. Are gasketed impeller bolts allowed by this standard? The standard is silent to the use of a bolt, but specifies the use of an enclosed-type nut in paragraph D11.2.2 if enclosed threads are used. These bolts are isolated from the product contact surfaces by a gasket and some manufacturers have considered them a nonproduct contact surface, and therefore exempt from D11.2.2? There was considerable debate on this issue.

**VRC Response:** Sanitary Standard 02-09 does not allow for the use of gasketed impeller bolts.

**Justification:** Section D11.1 states, “There shall be no threads on product contact surfaces except for holding the impeller or rotor to the shaft”. This statement limits threads specifically to shafts located in product contact areas. It does not apply to; or allow for; the use of impeller bolts (containing gasketed enclosed type nuts) in product contact areas.

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