



## CCE COORDINATION BULLETIN

**BULLETIN NUMBER 2014-2**

**August 15, 2014**

**INFORMATION REQUIRED FOR LISTING ON 3-A SYMBOL AUTHORIZATION  
CERTIFICATES RELATING TO EQUIPMENT COVERED BY  
3-A SANITARY STANDARD 74-06 FOR SENSORS AND SENSOR FITTINGS AND  
CONNECTIONS USED ON EQUIPMENT, AND  
PROPER INSPECTION OF POTENTIAL VOIDS BEHIND SEALS AND GASKETS**

**EFFECTIVE August 15, 2014**

The following guidance shall be used by the CCE when performing TPV evaluations. This guidance is effective immediately upon receipt and shall be used until revoked or included in a *TPV Manual* update.

3-A Sanitary Standard 74-06 was revised in August 2013. The Sanitary Standard includes requirements for both the sensors and the adapters used to mount them to various styles of equipment, and for leak detection of void areas behind seals.

This bulletin is intended to guide the CCE to evaluate the various types of adapters used and to assure that proper leak detection is been provided.

Excerpt from Sanitary Standard 74-06 for reference:

- A1 This 3-A Sanitary Standard applies to the sanitary aspects of sensors and sensor fittings and connections for equipment which contains or processes milk and milk products and on pipelines which convey milk and milk products and to sensors and sensor fittings and connections within recirculation cleaning systems.

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### **Connection Adapters:**

The Sanitary Standard clearly includes the connections and fittings in the Scope. Therefore, it is incumbent upon 3-A Sanitary Standards, Inc. (SSI) to assure that when the 3-A Symbol is authorized, its use cannot be misinterpreted. There are adapter connections available in the marketplace, which do not meet this Sanitary Standard's criteria for various characteristics, such as gasketing, radii, unsanitary threads, and leak detection.

The TPV evaluation shall include:

- The verification of **each** type of adapter intended to be offered or for which the sensor can use for **each** sensor type covered by the 3-A Symbol Authorization;
- The verification that only appropriate, conforming adapters are being used; and
- The verification that the sensor is capable of detecting leaks into any internal cavity area behind an O-ring or seal.

The TPV Report and the resulting 3-A Symbol Authorization Certificate shall list each type of adapter found capable of satisfying the criteria of this Sanitary Standard.

The result of this process will enable a Regulatory Agency or user to verify from the searchable database at [www.3-A.org](http://www.3-A.org) that equipment or components found in use have been evaluated and found in conformity. Conversely, sensor and adapter combinations not listed can be assumed to not be sanctioned by the sensor OEM holding the 3-A Symbol Authorization.

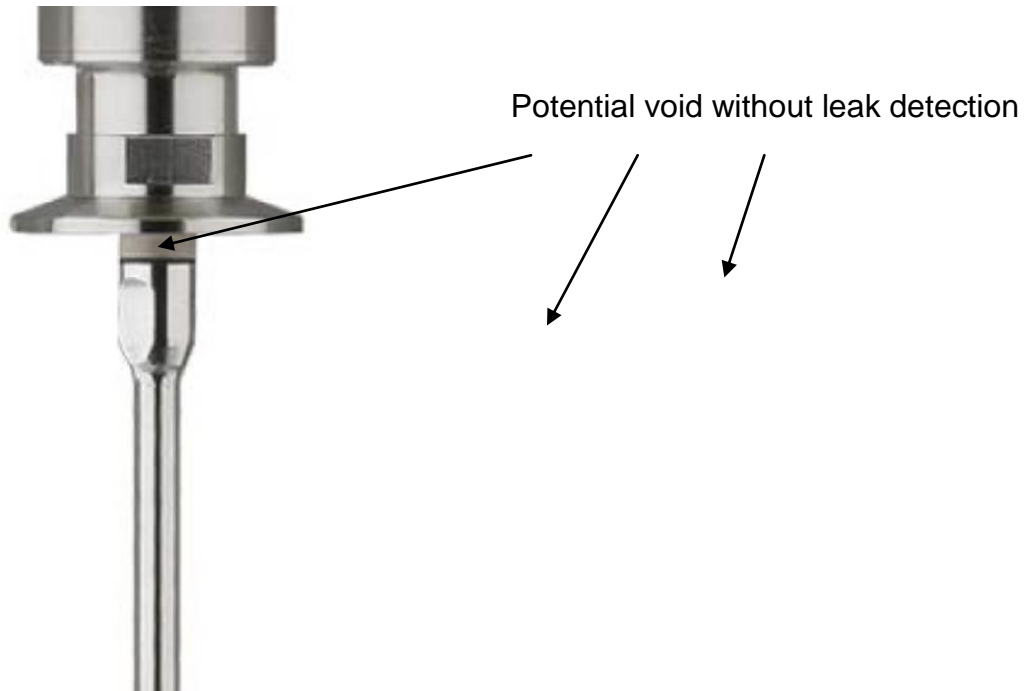
### **Leak Detection:**

Excerpt from Sanitary Standard 74-06 for reference:

E1.5.5 When a gasket or similar seal is used to prevent product entry into a cavity behind the seal, the assembly shall be provided with a leak detection port to drain product that may leak past the seal upon seal failure. This provision for leak detection shall be at the lowest point in the assembly and, when provided, shall be at least 3/32 in. (2.381 mm) in diameter.

Many sensors are designed to be activated by electronics that utilize a gasket to seal the electronics area from product or cleaning solutions. The placement of electronic packages immediately behind this seal does not exempt them from this Sanitary Standard's requirement for leak detection into the void area. Even in such cases where electronics are not the issue, a sensor may still include a void or blind area behind a seal. The unsanitary significance of these hidden void areas was discussed at the May 2014 CCE Training session. Figures 74-05-06 through 74-05-09, and 74-05-12 on pages 24 through 27, and 31 of ~~the~~ this Sanitary Standard provide good examples of the intent and positioning of leak detection openings as required by section E1.5.5.

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The potential void areas highlighted above are not unique to sensors and sensor connections. These conditions can and do occur frequently in many types of equipment. CCE's are advised to use this guidance to pay special, critical attention to all seals or gaskets on other types of equipment that may have a void area behind and for which product can leak into but not be drained away. The normal boilerplate criteria for inspectability, cleanability and ease of disassembly that are present in all standards is a justifiable base for evaluation and comment even for older standards that do not reference dual gaskets and leak detection pathways specifically.