Interpretation Request #1

IEEE Std 386-2006, 7.1 Production Tests states that “Bushing wells may be sample tested in accordance with ANSI/ASQC Z1.4 with acceptable quality level of 2.5% using the normal inspection level.”

Does this “sample testing” also extend to integral bushings, or is it limited to only bushing wells? That is, integral bushings are to be 100% tested in accordance with the requirements specified here?

Interpretation Response

Bushing wells are defined in IEEE Std 386-2006, 3.5, as follows:

3.5 bushing well: An apparatus bushing having a cavity for insertion of connector component, such as a bushing insert.

Integral bushings are defined in IEEE Std 386-2006, 3.21, as follows:

3.21 integral bushing: An apparatus bushing designed for use with another connector component, such as an elbow.

The term “bushing well,” as defined, is interpreted as including only integral (apparatus) bushings that have a cavity. An apparatus bushing is not defined in IEEE Std 386-2006 or in the IEEE dictionary. However, using these two IEEE Std 386-2006 definitions it is determined that a bushing well is a special type of integral bushing. It is concluded that the sample testing noted in the excerpted paragraph from IEEE Std 386-2006, 7.1 that is noted above does not extend to all integral bushings. Also interpreted is that (100%) of all integral bushings, except the bushing well type, must be tested in accordance with IEEE Std 386-2006, 7.1, paragraph 1.