20 Year Shelf Life Study for Surface Finishes

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Abstract

Printed circuit board surface finishes are generally acknowledged of retaining their solderability characteristics for 1-2 years dependent on their storage conditions and original deposition quality. But what happens to printed circuit board surface finishes after being stored for 20 years? This paper documents a unique situation where industry printed circuit boards surfaces finishes were examined using wetting balance assessment and electron microscopy analysis after being stored in 21C, 30%-70% RH conditions. Some of the printed circuit board surface finishes included in the investigation were immersion silver, immersion bismuth, ENEPIG and ENIG.