EVANS COMPONENTS

Evans PWEA Treated PW Series Regulator

(Product Improvement Notice)

Image above shows the wetted surface before (left) and after (right) the PWEA tratment

PWEA Technical Details

Evans Components proprietary wetted surface treatment PWEA® to prevent stress corrosion cracking and leaching of brass for PCW applications.

Through the process of continuous product improvement Evans Components began treating all PW Series regulators with the PWEA® treatment in 2016. This new process eliminates the potential dezincification of brass wetted internals which in some cases has caused leakage around the stem/poppet due to stress corrosion cracking.

The PWEA® treatment is an electrodeposited intermetallic alloy which substitutes the classic electrolytic nickel-chrome deposit. The name of this process is PWEA®, it complies with limits stated by international standards on drinkable water standards which include:

NSF 61 section 8- pH5 Hot Commercial (82°C) for industrial applications that can be considered the stiffest test on the subject. PWEA®, process also meets NSF 4, UNI 10531 and UNI 11460 for industrial equipment "food zone" devices.

The process can produce polished deposits with wide resistance guarantee against wear and corrosion (hardness 400 Vickers – 200 neutral saline smoke according to DIN 50021, ASTM B 117, and UNI ISO 9227).

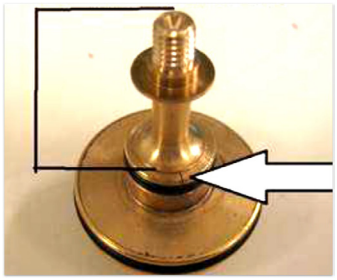
This process is stable to ordinary temperatures with Vickers hardness of about 400 D.P.H.

The absence of porosity in this alloy guarantees the resistance to corrosion, leaching of material and a long term polished effect in an equal way to nickel and chromium deposits with same thickness, with the advantage of being chemically inert.

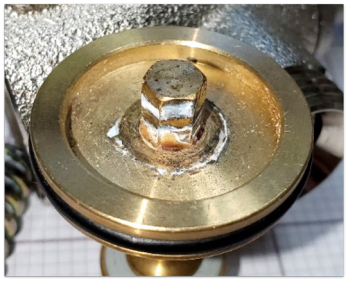
This process enables PWEA ® polished deposits directly on all wetted brass alloys of the regulator at a current density of 0, 1 to 4 A/dm². The color of the deposit is constant regardless of the variations in the solved product concentrations. All the above mentioned features provide superior resistance to corrosion, which is equal to the one produced by a chromium deposit with same thickness.

EVANS PWEA Treated Internals

Non-Treated Internals



Stress Corrosion Cracking, Regulator Poppet



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