

Evans PWEA Treated PW Series Regulator (Product Improvement Notice)



**I.D. Wetted Surface
(Before Treatment)**

**I.D. Wetted Surface
(After Treatment)**

Evans PW Series

PWEA Technical Details

Evans Components PCW Regulator Leakage on Stem/poppet, proprietary wetted surface treatment **PWEA®** to prevent stress corrosion cracking for PCW applications.

Through the process of continuous product improvement Evans Components began treating all PW Series regulators with the **PWEA®** treatment. 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:

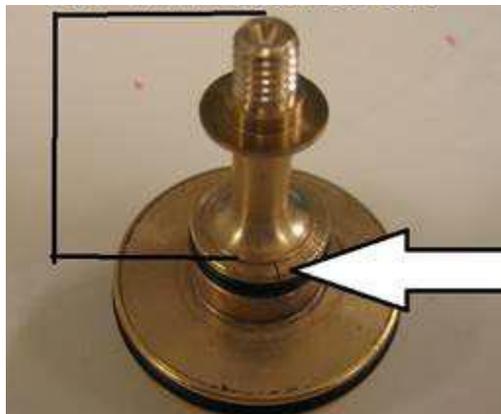
-NSF 61 section 8- pH5 Hot Commercial (82°C) for industrial faucets that can be considered the stiffest test on the subject.

-NSF 4, UNI 10531 and UNI 11460 for coffee machines and other "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 hardness of about 400 D.P.H. and can be subject to recrystallization only at high temperatures of 500° to 700°C.

The absence of porosity in this alloy **guarantees the resistance to corrosion 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 copper alloys, nickel, silver, 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.



**Stress Corrosion
Cracking, Regulator Poppet**