BURNS ENGINEERING

Application Note

A100823

Teflon® Cover for Corrosion Protection

APPLICATION

Plating baths, chemical storage tanks, and sewage treatment are examples of places where common stainless steels can corrode quickly and fail. Plating baths for example, require accurate temperature measurement to control the characteristics of the plating on the finished product. A typical bath has a heater and temperature sensor with controller. The more accurate the temperature control the better and more predictable plating results.

CHALLENGE

Tantalum and other exotic metal alloys that are resistant to chemicals are expensive and sometimes difficult to form into a suitable temperature probe. None of them are completely resistant to corrosion and will eventually have to be replaced. One solution is to plate the sensor with Teflon® however the coating is very thin and is easily damaged. Also, there is the possibility of pinholes resulting from incomplete plating and that becomes a location for corrosion to start.

Option Code /SC02

Add to any Series 100, 200, or 300 style A, B, D, or G, model number, 1/4" diameter only.

SOLUTION

A very effective and low cost solution is to add a covering of Teflon® over a standard probe. The covers are typically are made from shrinkable PFA Teflon®. Used in combination with compression fittings made of Teflon® or other chemically inert materials they make up an assembly that can be installed in a variety of places. The Burns Series 100, 200, and 300, A, B, D, and G style probes in 1/4" diameter can be ordered with the Teflon® cover by specifying option code / SC02 in the model code string. For further information or assistance please contact customer service at 800-328-3871, or request information through our website at: http://www.burnsengineering.com/contact/

TEFLON® IS A REGISTERED TRADEMARK OF EI DUPONT CO.

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