

# Typical Win/Win Situation

By Rick Richardson, Manager R & D

Recently, a company came to us with a corrosion problem with their current coating. The company, a major manufacturer of electrical distribution equipment, used a process that had been the standard for their product for years— silver or tin plating on copper conductors. They used these coatings because of their low electrical resistance and copper does provide some corrosion resistance in milder environments. However, in recent years, some of the atmospheres that this equipment was subjected to became increasingly aggressive and corrosive to the silver and tin. This added considerable downtime and refurbishing cost for the maintenance of the equipment.

When Techmetals entered into a cooperative research project with the company, the objective was to find an alternative coating that had as good or better electrical properties but also had superior corrosion resistance. We performed an intense series of tests and experiments on a variety of coatings and found one that performed. As a result of this mutual effort, the company is now producing a better product and Techmetals gained another satisfied customer. A typical win/win situation.

Techmetals is unique in the metal finishing industry, as we are one of the very few companies that have dedicated a portion of its facilities solely for research and development. We have approximately 1600 sq. ft.

that contain prototype plating chemistries, environmental technologies and innovative equipment designs. There are two full time and one part time technicians assigned to this department with a collective experience of over 50 years.

We discovered a few years ago that to stay competitive we needed to offer services that would be hard to find elsewhere. As primarily an engineered coating facility we focus on coatings that provided superior wear and/or corrosion resistant properties that prolongs the life and enhances the performance of our customers components, we realized the need for coatings that out perform what is typically offered elsewhere in our industry.

Now, we have the capabilities to tailor a coating to a specific need or application. If a certain part or component requires corrosion protection in a unique environment we have the ability to develop a new coating or alter the characteristics of an existing one, and perform the testing needed to meet the requirements. The same follows for situations where a wear resistant coating is required or a coating that is corrosion resistant and also performs well in wear or

abrasive applications. Whatever the requirement—whether it be corrosion, wear, magnetic, coefficient of friction, stress and grain structure properties —Techmetals can mix and match our various chemistries and/or constituents to satisfy our customers needs. ●

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