

Summertime Corrosion: Yellow Metals

Session Questions and Answers

Q: Will an acid etch brighten my parts?

A: Yes, it will. It will remove that dull oxide layer. However, it might give you an uneven or somewhat spotty look. Typically, it's not used for brightening parts, but it does remove that oxide layer. It does shine them up a little bit, but it might not be the look you're seeking, in which case you might want to look at some sort of chemical brightening or electro brightening process.

Q: Are there any environmentally/operator-friendly choices for an acid etch?

A: Yes. Citric acid tends to be a very good etching acid. It works well for not only brass, bronze, and copper, but also for aluminum and light oxide on steel parts. It's acidic, but it has a ph of about three, which is relative compared to some of the other acids out there which have a ph of one.

Q: Do I need a standalone Corrosion Inhibitor piece of equipment?

A: No. Generally, this is built right into your wash process. So, when you go from your cutting tool to the washer, typically these inhibitors are going to either be built into the soap or the chemical that you're using to clean the parts. Or you can add a standalone corrosion inhibitor to the rinse on your wash process.

Q: Can I plate directly over corrosion inhibitors?

A: I would say that when you're plating your parts, you want them to be as clean as possible. Fortunately, a plating line will have a pre-cleaning step in it where it's going through a series of dip tanks, and it will include a cleaning stage. This typically should be enough to remove the corrosion inhibitors, but you cannot plate directly. You would want to remove them, and you would need your surface as clean as possible to get as even of a plate as possible.