



PHOSPHATING: SUMMER'S SILENT ASSASSIN

A quick look at the often overlooked and underappreciated material finish that can make or break your application.

WHY IS QUALITY PHOSPHATING SO IMPORTANT?

As summer sets in, there are two important reasons why it's crucial for your steel parts to be properly protected. The increased heat and humidity that this season brings makes atmospheric steel corrosion inevitable. These conditions are even more exacerbated if your applications are near or exposed to salt water.

Here at Rotor Clip, we've been working to fight steel corrosion for over 60 years. From the moment our rings leave the production floor, through storage, and optimized for extended life into your final application, you can be sure that your parts are protected.

WHAT PUTS ROTOR CLIP'S PHOSPHATE ON TOP?

• STARTING WITH THE BEST

Rotor Clip has worked with our zinc phosphate supplier to develop phosphate that produces an excellent crystal that is compatible with the needs of our customers that will use our products in high-speed automated assembly equipment. Starting with a high-quality zinc phosphate means that our finishing and coatings are applied reliably and perform consistently, taking out any guesswork in final application performance.

• RELIABILITY IN APPLICATION

Consistency of our finishes is what makes our customers keep coming back. This is achieved through the control parameters set in our lab and production floor, which have been incorporated into our control plans. Additionally, our production line is always open for you, if you want to come visit to ensure that your parts are made to whichever specifications that you demand.

• DEFENSE AND INDUSTRY COMPLIANT

Rotor Clip can also supply parts with phosphate, as well as cadmium and zinc plated finishes that will meet stringent and demanding Military and Aerospace application requirements.

• VARIETY

We offer several versions of our zinc phosphate finish to meet your needs. Our traditional dry phosphate or phosphate and oil coating will be applied standard on all carbon steel parts, at **no additional cost**. Our engineers will work with you to determine what finish is best for your application needs.

Our capabilities also include a heavy phosphate and oil finish, rated for 72 salt spray hours, which in the right applications, may be able to replace costly stainless steel.

• QUALITY CONTROL

Rotor Clip has large in-house testing lab to verify our salt spray ratings. We are also able to supply these certificates free-of-charge to ensure quality and reliability:

- Certificate of Conformance
- Certificate of Origin
- Heat Treat Certification
- Material Safety Data Sheet (MSDS)
- Mercury Free Certification
- Military Certification (Material, DFAR Melt, Plating)
- Passivation Certificates
- RoHS/REACH Certificates
- Salt Spray Certification

GOING BEYOND PHOSPHATE

Rotor Clip goes above and beyond best-in-class phosphate finishes to offer a wide range of protective finishes to suit any application:

- **Zinc Plating:** This yellow dichromate post-plating finish is particularly effective for applications exposed to seawater.
Salt spray protection of 96 hours
- **Zinc Bright:** For when aesthetics are important, the dichromate is leached out of this process, leaving a bright silver finish.
Salt spray protection of 48 hours
- **Trivalent Chromate over Zinc:** This RoHS & ELV compliant coating is hexavalent-free, meeting global requirements.
Salt spray protection of 240 hours
- **Zinc Dichromate with Sealer:** This barrel finish is much thicker than phosphate offering strong corrosive protection.
Salt spray protection of 240 hours
- **Heavy Zinc Dichromate with Sealer:** A thicker, heavier version, this is a low-cost substitution for costly non-corrosive materials.
Salt spray protection of 480 hours