## MAXCOAT™ ZF

Maxcoat™ ZF is an inorganic, zinc-flake surface coating for metal that protects against corrosion. This coating offers better corrosion protection than electroplated zinc, without the use of chrome, providing a superior, environmentally sound alternative. Acid pickling is not required to prepare the part surface and current is not used in the application of the coating, substantially lowering or even eliminating the risk of hydrogen embrittlement. Because of this, Maxcoat™ ZF is an excellent coating choice for components subjected to high stresses.

With the use of specialized topcoats, corrosion protection is further enhanced, specific torque/ tension values can be achieved, and various colors can be applied. The microparticles of zinc, which already offer galvanic protection to the steel, are combined with microparticles of aluminum to eliminate the "bimetallic cell" problem that can attend the mating of zinc and steel. These coatings are also self-healing—if the coating is marred, metal oxides migrate to the site of damage and restore the barrier protection.

The zinc flake coatings offered by Chem Processing, Inc. are equal or superior to other branded products such as Geomet and Dacromet, and we can work with your engineering team to procure approvals to major OEM specifications.

## **Engineering Characteristics of Maxcoat™ ZF:**

- Coating thickness range of 0.0002 to 0.0007 in.
- Can withstand temperatures up to 900°F\*
- Corrosion resistance up to 1000 hours\*\*
- High ductility
- Low coefficient of friction\*
- Chrome free/ELV & RoHS compliant
- Self repairing
- Consistent, predictable torque/tension values\*
- Lower risk of hydrogen embrittlement than electroplated finishes
- Resistant to solvents\*
- Electrically conductive

## Typical Maxcoat™ ZF Applications:

- Transportation: Fuel components
- Fasteners: construction, marine, automotive
- Wind Energy: fasteners, internal components
  Heavy Equipment: shaped or formed pre-plated parts
- Aerospace: replacement for cadmium in corrosive environments
- Food Service: process equipment
- \*Dependent on topcoat
- \*\* Per ASTM B117 Salt Spray test

All processes comply with industry specifications including ASTM, SAE, MIL, etc., as applicable for the particular process involved and are performed under ISO 9001:2000/AS9100B standards. Specific company approvals may also apply.

