

# Superior Performance for Screws and Rotors Coated with **CARBIDEX™ CPR** Better than Hard Chrome Plating (HCP)

- **Industry:** Plastic & Rubber
- **Application:** Single & Twin Feedscrews, Mixing Rotors & Housings processing PVC, CPVC and other Chlorinated Vinyl's
- **Manufacturing:** Pipe, Window Profiles, fittings, etc...

## The Problem

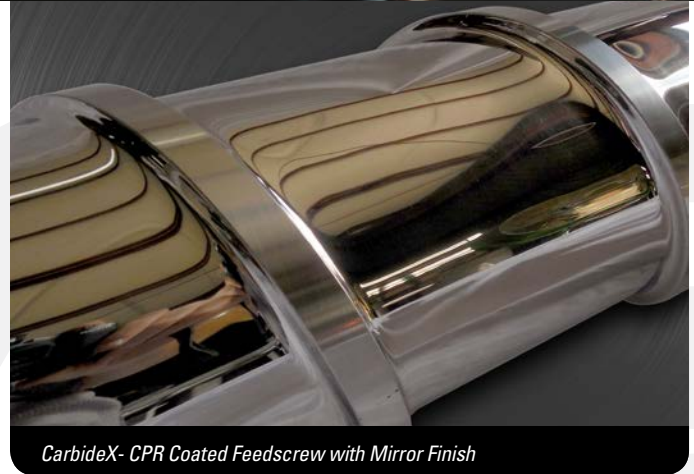
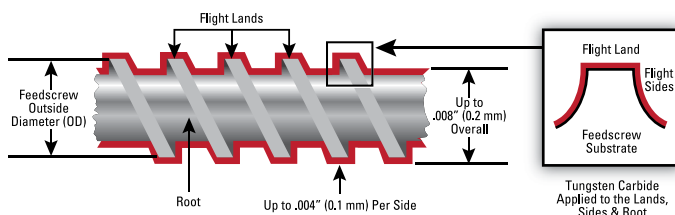
Injection molding or extruding PVC and CPVC polymers has its challenges due to the harmful fumes created during processing. The fumes are corrosive and permeate the micro cracks and pores in Hard Chrome Plating (HCP) resulting in damage to the feed screw. In the past, HCP was the primary option for PVC and CPVC. However, due to the corrosive nature of these polymers, HCP does not provide adequate protection of the base material, ultimately leading to **premature wear, excessive scrap and downtime.**

## Solution

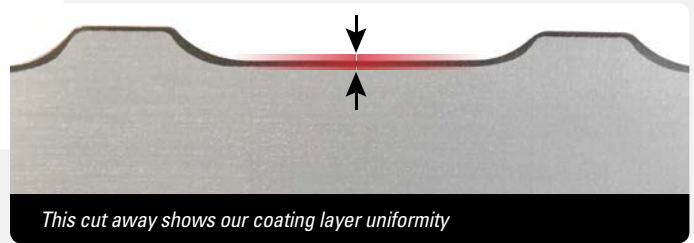
### Application of our Chrome Plating Replacement (CPR)

CarbideX™ CPR is a specifically formulated blend of Carbon and Chromium in a Nickel Matrix engineered to replace HCP in PVC and CPVC Applications.

- It is applied 2-3 Times thicker (.003" (.08 mm) – .004" (0.1 mm) per side) and more uniform than standard HCP
- Full encapsulation of the entire working surface of the feedscrew including the root, radius, flights sides, O.D. and mixers
- Eliminates the need for conforming anodes
- Highly Polished to a <4 Ra ui mirror finish for less coefficient of restitution (COR)
- Super Low porosity coating protects the substrate from chloride fumes.



CarbideX- CPR Coated Feedscrew with Mirror Finish



This cut away shows our coating layer uniformity

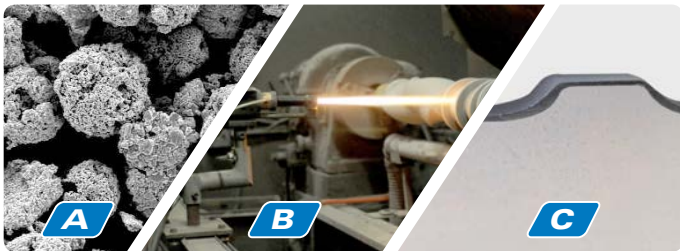
## Results

### Increased service life and improved performance output & uptime!

- More Corrosion Resistant than HCP
- No premature wear in specific areas that traditional hard chrome plating does; due to its lack of uniformity or thickness.
- 3-5 times longer service life
- Easier cleaning and color changes
- Can be recoated multiple times (extend asset life)
- More environmentally safe (HCP is Carcinogenic)
- Improved barrel life

## About Extreme Coatings

Since 1997 Extreme Coatings has carbide coated more than 20,000 feedscrews with our high velocity thermal spray process. The high volume percentage of hard, fine carbides ensures exceptional wear resistance unmatched by common alloys, tool steels or bimetals. You can expect an Extreme Coatings improved feedscrew to last two to five times longer than any other feedscrew. Extreme Coatings is the recognized world leader in this technology.



- A: Our high performance formulas
- B: HVOF thermal spray
- C: Extreme layer of protection

We manufacture most of our coating formulations in the USA to ensure maximum quality control and the highest quality standards.

Extensive process knowledge and years of coating experience gives us the confidence to offer our **Double Life Guarantee**. In addition our **Purchase Encouragement Program (PEP)**, allows a first time customer to prove the coating for six months before paying for it. We are certain you will be completely satisfied with the results.

---

**Authorized Distributor:**



**[www.extremecoatings.net](http://www.extremecoatings.net) • Toll Free: 1-888-FOR-ALOY**

**International: 001-727-528-7998 • Address: 2895 46th Avenue North, St. Petersburg, FL 33714 USA • E-mail: [info@extremecoatings.net](mailto:info@extremecoatings.net)**