

Feedscrews that Last 2X LONGER

Superior Performance & Service Life with CARBIDEX®

- **Industry:** Plastic & Rubber
- **Application:** Single & Twin Screws, Mixing Rotors
- **Processing Material:** PA 30-60% Glass Filled, PVC 40% CaCO₃, CPVC, MIM, Ceramics etc..

The Problem

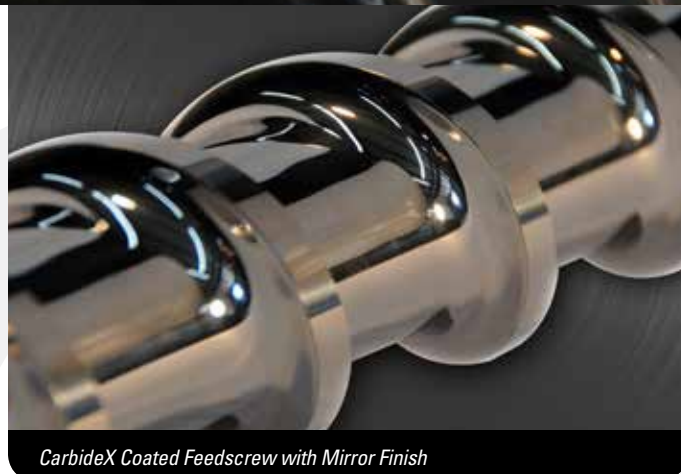
Injection molding and extrusion feedscrews and barrels provide their optimum efficiency when they are new. As these components wear this efficiency decreases dramatically. Machine adjustments to counteract this loss of efficiency only introduces new problems such as high shear rates, thermal degradation of polymers, greater cooling demands, inconsistent part weight/quality, etc. In addition these adjustments usually accelerate the wear condition. Many factors determine the best time to repair or replace a feedscrew/barrel but most processors continue operating well past this point. The result is excessive scrap and downtime costing you money.

Solution

CarbideX Surface Coatings

CarbideX® is a specifically formulated blend of Tungsten Carbide in a Nickel or Cobalt Matrix engineered to resist wear. Feedscrews coated with CarbideX maintain their like-new condition for much longer (guaranteed at least 2X). Enhanced feedscrews prevent the negative effects of system wear: higher melt temperatures, longer plasticizing times and higher energy usage. Like-new feedscrews provide reliable, consistent production.

- 2-3X more wear resistant than standard bi-metallic feedscrews
- High percentage tungsten carbide (88%) for superior abrasion resistance
- Density > 99% equals high corrosion resistance
- .2-.4 Ra μ m mirror finish = low friction, easy cleaning
- Proven USA technology!



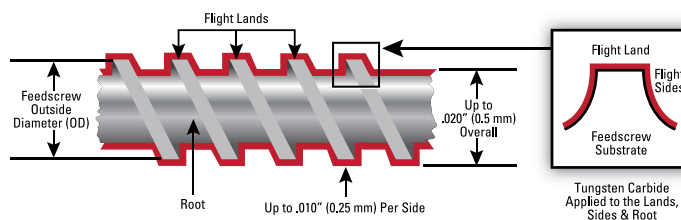
CarbideX Coated Feedscrew with Mirror Finish



- A: Is a standard powder metal feedscrew after 6 months processing highly abrasive ceramic filled polymer.
- B: Is a CarbideX C9000 coated feedscrew after 12 months in the same process with more life remaining.

Results

- Longer tool life and production consistency equals more profit
- Tight tolerance of screw and barrel relationship maintained
- Cost per kilogram/hour decreases
- Reliable processing consistency, less scrap and downtime
- 2 to 4 times more production
- Potential for increased barrel life
- Predictive versus reactive maintenance efforts



Improving the Performance and Service Life of Injection Molding and Extrusion Feedscrews, Mixing Rotors and Tip Assemblies

About Extreme Coatings

Since 1997 Extreme Coatings has carbide coated more than 42,000 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.

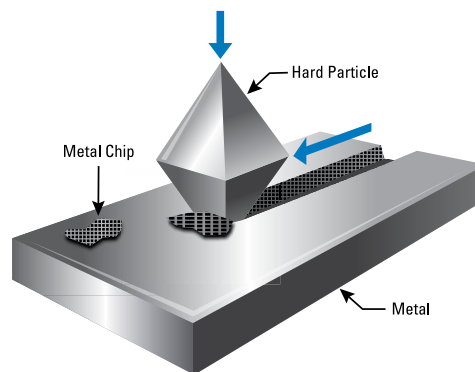


- A: Our high performance formulas
- B: HVOF thermal spray
- C: Extreme layer of protection

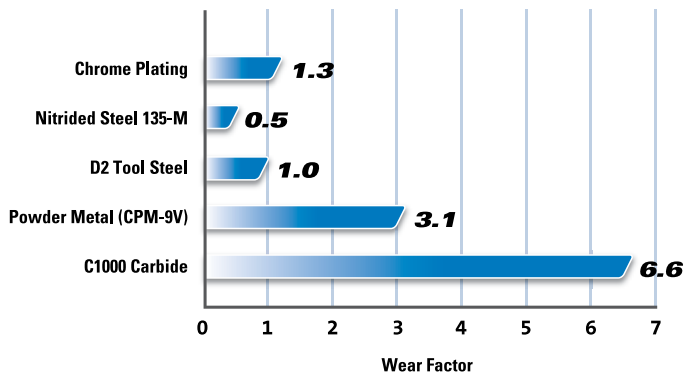
We manufacture most of our coating formulations in the USA to ensure maximum quality control and the highest quality standards.

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.

Comparison of Alloy Materials Designed to Protect from Abrasive Wear



Relative Abrasion Resistance ASTM G65 A



Authorized Distributor:



www.extremecoatings.net • Toll Free: 1-888-367-2569