

INNOVATORS IN  
TECHNOLOGY

技术的创新者



**Metal Improvement  
Company**

Subsidiary of Curtiss-Wright Corporation

金属改进公司

# Engineered coatings

## 专业涂料



Metal Improvement Company  
is a subsidiary of Curtiss-Wright  
Corporation

MIC是Curtiss-Wright集团旗  
下的子公司

Enhancing the performance of metals  
and materials

改善零件性能 延长零件寿命



# Engineered coatings

## 专业涂料

Metal Improvement Company (MIC), established in 1945, is a global organisation specialising in metal and material treatment services which enhance performance and extend the life of critical components, prevent premature failures and enable component designs to achieve their maximum performance.

MIC has over 60 operating divisions in USA, Canada, Europe and Asia and can provide on site processing worldwide.

MIC's markets include aerospace, automotive, power generation, chemical processing, oil and gas, medical and general engineering.

Approvals: FAA, CAA, NADCAP and BS EN ISO 9001:2000 plus other specific company/industry approvals as appropriate.

成立于一九四五年的MIC是一家专门从事金属表面处理和提供相关服务的全球性公司，其服务能改善关键零件的性能和延长它们的寿命，并能防止零件早期失效，使这些零件达到其最大的设计潜能。

MIC在美国、加拿大、欧洲及亚洲设有60多家分公司，并能在世界任何地方提供现场加工服务。

MIC的市场包括航空、汽车、发电、化工、石油及天然气、医疗及一般工程领域。

所获得的认证有：FAA, CAA, NADCAP, BS EN ISO 9001:2000, 以及其它公司及行业认证。



## Engineered coatings

With over 40 years' experience in applying critical tolerance coatings, MIC has pioneered the development and application of coatings enabling you to meet your design challenges, lower the cost of ownership and enhance your products' performance. The correct coating can enable the use of less expensive metals, improve part wear life and reduce maintenance costs.

### The coatings MIC applies include:

- Dry film lubricants and fluoropolymer
- Zinc rich coatings for corrosion protection of ball studs, brake rotors, underhood stampings and fasteners
- Impingement coating processes for ultra thin solid film lubricants coatings
- Nonstick/release coatings for low coefficients of friction
- Primers for rubber and plastics for sound adsorbing and dampening materials to reduce noise and squeaking
- Coatings for EMI/RFI shielding to control electromagnetic interference
- Coatings to provide protection from extreme corrodants, corrosive chemicals and solvents.

### Pre and post treatments (incl anodizing)

Dry treatments include vapor and aqueous degreasing, abrasive blasting with aluminum oxide, chilled iron/steel or glass bead. Wet treatments include chemical cleaning and etching, alkaline cleaning, phosphate conversion coatings - manganese, zinc and iron.

Post phosphate oil/organic sealing and protective treatments along with anodizing – chromic, phosphoric, sulphuric and boric. Stress & hydrogen embrittlement relief baking.

## 专业喷涂

基于40多年对紧配合零件喷涂经验，MIC已经成为开发专业涂料的领先者，这些涂料能满足设计中的挑战，减低使用者成本，以及提高产品性能。我们的专业涂料可以允许采用一般材料，改善零件磨损寿命，减少维护费用。

MIC采用的涂料包括：

- 干膜润滑类及氟碳涂料
- 富含锌的涂料，用于球头销、刹车盘、汽车冲压件及紧固件的防腐保护
- 冲击涂料可以形成超薄固体膜润滑涂层
- 不粘或用以降低摩擦系数的易剥离涂料
- 使橡胶和塑料湿润及吸音降噪的涂料
- 产生EM1/RF1屏蔽及抗电磁干扰的涂料
- 针对强腐蚀化学物质、溶剂提供保护的涂料

### 预处理及后处理（包括阳极化）

干处理包括气体或水性去油脂以及喷氧化铝、铁砂、钢砂和玻璃砂。湿处理包括化学清洗、蚀刻、碱性溶液清洗、以及锰系、锌系和铁系的磷化转化成膜工艺。

后处理有油类或有机封孔，铬酸、硼酸、硫酸阳极化及消除氢淬的烘烤。



Our engineered coatings are designed to enhance the performance of a wide range of components including pumps, valves, gears, bearings, fasteners, bolts, locknuts, rivets, washers, thread rolling screws, 'O' rings, gaskets and seals, food handling equipment, rollers and dyecans, airbars, magnets and centrifuge components.

我们的专业涂料设计用来提高各种零件的性能，例如泵、阀门、齿轮、轴承、紧固件、螺栓、锁紧螺钉、铆钉、垫片、螺杆、O形圈、汽缸垫、食品加工设备、辊轴、磁铁、离心机零件等。

## APPLICATIONS 应用领域

**Fasteners** - MIC's coatings provide consistent torque tensioning, anti galling and anti corrosive properties. MIC is an innovator in the application of solid film lubricants and fluoropolymer that enhance the performance of fasteners, bolts, locknuts, rivets, washers and thread rolling screws for both general industrial and aerospace markets.



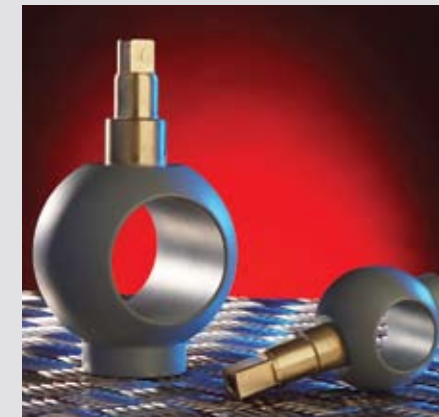
The solid film lubricants we apply are dispersions of various lubricating solids and binder systems designed to help reduce friction and corrosion, provide consistent torque tensioning and prevent galling, fatigue and failure.

**紧固件** – MIC设计的涂料能够提供一致的扭矩，并具有防摩擦、防腐蚀的特性。MIC同时也是固体膜润滑及氟碳涂料的研发者，这种涂料可以提高航空和一般领域所用紧固件、螺钉、锁紧螺栓、铆钉、垫片、螺杆等零件的性能。

我们的固体膜润滑涂料是由具有润滑特性的固体与黏合剂合成，设计用来减少摩擦和腐蚀，使施加的扭矩趋于一致，并且预防磨损、疲劳和失效。

**Pumps and valves** - MIC is the leading applicator of engineered coatings that solve problems caused by aggressive environments in which pumps and valves operate.

We can apply coatings that address service conditions including wear, corrosion, erosion, seizing, steam,



extreme temperatures and harsh chemical environments.

**泵和阀** – MIC在解决恶劣环境下工作的泵与阀的问题方面，也是有关专业涂料的领先应用者。

我们涂装的涂料能够应对磨损、腐蚀、侵蚀、蒸气等极为不利的化学腐蚀环境。



**Magnets** - MIC has coatings that are designed specifically for magnets and their related applications offering many competitive advantages over other magnet coating processes.

These coatings can eliminate chipping and blistering with superior corrosion resistance and can also promote the adhesion of subsequent processes for mounting into assemblies.

These coatings also are available in different colours that can be detected by various sensing technologies.

**磁铁** – MIC也专为磁铁及其有关的应用设计了专门的涂料，这些涂料相对其它涂装工艺有许多优点。这种涂料能防止磨损和腐蚀，还能改善与其它组件的装配性。

这些涂料有不同颜色可供选择，并能容易被各种感应技术所识别。





## **Metal Improvement Company**

Subsidiary of Curtiss-Wright Corporation

**金属改进公司**

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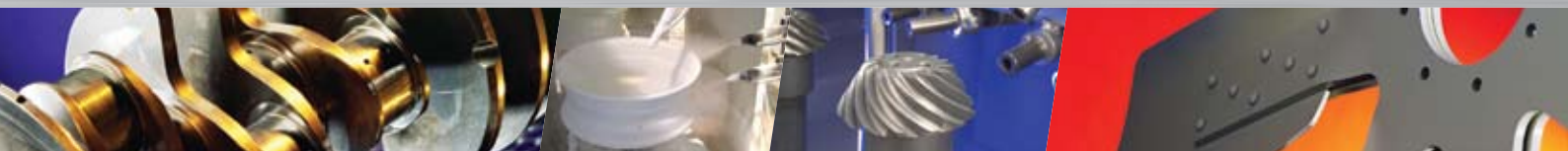
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