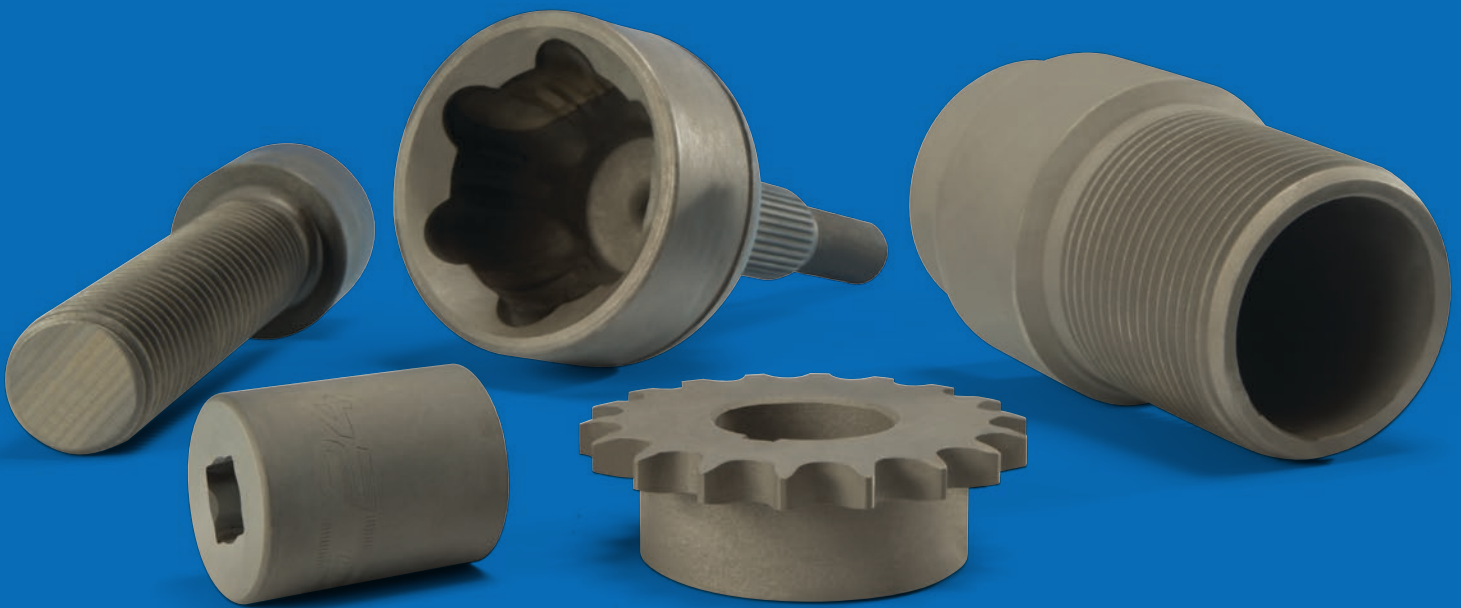


# MicroLok<sup>®</sup> MZN



**Zinc Phosphate Finish for Iron & Steel**

## Coatings for Iron and Steel - MicroLok<sup>®</sup> MZN

### What is MicroLok<sup>®</sup> MZN? An Attractive & Protective Finish for Iron & Steel

The MicroLok<sup>®</sup> MZN process is a fine-grained zinc phosphating solution for iron and steel components. Applied at 120-160° F, the MicroLok MZN finish complies with MIL-DTL-16232G, Type Z, Classes 1, 2,3. When sealed with a rust preventive, the MicroLok MZN finish has excellent corrosion resistance and also provides anti-galling protection and break-in lubricity to critical working surfaces.

**Safe & Easy to Operate.** The MicroLok MZN solution operates at a safe 120-160° F, with no fumes or splattering. In addition, the working bath has a very mild pH of 4 to 5. Most cold blacks and zinc phosphates operate at pH 1-2, with significantly higher acid content.

**Short Process.** For most parts, the MicroLok MZN process requires only five steps and about 15 minutes. The MicroLok MZN bath is maintained by a simple titration procedure to monitor the concentration.

**Durable Finish. High Heat Stability.** The MicroLok MZN finish withstands up to 1400° F without degradation, making it suitable for high heat applications, such as brake components.

**Easy to Install.** Complete In-House Tank Line Systems are available at low cost and are supplied complete with training of your operators by factory personnel.

**Ideal for tooling and machine components, piston/cylinder assemblies, rotors & calipers, oil-field equipment** or any part that does not require a dark black finish, but does require robust corrosion protection, anti-galling properties or break-in lubricity, without a significant dimensional change.

### Before & After Finishing



# MicroLok® MZN

## MicroLok® MZN Five Step Process

For Most Parts, Five Easy Steps:

For machined parts, the MicroLok MZN process require just five steps and about 15-20 minutes:

1. **CLEAN** the parts for 5 minutes in Safe Scrub ST biodegradable cleaner: 150° F.
2. **RINSE** well in clean water: 20 seconds.
3. **APPLY** MicroLok MZN finish by immersing for 5-15 minutes at 120-160° F.
4. **RINSE** well in clean water: 20 seconds.
5. **SEAL** in Rust Preventive such as Dri-Touch® Amber IRP2: 1 minute. Allow to dry.

Parts that carry rust or heat treat scale should be descaled prior to coating with MicroLok MZN. Please consult with your Birchwood Technologies Representative for detailed guidance.





# Ask Us About...

- Custom Tank Lines • Automated Tank Lines
- 40 & 100 Gallon Tank Lines • 5-Gallon Mini Kits
- Ion Exchange & Near-Zero Water Recycler Options

## 40 & 100 Gallon Process Lines

Completely pre-engineered, ready for fast setup and operation. Each system is shipped with complete operating instructions including test kit, owners manual and maintenance log.



## 5-Gallon Mini Kits

The ideal low cost system for those just-in-time jobs that must be out today. With a 5-Gallon Mini System you can produce great looking parts in just minutes.



## Ion Exchange System Zero Discharge System

Purify and recycle the rinse waters, resulting in a "closed-loop" zero-discharge installation. The technology is available for all size systems, including 40-gallon, 100-gallon and larger capacity custom tank systems.

Free Sample Finishing to Evaluate Options:  
[birchwoodtechnologies.com/sample/](http://birchwoodtechnologies.com/sample/)

**BIRCHWOOD**<sup>®</sup>  
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