

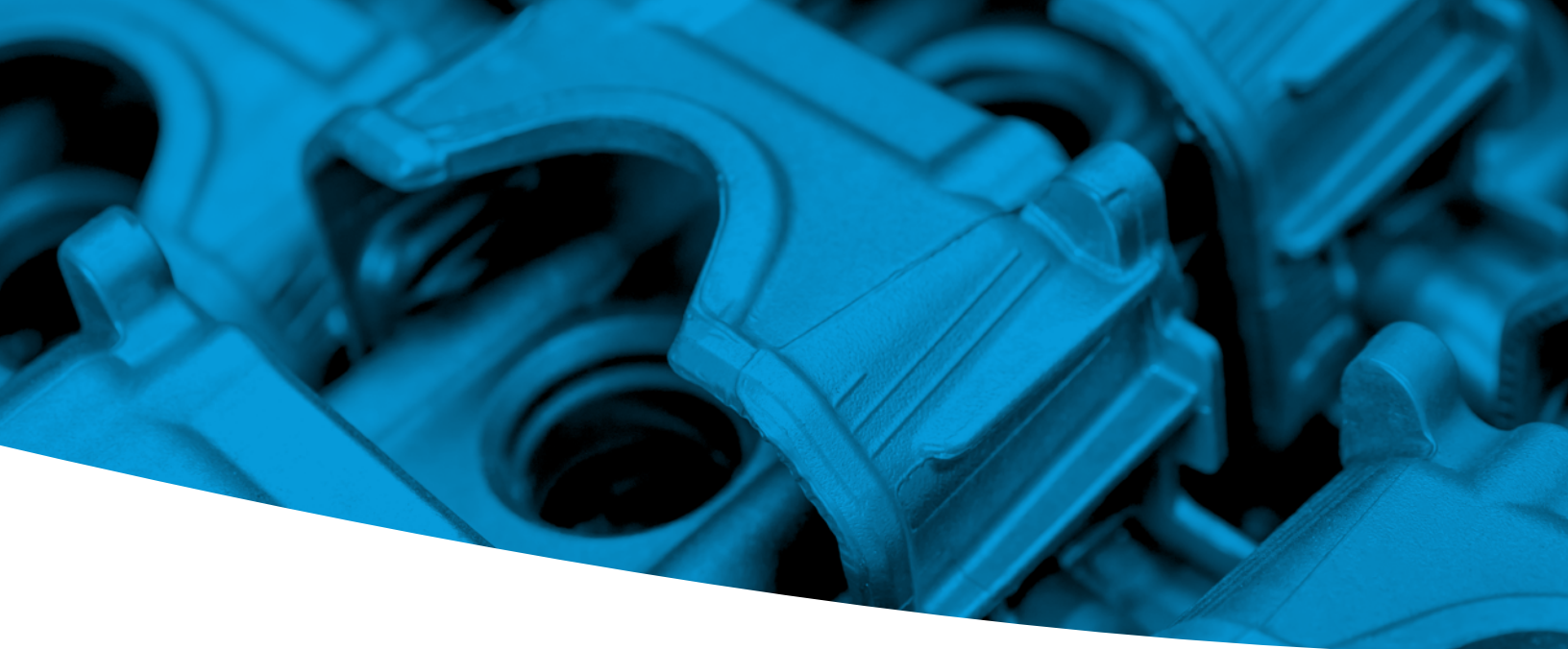


METAL PROTECTION

Protecting Your Competitive Advantage. **Together.**

Core Metal Protection Products for North America





Metal Protection

Rust and corrosion are the naturally occurring enemies of machined parts. Moisture, oxygen, dirt and residues from other metalworking fluids can cause serious damage. Quaker Houghton's complete line of solvent, oil and water-based, and grease/wax corrosion preventives protect metal parts during production and in storage, both indoor and outdoor. Our metal protecting product line is well-proven throughout the aerospace, automotive, bearing, steel and offshore industries and wherever metal components are manufactured.

Applications

- In-process rust protection
- Final rust protection
- Post tempering
- Hydrostatic testing
- Light lubrication
- Light cleaning

Soluble Oils : Water dilutable, Barium-free

RUST VETO® 4221 NB

Very stable emulsion, best heat tolerance. Applied by dip or spray, indoor protection 6-12 months.

RUST VETO® 4222 S

Core soluble oil product, good emulsion stability excellent humidity protection. Applied by dip or spray, indoor protection 12 months.

RUST VETO® 4295-PT

Very stable emulsion, thinnest soluble oil film, biostable. Applied by dip or spray, indoor protection 6-12 months.

Greases & Waxes : Neat, compatible with all metals

RUST VETO® HEAVY

Rust inhibiting grease for brush-on application or hot dip. Melting point 120°F. Provides light lubrication. Applied by dip or brush, 36 months indoor protection and 6 months shed protection.

FERROCOTE® B 53 TX

Wax that is high pressure performance conforming to API GL5. Break-in bearing lubrication. Dip application with 12 months outdoor protection.

FERROCOTE® 5815 LVO

Thixotropic (wax) that is barium-free solvent-dispersed RP. Applied by dip or brush, 12 months indoor protection 6 months outdoor.

Solvent-Based: Neat, compatible with all metals

RUST VETO® 76-MB

Fortified for when extra rust protection is needed. Applied by dip or spray, indoor protection 18 months.

COSMOLINE® 1104

Fingerprint removal products for precision parts such as aerospace bearings. Applied by dip or spray.

RUST VETO® 2147

Oily corrosion preventive for severe applications. Excellent for cast iron. Applied by dip or spray, 12 months indoor protection, 2 months shed protection.

RUST VETO® 342

Dry, waxy film for uncovered, extended outdoor protection. Translucent film allows visibility of metal surface. Applied by dip, spray, or brush. Indoor protection 3+ years, 2 years outdoor protection.

RUST VETO® 344

Black asphaltic-based for outdoor rust protection. Applied by dip, spray, or brush. Indoor protection 36+ months, 24 months outdoor protection.

RUST VETO® 377-HF

Moderate drying, excellent salt spray performance. Excellent salt spray performance for packaged overseas shipments. Applied by dip or spray, 12 months indoor 6 months shed protection.

RUST VETO® 4214-HF

Medium flash, moderate drying time. Core product for water displacing and water separating applications. Applied by dip or spray, 12 months indoor protection.

FERROCOTE® 5856 BF T1

Barium-free, excellent moisture displacement and fingerprint neutralization with thinner film than FC 5856 BF. Significant field experience. Approved at Timken, Ford, Koyo, NN Ball, Caterpillar. Applied by dip or spray, 1-5 years protection.

RUST VETO® 4242

High solids, low VOC. Leaves thin film, applied by dip or spray. 12 Months indoor protection.

WOCOTEC 3204

Value grade 3 month for all metals. Applied by dip or spray. 3 months indoor protection.

FERROCOTE® 364 BF T1

Water displacing and fingerprint neutralizing. Applied by dip or spray. 6-12 months indoor protection.

FERROCOTE® 5856 BF

Barium-free corrosion preventive offering excellent moisture displacement and fingerprint neutralization. Approved at Timken, Ford, Koyo. Applied by dip or spray. Up to 5 years of indoor protection.

RUST VETO® 4240

Ultra-thin film, low odor. Excellent choice for finished parts where a minimal film is required. Applied by dip. 9-12 months indoor protection.

FERROCOTE® 5856 BF T3

Very thin film, barium-free, offering excellent moisture displacement and fingerprint neutralization. Approved at Timken, Ford, Koyo. Applied by dip or spray. 3 to 6 months indoor protection

FERROCOTE® 364 BF T5

Very thin film, barium-free, light duty protection at a cost effective price. Applied by dip or spray. 3 to 6 months indoor protection

FERROCOTE® 5856 LVO

Same benefits as FERROCOTE® 5856 BF T1 but a higher flash point to comply with certain plant requirements. Applied by dip or spray, 1-5 years indoor protection.

Oil-Based : Neat, low VOC applications

RUST VETO® 210

High flash, thin film oil. Fast packaging, limited drippage. Meets SCAQMD standards. Applied by dip or spray, indoor protection 12 months.

RUST VETO® 210-C

High flash, thin film oil. Fast packaging, limited drippage. Good for wet parts. Applied by dip or spray, indoor protection 12 months.

WOCOTEC 4410

Value grade 6 month RP for steel. Applied by dip or spray, 6 months protection.

FERROCOTE® 5900

Provides low, constant torque during bearing break-in. Applied by dip or spray, 1-5 years protection.

FERROCOTE® 368 BF K1

High flash, thin film oil. Fingerprint neutralization. Applied by dip or spray, 3-6 months protection.

FERROCOTE® 368 BF

High flash, thin film oil. Fingerprint neutralization. Applied by dip or spray, 3-6 months protection.

FERROCOTE® 61 AUS

Mill oil, meets SCAQMD VOC limits. Applied by dip or spray, 6 months indoor protection.

Water-Based : Synthetic, can be biostable

RUST VETO® 2212

Core product, light in-process short term rust protection. Applied by dip or spray, 4 weeks protection.

RUST VETO® 2212 B

Biostable, light in-process short term rust protection. Applied by dip or spray, 4 weeks protection.

FERROCOTE® 624 AAM

Boron-free, biostable in-process in process fluid technology for compatibility with heat treat processes. Not water displacing or separating. Applied by dip or spray, 60 days protection.

FERROCOTE® 155

Meets SCAQMD VOC limits. Not water displacing or separating. Applied by dip or spray, biostable, 2-4 months protection.

Typical Values

| PRODUCT | TYPE OF FILM | LENGTH OF PROTECTION | FLASH POINT | WATER DISPLACING | WATER SEPARATING |
|-----------------------|------------------------|------------------------------------|-------------|------------------|------------------|
| RUST VETO® 4221 NB | Light, oily | 6-12 months indoor | 350°F | No | No |
| RUST VETO® 4222 S | Light, oily | 12 months indoor | 275°F | No | No |
| RUST VETO® 4295-PT | Light, oily | 6-12 months indoor | 295°F | No | No |
| RUST VETO® HEAVY | Greasy | 36 months indoor, 6 months shed | 450°F | No | No |
| FERROCOTE® B 53 TX | Greasy/ waxy thin film | 12 months outdoor | >428°F | No | No |
| FERROCOTE® 5815 LVO | Greasy thin film | 12 months indoor, 6 months outdoor | 230°F | No | Yes |
| RUST VETO® 210 | Oily | 12 months indoor | 360°F | No | No |
| RUST VETO® 210-C | Light oily | 12 months indoor | 260°F | Yes | Yes |
| WOCOTEC 4410 | Light oily | 6 months indoor | 320°F | Yes | Yes |
| FERROCOTE® 5900 | Oily | 1-5 years indoor | 266°F | Yes | Yes |
| FERROCOTE® 368 BF K1 | Light oily | 3-6 months indoor | 255°F | Yes | Yes |
| FERROCOTE® 368 BF | Light oily | 3-6 months indoor | 246°F | Yes | No |
| FERROCOTE® 61 AUS | Oily | 6 months indoor | 380°F | No | No |
| RUST VETO® 2212 | Imperceptible | 4 weeks indoor | - | No | No |
| RUST VETO® 2212 B | Imperceptible | 4 weeks indoor | - | No | No |
| FERROCOTE® 624 AAM | Dry, imperceptible | 60 days indoor | - | No | No |
| FERROCOTE® 155 | Nearly imperceptible | 2-4 months indoor | - | No | No |
| RUST VETO® 76-MB | Light oily | 18 months indoor | 150°F | Yes | Yes |
| COSMOLINE® 1104 | Oily | - | 108/150°F | No | No |
| RUST VETO® 2147 | Oily | 12 months indoor, 2 months shed | 180°F | No | No |
| RUST VETO® 342 | Translucent, waxy | 3+ years indoor, 2 years outdoor | 108°F | Yes | No |
| RUST VETO® 344 | Black, plastic-like | 3+ years indoor, 2 years outdoor | 108/150°F | No | No |
| RUST VETO® 377-HF | Greasy | 12 months indoor, 6 months shed | 150°F | Yes | No |
| RUST VETO® 4214-HF | Dry to touch | 12 months indoor | 150°F | Yes | Yes |
| FERROCOTE® 5856 BF T1 | Imperceptible | 1-5 years indoor | 176°F | Yes | Yes |
| RUST VETO® 4242 | Light oily | 12 months indoor | 180°F | Yes | Yes |
| WOCOTEC 3204 | Dry to touch | 3 months indoor | 142°F | Yes | Yes |
| FERROCOTE® 364 BF T1 | Light oily | 6-12 months indoor | 178°F | Yes | Yes |
| FERROCOTE® 5856 BF | Imperceptible | 1-5 years indoor | 194°F | Yes | Yes |
| RUST VETO® 4240 | Dry to touch | 9-12 months indoor | 145°F | Yes | Yes |
| FERROCOTE® 5856 BF T3 | Imperceptible | 3-6 months indoor | 163°F | Yes | Yes |
| FERROCOTE® 364 BF T5 | Light oily | 3-6 months indoor | >150° | Yes | Yes |
| FERROCOTE® 5856 LVO | Light oily | 1-5 years indoor | 230°F | Yes | Yes |

