**Chemical Solutions for Military Applications** 

Better Chemistry. Better Business.

As the nation's most experienced chemical distributor, Hubbard-Hall brings expertise to the intersection of chemistry and industry. Founded in 1849, Hubbard-Hall Inc. is based in Waterbury, CT and reaches internationally as well as within the U.S. Hubbard-Hall is SBA self certified as a small business concern.

ISO 9001:2008; Certification # 84491-IS4 exp. 8/28/2015

ISO registrar: NSF-ISR

D-U-N-S®: 05-531-0759 NAICS Code: 325998 CAGE Code: 94853

#### What We Do

- · Chemicals: Distribute over 5,000 commodity chemicals
- Surface finishing products for industrial manufacturing and remanufacturing applications for military, aerospace, defense vehicles, components and other hardware
- Chemical Services: Technical, value-added process support services including training, lab analysis and process improvement audits

#### **Customers** (Sample List)

Anniston Army Depot
ATK Alliant Lake City
Boeing Company
Colt Companies
FN Manufacturing
General Dynamics
Lockheed Martin
Marlin Firearms
Maverick Arms
Pratt & Whitney
Raytheon

Red River Army Depot Remington Arms Company Rockford Acromatics Sikorsky Aircraft United Avionics Incorporated

#### **Product Lines Available**

Aquaease™ Aqueous cleaners
AquaMill™ Mass finishing
Aquapure™ Wastewater treatment
Aquastrip Coatings and CARC strip
Black Magic™ Black oxide

**Emerald HD** DfE recognized cleaners **Enviroguard** Aerospace solvent blends

**Hubtron PB** (stabilized nPB) Solvent cleaners, SNAP/EPA approved

Laser Guard Brighten copper and brass

**Lusterclean™** Heavy alkaline degreaser/deruster **Metal Guard**® Aqueous and oil based rust inhibitors

Mi-Clean™ Surface cleaners

Mi-Phos™ Phosphates for iron, zinc and manganese
Military Deruster Specifically formulated for Military Apps

Stripol™ Metal Strippers



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# **MIL Spec Product Offerings\***

# **Phosphates**

## Ferrous Metal Surfaces and Pre-Treatment for Organic Coatings

- TT-C-490E Type I: M-Phos™ Z-3
- TT-C-490E Type II: M-Phos™ 26, Hubfos 12-S and Hubfos 150
- TT-C-490E Type V: Mi-Phos™ Z-10

# **Black Oxide Coatings**

#### **Ferrous Metals**

- MIL-DTL-13924D Class I: Black Magic™ Infusion
- MIL-DTL-13924D Class IV: Black Magic™ SSL

### **Copper Alloys**

MIL-F-195D: Black Magic™ CBL

# **Phosphate Coatings**

#### Phosphate Coating, Heavy, Manganese or Zinc Based

- A-A59267 Type Z / MIL-DTL-16232G Type Z: Mi-Phos™ Z-2
- A-A59267 Type M / MIL-DTL-16232G Type M: Mi-Phos™ M-5

# **Rust Preventative**

# Corrosion Prevention Compound, Solvent Cutback, Cold-Application

• MIL-PRF-16173E Grade 3: Metal Guard® 100, 400, 500 Series

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# **Chemical Conversion Coatings**

#### **Aluminum Alloys**

• MIL-C-5541E Class 3: Hallcoat A 1

# **Heat Treating Salts**

- MIL-S-10699B Class 1: Quick Cure 275
- MIL-S-10699B Class 2: Quick Cure 420
- MIL-S-10699B Class 5: Neutral Salt B
- MIL-S-10699B Class 8: Neutral Salt HH

<sup>\*</sup> This is only a sample of the products applicable for military applications. If there is another application or product line you are looking for please contact Hubbard-Hall





