



DAUBERT CROMWELL
The Leading Name in Corrosion Prevention®

PRODUCT SELECTION GUIDE

- LIQUIDS
- COATINGS
- POWDERS



DAUBERT CROMWELL
The Leading Name in Corrosion Prevention®

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This Product Selection Guide to Daubert Cromwell liquids, coatings and powders is intended as a quick reference guide. It offers corrosion solutions for general industrial applications, using proven, quality products that manufacturers worldwide have trusted since 1948. For specific recommendations and product selection assistance, please contact Daubert Cromwell at 800-535-3535; www.daubercromwell.com.

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Products for Unprotected Storage/Transport Systems

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
Equipment, Assemblies Parts <ul style="list-style-type: none"> Exposed Metals Unpainted Metal Parts   <ul style="list-style-type: none"> Equipment Machinery Piping Cranes Seasonal Equipment Hinges, Tooling Pumps, Tanks Stored Metal Parts Machine Components  	<p>Steel (ferrous) metals; compatible with non-ferrous metals (zinc, brass, cadmium, aluminum, copper).</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Use Nox-Rust 5100 or Nox-Rust 3100 to keep rust from forming on equipment that is stored or transported in severe environments and temperature extremes. ✓ Use Nox-Rust 5200 to prevent corrosion on metals that will be stored outdoors for less than 6 months, and on equipment stored indoors for long periods of time. ✓ Metal surface should be as clean and dry as possible. ✓ Remove loose or flaking rust. If mild flash rust is present, Nox-Rust 3100 should adhere and will minimize additional corrosion. 	<p>Heavy Duty Outdoor Corrosion Protection:</p> <p>Nox-Rust 5100</p> <ul style="list-style-type: none"> Apply the black oil by dip, spray or brush. Dries as a black, dry, firm film. Parts can be handled after 3-6 hours. Film sets up completely in 12-24 hours. To remove, use solvent/alkaline cleaner. Lasts 1-3 years. Sold in 55-gallon drums and 5-gallon pails. <p>Nox-Rust 3100</p> <ul style="list-style-type: none"> Apply the amber oil directly onto metal by dip, spray or brush. Dries as a firm, waxy film that can be handled after 3-6 hours. The coating will set up in 12-24 hours. Rust prevention properties are fully developed when the coating is dry. To remove, use solvent, vapor degreaser or steam. Corrosion protection lasts 3-6 months outdoors when exposed to weather; 5 years indoors. Sold in 55-gallon drums, 5-gallon pails, and ready to use in convenient new 11-ounce aerosol cans. <p>Nox-Rust 5200</p> <ul style="list-style-type: none"> Apply the brown, grease-like film by dip, spray or brush. Dries as a semi-firm coating that sets up in 12-24 hours. Parts can be handled after 3-6 hours. To remove, use solvent/alkaline cleaner or an emulsion cleaner. Protection lasts 3-6 months outdoors; up to 5 years indoors. Sold in 55-gallon drums, 5-gallon pails, and ready to use in convenient new 11-ounce aerosol cans.

Products for Protected Storage/Transport Systems

ASSEMBLY

Equipment, Assemblies Parts

- Exposed Metals
- Unpainted Metal Parts



- Engine Systems
- Automotive Body Panels
- Metal Dies
- Tools, Hinges
- Fuel Tanks



- Motors
- Underside Assemblies
- Turbines
- Heating and Cooling System Components



TYPE OF METALS

Steel (ferrous) metals; compatible with non-ferrous metals (zinc, brass, cadmium, aluminum, copper).

Application Tips:

- ✓ Use Nox-Rust 5300 to displace water or saline solution from vulnerable metal surfaces where corrosion could occur.
- ✓ Can be used in combination with a barrier material to cover bare steel or phosphated surfaces for limited periods outdoors.
- ✓ It is completely miscible with lubricating oils.
- ✓ Nox-Rust 8500 and 8500AL prevent rust stains on paint caused by flakes of rust or metal falling on surfaces while in transit.
- ✓ Protects against normal oxidation and weathering.
- ✓ Will adhere to a variety of ferrous, non-ferrous and plastic substrates.
- ✓ Protects chrome from white rust.
- ✓ Eliminates water spotting caused by acidic rains or hard water.
- ✓ Protects against marring and scratching.
- ✓ An aesthetically pleasing finish.

CORROSION SOLUTION

Outdoor Corrosion Protection:

Nox-Rust 5300

- Apply the brown, oily film by dip, spray or brush.
- The liquid will displace water and saline solutions to keep corrosion from forming on metal surfaces inside closed systems.
- Dries as an oily film. Metal parts can be handled in 3-6 hours. Sets up in 12-24 hours.
- If removal is required, use solvent/alkaline cleaner or an emulsion cleaner.
- Lasts up to 12 months.
- Sold in 55-gallon drums, 5-gallon pails and convenient new 11-ounce aerosol cans.

Exterior Coatings:

Nox-Rust 8500 (clear color)

Nox-Rust 8500AL (aluminum color)

- Hard acrylic emulsion film.
- Water-based.
- Apply the light, oily film by dip, spray or brush.
- Dries as a tack-free coating, so it will not pick up dust or dirt. Non-staining.
- May be removed with soap and water for up to one hour after application.
- 8500AL is aluminum-colored (silver).
- Sold in 55-gallon drums and 5-gallon pails.

Products for Protected Storage/Transport Systems

ASSEMBLY

Equipment, Assemblies Parts – Tank Enclosures

- Engines
- Piping
- Fuel Tanks
- Crankcases
- Injection Pumps
- Transmissions
- Drive Clutch
- Hydraulic Systems
- Storage Tanks
- Snowmobiles
- Lawn Mowers
- Road Building Equipment
- Farm Equipment



- Power Plants
- Gas, Steam Turbines
- Piping Systems
- Heating and Cooling Systems
- Boilers



TYPE OF METALS

Steel (ferrous) and/or other metal parts in enclosed systems; iron, zinc and aluminum.

Application Tips:

- ✓ Nox-Rust 1100 is a lubricating oil and corrosion preventive to protect metals in closed systems.
- ✓ Prevents rust caused by condensation buildup inside equipment during lay-up and preservation.
- ✓ Vaporizing rust inhibitors cover interior cavities and recesses.
- ✓ When used as directed engines need no preparation before restarting.
- ✓ Nox-Rust 1101 now available in convenient, ready to use aerosol spray.
- ✓ Nox-Rust 9800 is barely discernible when dry.
- ✓ Protects metal surfaces during extended periods of equipment inactivity, such as during storage and lay-up.
- ✓ Suitable for use in the steam path in power plants and other critical areas.
- ✓ Moisture-absorbing and fingerprint removing.

CORROSION SOLUTION

Lubricating Liquids:

Nox-Rust 1100

- Apply the light, golden oil into steel fuel tank, oil fill hole and spark plug holes of cool engines.
- Add to sealed cavities of drive assemblies, carburetor engines, diesel engines and transmissions per instructions in Product Application Bulletin.
- Apply as an additive or by fogging.
- Removal not required.
- Corrosion protection lasts up to 1 year.
- Sold in 55-gallon drums and 5-gallon pails.





Nox-Rust 1101

- Multi-metal VCI oil in concentrate form.
- See Product Application Bulletin for dilution rates.
- Corrosion protection lasts up to 1 year.
- Sold in 55-gallon drums, 5-gallon pails, and ready to use 11-ounce aerosol cans.





Nox-Rust 9800

- Water soluble VCI liquid to apply by fog or spray into enclosed systems.
- Clear, amber liquid is ready to use.
- Dries as a thin soft, self-healing film.
- No surface preparation required.
- Won't discolor aluminum.
- Removal not typically required, but can be easily removed with hot steam or water.
- Corrosion protection lasts 24 months.
- Sold in 55-gallon drums and 5-gallon pails.

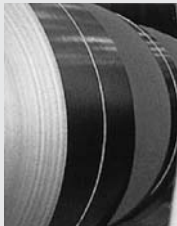
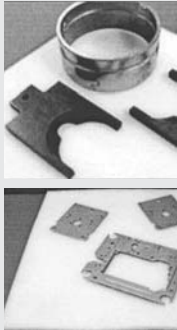

Products for Enclosed Storage/Transport Systems

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
<p>Closed Systems</p> <ul style="list-style-type: none"> • Boilers • Tanks • Heat Exchangers • Steam, Condensate Pipelines • Turbines • Pipes • Compressors • Lay-up and Preservation Applications   	<p>Ferrous metals, combinations of metals and multi-metals, copper and brass.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Nox-Rust powder is safe and environmentally friendly. It does not contain phosphates, heavy metals or nitrites. ✓ Typically does not require any special surface preparation prior to equipment shut-down. ✓ Use Nox-Rust VCI Powder 1010SFG in applications with copper and brass. ✓ Ideal for extended periods of equipment inactivity, during storage or lay-up, or during and after hydrostatic testing. 	<p>VCI Powders:</p> <p>Nox-Rust Powder 1010SFG</p> <ul style="list-style-type: none"> • Silica-free, finely ground powder. Water soluble. • Use wet or dry. • Compatible with copper, brass and galvanized steel. • Apply by dusting, fogging, or dissolving in water. • Does not need to be removed prior to equipment restart. • Sold in 5 lb., 25 lb. boxes and 150 lb. drums. <p>Nox-Rust VCI Powder 1000SF</p> <ul style="list-style-type: none"> • Water soluble, silica-free. • Ferrous metal protection. • Apply by dusting manually, fogging into enclosed spaces using a low-pressure air hose, or dissolve in water. • Apply wet or dry, per instructions in Product Data sheet. • Does not need to be removed before restarting the unit. If removal is desired, use a cold water flush, water spray or air gun. • Sold in 5 lb., 25 lb. boxes and 150 lb. drums. <p>Nox-Rust VCI Powder 1000SFG</p> <ul style="list-style-type: none"> • A finely ground version of Nox-Rust 1000SF, for use in applications where a fine powder is needed.
	<ul style="list-style-type: none"> ✓ Daubrite 1 Packets protect metals against corrosion, oxidation, tarnish and discoloration. ✓ The VCI vaporizes inside the closed space, protecting even the most difficult to reach recesses and interior voids. ✓ Clean, dry, effective corrosion protection. 	<p>Daubrite 1 VCI Packet</p> <ul style="list-style-type: none"> • Place each unopened 1.5" x 3" Tyvek pouch in container with the metal and close the container. • Corrosion protection lasts up to 24 months. • Daubrite 1 Packet protects 1 cu. ft. of enclosed space. • Daubrite 5, Daubrite 10 disk emitters also available.



Products for Protected Storage/Transport Systems

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
<p>Equipment, Assemblies Parts</p> <ul style="list-style-type: none"> • Exposed Metals Stored Indoors  	<p>Steel (ferrous) and/or other metal parts in enclosed systems; iron, zinc and aluminum; compatible with copper and brass.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Nox-Rust 9900 is a low VOC product with no solvents, petroleum oils, or toxic chemicals. ✓ Use where you need an environmentally safe barrier coating. ✓ Can be diluted with water. 	<p>Environmentally Safe Water-Based Coating:</p> <p>Nox-Rust 9900</p> <ul style="list-style-type: none"> • Apply the amber, water-based barrier coating by dip, spray or brush. • Dries to a firm, tacky film that is not water soluble. • If removal is desired, use hot alkaline or mineral spirits. • Corrosion protection lasts 6-12 months. • Sold in 55-gallon drums and 5-gallon pails.
<p>Closed Systems</p> <ul style="list-style-type: none"> • Boilers • Tanks • Heat Exchangers • Steam, Condensate Pipelines • Turbines • Pipes • Compressors • Lay-up and Preservation Applications  	<p>Copper, galvanized steel, ferrous metals.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Preserves tubes, pipes, and reservoirs. ✓ Preserves equipment and piping systems that need to undergo hydrostatic testing prior to shipping or storage. ✓ Nox-Rust 1200 does not contain phosphates, heavy metals or nitrites. ✓ It replaces hydrocarbon and solvent-based liquids, nitrogen blankets, desiccants and other alternatives. ✓ Silica-free solution leaves no build-up on the metal. ✓ Nox-Rust 1200 provides short and long-term protection, depending on the application. 	<p>Environmentally Safe Silica-Free Water Solution for Closed Systems:</p> <p>Nox-Rust 1200</p> <ul style="list-style-type: none"> • Water soluble liquid works in both contact and vapor phases. • Apply by fogging or spraying, adjusting volume and concentration levels according to the application. Follow dilution recommendations in Product Data Sheet. • Silica-free liquid leaves no residue. If removal is desired, use a cold water flush or water spray. • No special surface preparation required prior to equipment shut down. • System does not need to be re-charged or maintained during the lay-up period. • Sold in 55-gallon drums and 5-gallon pails.




Products for Protected Storage/Transport Systems

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
<p>Steel Coil Edge Protection</p> <ul style="list-style-type: none"> Edge Coat for Coils and Sheet Stock 	<p>Outdoor storage and transport for steel (ferrous) and zinc protection. Compatible with non-ferrous metals (brass, cadmium, aluminum, copper).</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Nox-Rust 4101 is designed to protect in areas where acid fumes are present, as commonly found in pickling operations. ✓ Prevents corrosion from forming on steel parts and equipment stored in high humidity conditions. 	<p>Water-Displacing, Non-Staining Liquid</p> <p>Nox-Rust 4101</p> <ul style="list-style-type: none"> • Apply by dip, spray, flow coat or brush. • Dries as a soft, waxy film. • Non-staining • Removable with petroleum solvent, caustic cleaner, steam. • Corrosion protection lasts 6-12 months. • Sold in 55-gallon drums and 5-gallon pails.
<p>Anti-Corrosion VCI Packaging</p> <ul style="list-style-type: none"> Electronics, subassemblies, and valuable equipment 	<p>For use on steel, copper, zinc and multi-metals.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Daubrite foam cushions, protects parts is flexible and non-abrasive. ✓ The soft, open cell foam cushions the part against damage while the VCI action prevents corrosion from forming inside the packaging environment. 	<p>VCI Foam</p> <p>Daubrite Foam</p> <ul style="list-style-type: none"> • Not affected by humidity, condensation, dirt, or changes in the exterior environment. • Leaves no residue to affect the performance of part. • Parts are immediately ready to use without additional cleaning or rework. • Standard Daubrite foam is blue. • Sold in cases of 10"x10"x1/4" pads. 250 pads per case. • Also sold in custom sizes and rolls.
<p>• Tubes, pipes or conduits in storage or during shipping.</p> 	<p>Carbon steels, stainless steels, copper, brass, aluminum, silver, galvanized steel, solder, silicone steel.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Place wire inside the tube or pipe. ✓ The length of the wire strip should equal the length of the pipe. 	<p>Daubrite Wire</p> <ul style="list-style-type: none"> • Long term corrosion protection of closed space. • The slow release vapor action protects the exterior as well as hard-to-reach interior surfaces. • It is self-healing and will provide 24 months of long-term protection for storage and overseas shipments.

Products for the Metal Working Industry

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
<p>Sheet Metal Stamping</p> <ul style="list-style-type: none"> • Coiled Stock • Blanker • Steel Parts • Automotive Panels, Parts 	<p>Cold rolled steel.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ An excellent multi-metal corrosion inhibitor for general industrial use. ✓ Prevents staining and corrosion under high humidity storage conditions. ✓ Will not affect priming, painting, sealing, welding or cleaning operations. ✓ Won't cause problems due to dripping. ✓ Approved by Ford, General Motors, GE. 	<p>Metal Processing Lubricants and Preservatives</p> <p>Nox-Rust 5400</p> <ul style="list-style-type: none"> • Apply liberal amount by spray, dip, brush or roller coat. • Applies as an oily film. • Easy to remove with conventional cleaning methods. • Used as a wash, it leaves behind a lubricant and corrosion preventive film. • Corrosion protection lasts 1 year. • Sold in 55-gallon drums, 5-gallon pails, and ready to use 11-ounce aerosol cans.
<p>Metalworking, Precision Parts & Assemblies</p> <ul style="list-style-type: none"> • Springs • Stampings • Saws & Machine Tools • Engines • Compressors • Refrigeration Equipment • Aviation Parts • Watchmaker & Precision Tools • Gear Shafts • Sockets • Blades 	<p>Steel (ferrous)/zinc compatible w/ non-ferrous</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Removes water after using an aqueous cutting oil. ✓ Won't clog stamping machines. ✓ Non-staining. ✓ Repels water from metal surfaces. ✓ Won't emulsify in presence of alkali. ✓ Removal is not required. ✓ Leaves a sparkling luster on treated metal. 	<p>Nox-Rust 7100</p> <ul style="list-style-type: none"> • Apply the light, transparent oil by cold dip, spray or brush. • Where large volumes of water, liquid alkaline, cleaner or soluble cutting fluids are to be displaced from fabrications, agitate parts in a dip tank that has a bottom drain. • Dries as a transparent, non-discernible film. • If removal is desired, use petroleum solvents, alkaline cleaners or vapor degreasers. • Corrosion protection lasts up to 3 years when parts are packaged and stored indoors; 3 months when covered parts are stored outdoors. • Sold in 55-gallon drums, 5-gallon pails and convenient 11-ounce aerosol cans.

Products for the Metal Working Industry

ASSEMBLY	TYPE OF METALS	CORROSION SOLUTION
Metalworking, Precision Parts & Assemblies <ul style="list-style-type: none"> • Springs • Stampings • Saws & Machine Tools • Engines • Compressors • Refrigeration Equipment • Aviation Parts • Watch-Maker & Precision Tools • Gear Shafts • Sockets • Hammers • Cutting Tools • Bearings • Knife Blades • Guns & Firearms • Precision Equipment   	<p>Steel and ferrous metals; compatible to zinc, brass, cadmium, aluminum, copper.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Ideal lubricant for high precision equipment and parts. ✓ Compatible with barium lube grease. ✓ Excellent lubricating oil for assembly parts. 	<p>Corrosion Preventive Lubricant</p> <p>Nox-Rust 7800</p> <ul style="list-style-type: none"> • Apply the light oil by dip, spray or brush. • Mixing or other preparation is not required. • Applies as an oily film. • Removal is not required except in some instances when metal is to be painted. Use solvents, mineral spirits or alkaline cleaners. • Lasts 6-12 months. • Sold in 55-gallon drums and 5-gallon pails.
	<p>Steel (ferrous) metals.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Can be diluted with water or petroleum solvent. ✓ Retards corrosion during shipment and storage of machined parts, tools, treated steel and assemblies. ✓ Water-displacing. 	<p>Final Rinse Additive</p> <p>Nox-Rust 9300</p> <ul style="list-style-type: none"> • Apply as an additive to final stage rinse (water or emulsifies with solvent). • Also may apply by dip, spray or brush (dilute as recommended on Tech Data Sheet). • Applies as a thin, oily emulsion. • Remove with alkaline cleaners/solvents. • Lasts 3-9 months. • Sold in 55-gallon drums and 5-gallon pails.
<ul style="list-style-type: none"> • Coiled Steel • Coated Steel Products • Steel Converting Machine Parts 	<p>Steel (ferrous) metals. Compatible with zinc and copper.</p> <p>Application Tips:</p> <ul style="list-style-type: none"> ✓ Removes dirt and debris from steel before mill oils are applied. ✓ Contains no oil or oil-based material. ✓ Water-soluble. 	<p>Cleaning Agent, Concentrate</p> <p>Nox-Rust 9700</p> <ul style="list-style-type: none"> • Synthetic, water-based fluid. • Apply straw-colored, clear, aqueous solution as an additive to cutting fluids, final stage rinse, or dip, spray or brush. • Dries as thin, soft, solid film. • No flash point. • Remove with water/alkaline cleaners. • Lasts 1-12 weeks. • Sold in 55-gallon drums, 5-gallon pails.

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