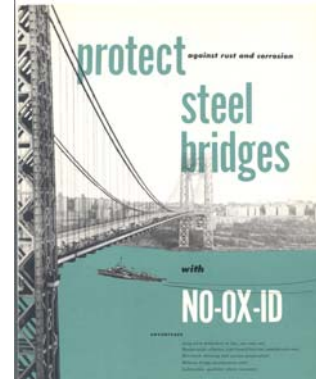
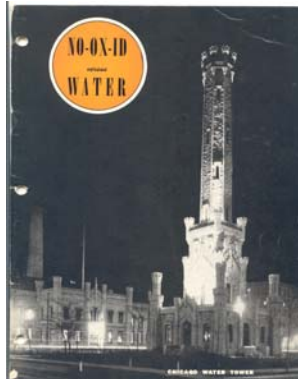


# Sanchem Inc

## **NO-OX-ID A-SPECIAL** **Heavy Duty Rust Preventive & Lubricant** **USDA, NSF-61 & RoHS Compliant coating**

NO-OX-ID IS THE ORIGINAL RUST PREVENTIVE COATING. This anti corrosion coating requires minimal surface preparation and is the long-term solution for lubrication and corrosion control. NO-OX-ID A-Special is used as an anti condensation coating on structural steel, in acid pickling areas, brine tanks, inside water tanks, steel cables, bridges and cofferdams. Use this cosmoline type corrosion resistant coating whenever the use of heavy duty rust preventives and anti condensation coatings are required.



**DESCRIPTION** - NO-OX-ID "A Special " is a general heavy-duty rust preventive to be used wherever cold applied coating is required to guarantee maximum protection of metal from weathering, water, or any corrosive atmosphere.

NO-OX-ID " A Special " is a an economical, effective, soft grease type rust preventive, which contains metal wetting agents and selected rust inhibitors blended in a petrolatum wax base. This product also contains a solvent for ease of application.

With NO-OX-ID "A Special " you can leave a coating of various thickness thin to thick depending upon the level of protection desired. The coating is semi-transparent, non-drying film and retains its properties indefinitely.

NO-OX-ID "A Special "is used extensively for maintenance purposes. Whether the corrosion problem involves nuts and bolts, structural steel, steel water tanks, equipment in service or storage, patterns, dies, or jigs, NO-OX-ID "A Special " will provide complete protection with one coating.



**NO-OX-ID**  
RUST PREVENTION

age protection of open tail shafts and other similar equipment; maintain bearings and gears; keep steel surfaces in good shape; protection of steel in storage; fluting steel hydraulic crane booms; anchor chain, mooring pipe in shipyards; in bays; to better rollers; behind insulation and before fasteners; and for outside of hull when the hull is to be painted in fresh water.

Application may be made either cleaning the surface down to bare metal, by brushing, scrubbing, or mechanical spray guns. Brushing is best accomplished by using a short stubby brush available by means of a shaft or hose handle, the material requiring no heating, but other types of application except in cases used for use of the product, never heating it above 100°. More rapid application is obtainable by the use of the standard spray gun or equipment such as the Alkath "Vertical" pump. In the latter is employed, it is recommended that the air pressure be directly on the tank and a single hose not over 10 feet long be used, from the tank, with a tapered pipe reducer at the end in place of a spray gun. For other mechanical applications, the material should be heated to about 150°-180° and in cold weather the container should have heating coils, or a water jacket system should be used.

The application should be slow and even, this being particularly important in Ballast and Fuel Water Tanks, so that there will be no "run-off" or slip to the bottom of the tank. It is advisable to circulate compressed air for several hours to clear the surface of the bottom, after application, if possible. After applying to drinking water tanks, hose the surface thoroughly at 100 the tanks with water and drain. This will carry off the remaining solution which will leak out. The steel surface of bottom in not considered a fire hazard, the same precautions as with paint which require a solvent being recommended. NO-OX-ID "A Special" does not contain toxic or poisonous ingredients, and does not in any way contaminate drinking water. The standard line of NO-OX-ID "A Special", when the solvent has evaporated, is equivalent to NO-OX-ID "A", the solvent being added to the formula for ease of application only. The solvent employed is a high-test petroleum naphtha or solvent spirit being a minimum flash point of 100 F.



NO-OX-ID coatings protect water and bottom metals of numerous C, C-2 and C-3 Class Vessels.  
Photo courtesy of U. S. Bureau of Navigation

**NO-OX-ID**  
RUST PREVENTION

**ITEMS OF INTEREST ABOUT NO-OX-ID (Continued)**

For hand application of NO-OX-ID, etched half palm brushes with short stubby handles are available.

The best results, NO-OX-ID should be applied over a properly cleaned and prepared surface. In rare cases, when it is necessary to use a spray or mist area, a consistency such as NO-OX-ID "A Special" should be used and the material thoroughly rubbed to until all of the water is displaced.

An exception to the proper surface preparation mentioned above is where the user desires to remove existing rust by means of a "wet non-dissolving compound." NO-OX-ID "A Special", "B" and "C" has been developed for this purpose. When using a temporary application only, and after rust has been removed thoroughly, a permanent rust-preventive coating should be applied.

Among the many ideal applications for the surface treatments of NO-OX-ID are included—

and other immovable areas where moisture would otherwise cause steel to rust; the hulls of huller rafts, and in the hulls of boats of small craft; steel hydraulic crane booms; steel piping, and other steel and water connections, such as elbows, fittings, lock steel piping goring checks; steel pipes, joints, valves, elbows, chain lockers, underground pipe lines; miscellaneous equipment in and about shipyards subject to rust and corrosion.

NO-OX-ID 750 M has been developed for internal conditions engine lay-up protection from rust and corrosion. A bulletin, descriptive of this application, is available upon request.

Slip chockers at various parts carry the popular NO-OX-ID "A Special", "B", "C" and "D" to small concrete steel structures for shipboard use, expediting the more complete scale control at the Deere's branches listed in the front of this bulletin.





Photo courtesy of Deere & Co. Division of International Corporation, Limited, San Francisco. Model shown prepared with NO-OX-ID "A Special" for rust prevention coating. Coating applied to all steel surfaces.

**NO-OX-ID**  
RUST PREVENTION


**THE PRINCIPAL CONSISTENCIES OF NO-OX-ID USED IN THE MARINE INDUSTRY**

**NO-OX-ID "A-SPECIAL"**

For Marine application of the various consistencies of NO-OX-ID available, "A Special" is the treatment recommended. It is a heavy petroleum base, contains a small amount of high-test naphtha as a solvent for ease of application, and forms a non-corrosive, non-drying coating. Its main consistencies include coating below, side and wing ribs and other such parts of drinking water, and any other tanks for water storage; hulls, decks, bulkheads, and keels; tank tops, hulls, mooring stanchions, catwalks, and ladders; bilge keels; lying up machinery; open parts, bulk equipment, and structural plates over-



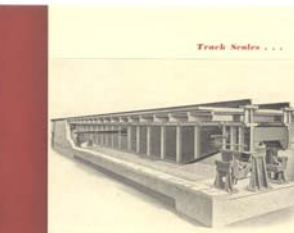
NO-OX-ID "A-SPECIAL" on work shop of dry dock.



**NO-OX-ID**  
for MAINTENANCE of STEEL STRUCTURES in the RAILROAD INDUSTRY . . .

**NO-OX-ID**  
RUST PREVENTION

**Track Scales . . .**



**TRACK SCALE INSTALLATIONS** are subjected to corrosion on account of drainage and resulting damp conditions, frequently found in scale pits. Again the dual service of NO-OX-ID "A Special" in providing lubrication and protection against corrosion meets the condition.

Many scale superintendents are using NO-OX-ID Glass Filler Red as a rust proofing primer coat prior to application of paint.

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**Expansion Bearings . . .**

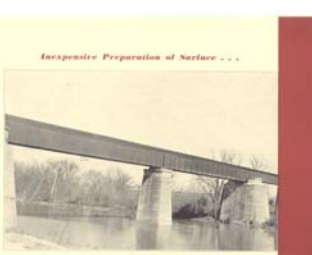


**EXPANSION BEARINGS** are best maintained with NO-OX-ID. The vehicle in NO-OX-ID being a petroleum product, the dual service of rust prevention and lubrication are obtained through its use.

Heating these bearings to retain NO-OX-ID, and making suitable enclosure to exclude water and dirt, will give permanent protection and lubrication.

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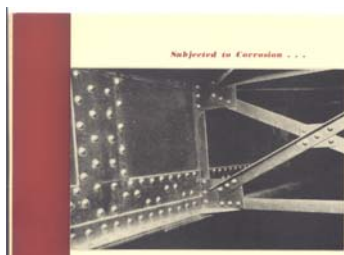
**Inexpensive Preparation of Surface . . .**



**THE USE OF POWER TOOLS**, sandblasting and thorough hand cleaning of structural steel is expensive. Many railroads are now using the NO-OX-ID method of protecting bridges. All that is necessary, in following this procedure, is to wire brush the surface to remove loose paint films and rust scale. NO-OX-ID definitely arrests existing corrosion.

PAGE 1

**Subjected to Corrosion . . .**



**THE AREAS PICTURED ABOVE** are subjected to corrosion accelerated by moisture, below the road and slabs. Surfaces subjected to these corrosive conditions require the maximum protection. One coat of NO-OX-ID "A Special" affords economical, long-term protection, together with the feature of arresting corrosion already in progress.

PAGE 4

**Sulphur Dioxide . . .**



**THE STRUCTURE** pictured above is subjected to accelerated corrosion from locomotive gases.

In the combination of coal and oil sulphur dioxide is formed. This, in the presence of moisture, becomes sulphurous acid and through oxidation reacts to form sulphuric acid. Both of these acids are extremely corrosive to all metals. NO-OX-ID has been used extensively to combat the corrosive influence of these rust accelerators. One well known railroad has adopted NO-OX-ID as a standard after making various tests, one of which was an metal exposed to the conditions outlined above.

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## Where can you use the original multipurpose heavy duty rust preventive?

### GENERAL USES

1. Acid pickling rooms
2. Tanks: Brine, ammonia, caustic, chemical storage, filter, settling tanks, septic tanks, and water tanks.
3. Agitators
4. Bearings
5. Bolts
6. Bushings
7. Threads – pipe drill, bolts, screws, galvanized pipe thread.

### GENERAL METAL WORKING

1. Gears
2. Jigs
3. Machined parts & spare parts in storage.
4. Metal Stampings
5. Molds
6. Sheet metal
7. Steel Bars
8. Steel Coils
9. Structural Steel
10. valves
11. Meters
12. Nut, bolts and flanges

### AIRCRAFT CONSTRUCTION

1. Bolts, bearings, nuts and fittings.
2. Control cables.
3. Machine gun mounts.
4. Lubrication and protection of retractable landing gears.
5. Inside pontoons.
6. Rods, struts, hallow tubing and turnbuckles.
7. Battery Terminals
8. Battery Holders
9. Tire Rims
10. Springs

### AUTOMOBILE INDUSTRY

1. Battery, containers, holders and terminals
2. Bolts, nuts and threaded parts.
3. Exports and domestic shipment.
4. Springs- as a lubricant as well as a rust preventative.
5. Engines in shipment & storage
6. Tire rims
7. Gears

### BREWRIES-TANNERIES-GLUE PLANT

1. Structural steel in acid
2. Inside septic tanks.

3. Steel overhead doors.
4. Finished surfaces on presses.

### ELECTRIC TRANSMISSION

1. Bus bars, contact points, switchblades and ect..
2. Transformers .
3. Steel conduit.
4. High line towers, brackets and insulators.

### ENGINES

1. Threads of aid hose couplers.
2. All bright parts, such as side rods, piston rods and the inside of cylinders for protection in transit of new locomotives and those going to the shop.
3. All bright parts for rod engines.
4. Crank pins and bearings after boring.
5. Cylinder bushings after boring.
6. Frame jaw faces.
7. Spring hanger pins.
8. All pipe threads.
9. Shoes and wedges.
10. Locomotives in storage.

### FARM EQUIPMENT

1. Tractors and pulleys.
2. Laid-up machinery.
3. Iron gates, fences & Posts

### GAS INDUSTRY

1. Purifying boxes.
2. Coke and coal handling equipment.
3. Coke quenching cars.\
4. Condenser cooling coils.
5. Inside air and water tanks.
6. Nuts, bolts, and flanges at time of installation.
7. Pipe and tubing in storage.
8. Valve stems.

### OIL INDUSTRY

1. Metal equipment subjected to salt, acid or other corrosion.
2. Inside steel structures in general.
3. Nuts, bolts and flanges before installation (for greater ease of assembly and removal during repairs).
4. Inside of condenser boxes.
5. Condenser coils

6. Acid tanks, acid blow cases and acid lines.
7. Inside of water tanks (imparts no taste or odor to water). For potable water use "WW" grade.
8. inside top of tanks, except gasoline, benzene and naphtha storage.
9. inside top of agitators.
- 10...Bottom and on first ring of crude fuel and heavy oil tanks.
11. Top of water tanks.
12. Stored pressure still tubes.
13. Threads of tank car safety valves.
14. Threads of outlet neck caps on tank cars.
15. Thread of fittings in storage
16. Stored casing or casing ready to run. It is not necessary to remove NO-OX-ID from casing threads when it is running.
17. Tubing threads in storage.
18. All crown blocks.
19. Outside break bans on bull wheels.
20. Temper screws instead of grease.
21. Threads of casing head controls.
22. Casing heads of gas wells
23. Stored rod lines.
24. Stored gun barrels, tanks and metal surfaces in contact with salt water, particularly pumping jack.
25. Balls and seats of stored working barrels.
26. Christmas tree on flowing oils wells
27. Lead of vacuum lines of pumping wells (or NO-OX-ID "GG2")
28. Steel derricks (or NO-OX-ID "GG2" or any NO-OX-ID fillers.).
29. Oil tank protection, will mitigate rust or pitting that had started.
30. Casings.

#### **MARINE SERVICE**

1. Tanks-ballast, side and wing.
2. Portable or drinking water and any other tanks for water storage.
3. Cofferdams.
4. Coal bunkers.
5. Tank top under wooden ceiling.
6. Steel where covered with wood.
7. Screws on boat davits.
8. Turnbuckles on rigging.
9. Machinery-engines and turbines laid-up, spare parts, tools and equipment, threaded joints.
10. Ventilator coamings under ventilator.
11. Refrigerator coils.
12. Inside brine tanks.

#### **MECHANICAL DEPARTMENT**

1. Threads of air hose couplers.
2. Buffer plates.
3. Car wheel journals
4. Electric conduit.

5. Machined parts.
6. Stoker parts.
7. Outside bottom surface of tanks, also boards upon which tanks rest.
8. Inside tender tanks.
9. Tender coal space
10. Top of tender under frame.
11. Train lines

#### **PACKING PLANTS**

1. Condenser coil
2. Steam coils
3. Brine tanks, inside
4. Brine coils
5. Ice cans
6. Hoists
7. Pans
8. Fire doors
9. Spray towers
10. Tracks and hooks
11. All piping to condenser.
12. Pre-coolers
13. Truck springs
14. Sprinkler systems
15. Structural steel
16. Valves and fitting
17. Conveyors
18. Refrigeration equipment

#### **PAPER MILLS**

1. Protection of rolls and driers in shipment and storage.
2. Tanks of all kinds
3. Overhead structural steel, in
4. Sprinkler system
5. Piping
6. Digesters-beater tanks.

#### **RAILROAD SERVICE**

1. Crank pin and bearings after turning.
2. Oil-electric and gas-electric Locomotives, both new and used going through the shop.
3. All bright parts
4. All inaccessible pins.
5. Springs hanger pins.
6. Threads of air hose couplers.

#### **SHIPYARD PROTECTION**

1. Pipe above and below ground
2. Steel Pilings
3. Dry Docks
4. Graving Dock
5. Surface Framing for barge lifts
6. Structural Steel

7. Cranes
8. Bridges – all surfaces except walkways
9. Marine Docks

16. Machinery in shipment and Storage
17. Mixing and aeration equipment.
18. Stand pipes and tank bottoms

**TELEGRAPH, SIGNAL AND  
ELECTRIFICATION**

1. Threads of turnbuckles on guy rods of electrification masts.
2. Air Lines
3. Boot Jacking Connections
4. Junction Boxes
5. Messenger Wires & Cables
6. Pipe Carriers
7. Rail Bonds
8. Insulated rail Joints
9. Switch and circuit control rods

**WATER INDUSTRY**

1. Steel settling tanks and baffles
2. Coarse and fine screen.
3. Saturated packing glands, to prevent rusting of stems
4. Condensed cooling coils.
5. Inside ammonia tanks
6. Metal Parts of clarifiers and flocculators.
7. Cranes, hoppers and ash conveyers
8. Coal handling equipment
9. Nuts, bolts, and flanges during assembly for ease of removal through protection.
10. Paper machine and bester rooms.
11. Piping
12. Strainers.
13. Metal work of filtration systems
14. Inside and underside of roofs of steel storage tanks. (for potable water, us “WW”)
15. Sludge digestion and removal equipment
- 33.

**ELECTRICAL INDUSTRY**

1. Aerial Cable
2. Aluminum Cable
3. Anchor Rods
4. Battery Holders
5. Battery Terminals
6. Battery Posts
7. Boot Jack contacts
8. Bolted Connections
9. Brackets
10. Bus Bar Systems
11. Cables & Clamps
12. Connectors
13. Contact Points
14. Electrical Conduit
15. Guy Wires
16. High Line Towers
17. Insulators
18. Junction Boxes
19. Manhole Hardware
20. Nuts & Bolts
21. Steel Conduits
22. Steel Fittings
23. Steel Poles
24. Switchgear
25. Temper Screws
26. Threaded Connections
27. Transformer Bases
28. Turnbuckles
29. Wires
30. Circuit Breaker
31. Switches
32. Drawout Breakers



## NO-OX-ID "A SPECIAL"

**APPLICATION** - NO-OX-ID " A Special " is cold applied as it comes from the container using a stubby brush, swab, or glove. NO-OX-ID should be rubbed onto the surface thoroughly to absorb any moisture present and to insure contact over all irregularities present. A thicker film should be applied to areas exposed to severe corrosive influences.

NO-OX-ID "A Special " can be sprayed in positive displacement heavy material pumps having an 8 to 1 piston ration such as Graco, Alemite, or Lincoln, after warming NO-OX-ID " A Special " to 90° F. This temperature is well beneath the flash point of NO-OX-ID "A Special".

**PREPARATION OF SURFACE** - NO-OX-ID "A Special " will penetrate old rust, scale and paint films to bare metal, arresting further corrosion and pitting. This penetrating action requires touching up later as rust scale is softened and drops off. For best results the following cleaning procedures are recommended:

1. Clean rags where only wiping or dusting is necessary or rags soaked in kerosene for light dirt removal on production parts.
2. Solvent immersion for dipping production parts for the removal of light film contaminants.
3. Wire or power brush where rust deposits or loose paint films must be removed by abrasive action over large areas.
4. Sand-, shot-, or grit-blasting on heavy rust deposits and scale firmly attached over large areas.
5. Flame cleaning, an alternative method for the removal of heavy rust or mill scale over large areas.
6. Steam cleaning, where thick grease, tarry, or other organic deposits are present.
7. Air Pressure Scraper - In cases of major structures, the user may desire to employ air cleaning with a simple scraper.

**CLEAN UP OR REMOVAL** - On production parts and equipment in storage, the coating can be removed by clean rags or swabs soaked in petroleum solvents, such as gasoline, kerosene, naphtha or vapor degreasers, alkaline wash, or solvent immersion methods can be used.

## PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (COC) ASTM D-92	250 F min
Congealing Point ASTM D-938	125-160
Penetration ASTM D-937	140-195
Phenols	1 ppm max
Total Heavy Metals	1 ppm max
Salt Spray 20 mils	10+ years

## TABLE FOR CALCULATION COVERAGE.

<b>FILM THICKNESS</b>	<b>APPROX. SQ. FT COVERAGE COVERAGE - PER GALLON</b>
1/64" (.016")	100 sq. ft.
1/48" (.023")	75 sq. ft.
1/32" (.031")	50 sq. ft.
1/16" (.063")	25 sq. ft.

## **STANDARD CONTAINERS**

380 lbs..	Net - 55 Gal. Drum	Pint Can	12 to a case	4 oz – 14/case
200 lbs.	Net - 30 Gal. Drum	8 oz Tubes	24 to a case	2 oz – 144/case
35 lbs.	Net - 5 Gal. Pail	8 oz can w/brush	14 to a case	1 oz - 216/case