

Gun Finishes For Concealed Carry



AFTER — A total refinish by Robar using their Newest NP3-Plus finish

Concealed carry presents a challenging environment for a handgun. Hot weather and close body contact can do wonders on a typical blued finish. If properly oiled, the gun can do the same on any good clothing with which it comes in contact.

This old Colt 1911 National Match was a superb shooter — it's only problem was a previous owner had carried it in ways unfriendly to the factory-blued finish.

The Robar NP3 finish has been around since the 1980's and is certainly a proven finish. NP3 is a surface treatment for steel and metal allows that combines sub-micron particles of PTFE (polytetrafluoroethylene) otherwise known as Teflon, with electroless nickel.



BEFORE — Showing extreme holster wear

NP3 - THE PROCESS

The application of NP3 is auto-catalytic, that is, not requiring any form of electricity. This process is preferable to standard electrolytic plating as all active surfaces are evenly plated, which is not the case with any electrolytically deposited coating. With Robar's well-equipped laboratory, coating thickness can be maintained to within .0002" or two ten thousandths of one inch, guaranteeing consistent quality coatings. With the PTFE evenly distributed and locked into the nickel-phosphorus matrix, NP3 is a true composite. If wear occurs, fresh particles of PTFE are exposed to keep the opposing surfaces lubricated throughout the life of the coating.

NP3 - THE ADVANTAGES

Very accurate and even coatings on all activated surfaces.

No lubrication is needed on opposing surfaces.

Cleaning is minimal, usually requiring only a soft cloth.

Permits firing for longer periods of time between cleaning, as dirt and powder residue has no wet or oily surface to which it can cling.

NP3 has a micro hardness of 48-51 Rockwell as plated (nickel matrix).

NP3 is very corrosion resistant, a 1 mil (.001) coating exceeding a 240 hour salt spray test.

NP3 has a high lubricity and low friction co-efficient; therefore, the life expectancy of a firearm will be greatly increased due to reduced friction wear.

The coating is strippable with no effect on the base metal, allowing other coatings to be applied or a new coating of NP3 to be applied, if necessary.

NP3 plated onto stainless steel guns will prevent galling, a problem common with stainless steel.

NP3 is a satin gray, non-reflective color ideal for all firearms.

NP3 can be plated to all internal parts giving a smoothness to the action not found with any other coating.

In cases where the NP3 has been perforated, the corrosion shows no tendency to spread or migrate under the coating.

NP3 is guaranteed against corrosion, peeling or flaking for the lifetime of the firearm.*

NP3 Plus

ROBAR just announced their newest innovation: NP3 Plus! Offering all the benefits that NP3 is famous for, NP3 Plus greatly increased corrosion protection making NP3 Plus the finish of choice for firearms used in hostile environments. NP3 Plus nickel/teflon provides lubricity, protection, extreme corrosion protection and a limited lifetime warranty.*

NP3 Plus offers the same lubricity and good looks as the original NP3, enhancing any firearm, pistols, rifles, shotguns and revolvers, too.

*NP3, NP3 Plus and Roguard metal finishes carry a limited lifetime warranty against finish failure. Finish failures that are covered include corrosion through the finish and peeling or flaking of the finish. Additionally, normal wear resulting in finish failure may be covered, if, at the sole discretion of The Robar Companies, the finish has failed prematurely due to such normal wear. Conditions that will not be covered are failure of the finish resulting from misuse, abuse, accident, improper cleaning or modifications performed after the metal finish has been applied.

Additional Robar Finishes

BLACK OXIDE

Commonly called 'blueing', this process oxidizes metal surfaces to a corrosion-resistant, decorative finish. The matte black finish is produced by a chemical reaction directly with the iron (Fe) in the steel to form the black oxide of iron (Fe₃O₄). Robar uses the latest chemicals containing new concepts in

activators, catalysts, penetrants, inhibitors and rectifiers. The result is an attractive oxide-resistant finish on steel, including low and high carbon steels, alloy steels or hardened steels. Robar's process will not flake, chip, peel, or create any dimensional change. In using the latest technology in the Black Oxide process, Robar is able to create a more corrosion-resistant, abrasive-resistant, attractive deep black finish. Robar also guarantees that all specifications will meet or surpass all military, aeronautical and civilian specifications. Robar offers all of these benefits at cost-effective prices. This process restores your old firearm to a like new condition. Please note Robar offers this finish in matte only - we do not offer polished or bright polished blued finishes. Mil-C 13924-C, Class 1, Mil-Std-171(Ord) Finish 3.3.1.

ELECTROLESS NICKEL

Electroless nickel has become popular as a finish for firearms. Electroless nickel is economical, attractive and will give years of maintenance-free service. Robar confidently offers electroless nickel for the following reasons:

1. Excellent resistance to fingerprints, perspiration, petroleum distillates of all types, gun solvents, gun cleaners and all powder residue.
2. A salt-spray corrosion resistance tolerance exceeding 1000 continuous hours per ml. thick deposit.
3. Plating rate is predictable, permitting a deposit of the exactly desired thickness.
4. All surfaces are equally plated with micro-smooth nickel. This allows a natural low friction and lubricity resulting in smoother gun operation and reliability.
5. It rates 0.1 on the Taber Wear Index, making it tougher than hard chrome. This is significant in that electroless nickel provides a more wear resistant surface.
6. Expansion and contraction of the metal will not result in peeling of the nickel deposit.
7. Electroless nickel will pass a 180 degree bend test, as specified under Mil-C-26074A, without peeling.

8. It is rated at Rockwell C53-56 in hardness before stoving (Rockwell 68-70 being possible). This means that plating of the wear surfaces alone will extend the useful life of a firearm.

9. Adhesion for this process is reported to be 30,000 to 60,000 pounds per square inch.

10. Electroless Nickel is durable and cost-effective, eliminating further investment into future finishing for the weapon.

BLACKENING OF STAINLESS STEEL

Robar is able to blacken stainless steel through the use of oxidizing type blacking compounds. This process produces black coatings on stainless steel and alloy steels by a "conversion" process. The chrome in the stainless steel is involved in a chemical reaction with the oxidizers in the solution producing chrome-sulfide. The application of the black finish is dependent upon the surface treatment of the steel. Bead blasted surfaces will have a satin black appearance while a surface blasted with aluminum oxide will be matte in nature. Importantly, dimensional changes involved in blackening are extremely small, less than 0.0001 Mil. This thickness of the black oxide type coating ranges from 0.00006-0.0001 Mil depending on the type of alloy being treated. Blackening of stainless steel not only makes the weapon more attractive, but adds to its corrosion resistance (96 hours salt spray per Mil-C-13924B) and aids in preventing galling, common in stainless steel guns.

PHOSPHATING/PARKERIZING

Phosphating, better known as "Parkerizing", is a process involving the transformation of the surface of the steel to a rust resistant manganese or zinc phosphate. Modern chemicals for phosphating are far superior to their predecessors. Phosphating is a non-reflective, matte black finish that resists corrosion and abrasion. The coating has a sponge-like structure that entraps oil or other corrosion resistant solutions producing an excellent coating for firearms exposed to high humidity and/or harsh

environments. Phosphating will hide light scratches, pitting or blemishes. Coating thickness of the finish varies depending on the user requirement. Phosphate coating applied by Robar will meet the following requirements: DOD-P-16232 F, Type M Class 1, 2 & 3 and Mil-P-50002 A Type 1, Composition B. DOD-P16232 F Type Z Class 1, 2 & 3.

As you can see from the photos below, Robar can just about provide any combination of finishes to nearly any fire arm. Go to their website and consider re-finishing that old super-shooter of yours.

<http://www.robarguns.com>



Combination finishes as well as custom colors are available from Robar. Call for details or assistance in choosing the right combination.

Every part is given the same attention to detail. Visual inspections are performed at every stage of processing.



The same Remington 870 shotgun, before and after refinishing with Matte Roguard & NP3