



ADVANCED NITRIDING SOLUTIONS

Duo-Phase Technology for Rifle Barrels

The Duo-Phase is Advanced Nitriding Solution's newest barrel enhancement technology. Designed primarily for military application, this technology enhances all aspects of barrel performance – less wear, increased accuracy, and higher muzzle velocity. The Duo-Phase is proven to extend barrel life up to 6 times.



It is superior to Salt Bath Nitriding, QPQ, Gas Nitriding, and Chrome Plating. Opposed to diffusion case hardening processes and plating processes that focus on adding mechanical strength, this technique enhances the near surface bore microstructure to endure heat fatigue over longer shot cycles. Many aspects of the barrel design are taken into consideration. Bore size and length, Rifling size, Rifling ratio, and taper. ANS works closely with our customers to tailor this application for various Barrel designs and sizes.



Since this is a barrel ID technology, secondary applications are required to achieve the desired look for industry standard Black color by zinc/mag phosphate, or Black Oxide.