Firearm Manufacturers "Shooting for" Corrosion Resistance, a Sleek Black Finish & Better Accuracy--Meet UltraOx®

By Stephanie Rottinghaus, Marketing Specialist, Advanced Heat Treat Corp.



UltraOx® sleek black finish on firearm components

"We have seen more accuracy since using UltraOx[®]."

~Firearm Manufacturer

UltraOx(R) doesn't round-off rifling, offering better trajectory and therefore more accuracy.

About the Author

Stephanie Rottinghaus has been the Marketing Specialist at Advanced Heat Treat Corp. since 2011. She graduated from Upper Iowa University with a Bachelor of Science in Marketing. Stephanie is involved with the Northeast

Iowa MarketWise group and serves on the Board of the local chapter of the American Advertising Federation.



Stephanie Rottinghaus

irearm manufacturers have enough to think about these days-their surface finish shouldn't be one of them-but since it's such an important factor in the look and functionality of each piece, it's a critical decision. There are a number of finishes to choose from; each having various advantages and disadvantages. One of the newest surface treatments available to firearm manufacturers, trademarked by Advanced Heat Treat Corp., is called UltraOx®. UltraOx® combines the controllable ferritic nitrocarburizing (FNC) process with post-oxidizing and a proprietary sealant.

Whew. Ok, what's that mean? Chemicals are *diffused* into the surface to generate increased hardness, wear resistance and improved corrosion resistance; UltraOx® is **not a coating** or painting, so it cannot flake or chip off. The protective layers are illustrated on the right by the photo, UltraOx® Layers!



UltraOx® *Layers*

UltraOx® has provided numerous benefits to a variety of industries, including automotive, construction, aerospace and defense. The benefits to the firearm industry are also vast and have been witnessed by manufacturers already using the process. One firearm manufacturer has experienced triple the life of their UltraOx®'d barrels!

UltraOx®:

- Is environmentally friendly-no toxic salts are used that could seep into holes or cracks, reducing the need for post-process cleaning-saving a step and therefore, time. (and they say time is money, right?) Doesn't round-off rifling, offering better trajectory and
- therefore more accuracy.
- Provides exceptional corrosion resistance while .
- protecting against scratches. (minimal upkeep!) Allows for masking (or selective hardening)-used to keep certain areas from being hardened.
- Enhances lubricity. •
- Can be used on titanium and ferrous alloys, including • stainless steels.
- Provides protection from galling and abrasion.
- Outperforms Nickel plating, chrome plating, QPQ/Salt Bath/Black Nitriding.
- Is a final step/process-parts can be assembled immediately upon completion.

UltraOx® is available at Advanced Heat Treat Corp.'s Alabama, Iowa and Michigan locations-request your sample today at www.ahtweb.com/firearms or call 319.232.5221!





Advanced Heat Treat Corp.