

AT 1450 - ALPHASHIELD BORE COAT

NANO-CERAMIC COATING

APPLICATION INSTRUCTIONS

1. PRODUCT DESCRIPTION

AT 1450 is the ultimate protective coating for gun bores. It is easy to apply and creates a micron thin, protective ceramic coating on the bore. AT 1450 creates a permanent, significant reduction in fouling (jacket, powder, lead, plastic wad, carbon) thereby reducing maintenance while maximizing the performance and longevity of your weapon. The coating is so thin that it will not negatively impact velocity, point of impact, or group size. Coated bores will need cleaning significantly less often and cleaning itself is much easier. AT 1450 protects against both galvanic and chemical corrosion. A single application will last the useful life of the bore for many firearms. AT 1450 is effective on all types of firearms including rifles, handguns, shotguns and muzzle-loaders.

2. SURFACE PREPARATION

- **Always ensure that firearms are unloaded and free of ammunition prior to applying coating.**
- Bore should be cleaned & free from rust, and lead or copper fouling & residue.
- Wipe-down all surfaces with denatured alcohol to remove all oils, dirt, etc.

3. APPLICATION

- As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.
- Gently shake coating container prior to application. It is important that the coating is well mixed prior to application.
- Use dampened bore mop to apply the coating inside the bore & chamber. Bore mop should be damp, not dripping.
- Run the bore mop down the bore in short (2-4 inch) strokes until the end is reached. Then pull back in one smooth stroke. Repeat this process 2-3 times until the bore is coated with a thin coating.
- Keep barrel vertical to allow any excess coating to drain out of the muzzle.
- Objective is to fill the micro-pores and leave a thin 2-3 micron film coating.
- **Allow at least 2 hours to dry. Then fire several rounds to sinter the ceramic coating and create an extremely hard film finish.**
- Inner barrel surface will now be extremely slick & easy to clean.
- **No additional lubrication is required inside the bore.**
- Coated bores will require significantly less cleaning. In the event that cleaning is required, use a light solvent. A brush will generally not be required for cleaning. If a brush must be used, a nylon brush is recommended.
- Heavily used firearms should be re-coated about once a year. Simply follow the same cleaning and application steps as above. Lightly used firearms generally do not require any re-application for the life of the weapon.
- Treated bores **do not** require oil or other lubrication and further lubricating treated components will not improve performance. However, coated parts can be oiled or greased without damage or decreased performance.



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7. DRYING & CURING TIMES

Drying Time	Dry to the touch in approximately 15-25 minutes at ambient temperatures. Warmer airflow will accelerate dry time.
Curing Time	Full ambient cure properties are obtained approximately 5 days after application (at room temperature). Warmer temperatures will result in a faster cure. Ambient cure will achieve the maximum performance.

8. COVERAGE RATE

- Coverage will be approximately 1,900 square feet per gallon (47 square meters per liter) at dry film thickness of 3 microns.

9. STORAGE STABILITY & SHELF LIFE

The shelf life is one year when stored in the original, unopened container. Store containers in a well-ventilated and covered area away from extreme heat and moisture. Contact your ALPHATEK representative if you have any questions about the products or its uses.

10. SAFETY

Safety glasses and disposable gloves are recommended during application. Coating may stain certain working surfaces and so cover the area prior to application. Refer to the Safety Data Sheet for this product prior to use.