

## Finishing Options

Diamond Black can be applied in several final finishes.

### Matte

An extremely non-reflective look. Great for hunting guns, M&P, and tactical weapons.

### Satin

This finish has a matte look, but with a fair amount of "sheen". The most versatile application.

### High polish

Much like hot caustic bluing, the Diamond Black coating reflects the finish on the metal below. Polishing to any grit is possible in order to duplicate the finish on factory guns. A high polished finish produces a highly reflective "show" type appearance and is a good choice for fine firearms.

### Colors

While the Diamond Black DLC is only offered in black, Ionbond can produce various coatings of different hardness levels and in several colors. Gold, Silver, and Dark Earth are offered by special order only.

## Functional, Durable Firearm Coatings

Whether your weapon is used for hunting, plinking, target, competition, self defense or professionally, Ionbond's Diamond Black coating provides reliability and performance. These are the critical components for shooting success.

CLUB Custom Guns is the East Coast Agent for Ionbond coatings. Contact us for all your gunsmithing needs.



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# ionbond

## Diamond Black

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Ionbond is a global company specializing in the thin-film coating market. They continuously work to improve their coatings and develop new technologies in order to offer truly innovative products for coating services and equipment. Ionbond is also a solution provider; their surface engineering expertise goes far beyond supplying wear resistant coatings. [www.ionbond.com](http://www.ionbond.com)

## Ionbond Diamond Black Firearm Coating

This is a metal finish that is applied through a Physical Vapor Deposition (PVD) process. If you've seen gold TiN coated drill bits, you've seen PVD. The coating process involves the depositing of diamond-like carbon coatings via a vacuum and an electrical charge. The result is a DLC (Diamond Like Carbon) coating that will provide years of protection against wear while retaining a nice appearance. Ionbond's unique application process makes it a finish that does not chip, crack or peel as it is a micron level coating. Diamond Black is generally 2 to 5 microns thin. This is not a conventional coating that adds thickness to the material; this is a micron level coating, which is an excellent choice for custom fit guns. There is no distortion of details or build up in the corners, which means consistent performance every time. Diamond Black provides the ultimate protection against holster wear, corrosion, bearing surfaces, and rough handling.



## Superior Properties

### Hard

Ionbond's Diamond Black coating is 1500-3000 HV. For comparison, typical hard chrome finishes are generally 1050 HV and melonite is in the 700 HV range. As you can see, the Diamond Black finish is 1.4 – 4.2 times harder than common "tough" finishes.

### Slick

(Another unique characteristic)

Diamond Black absorbs oil and releases it over time due to its unique characteristics. It also reduces the friction coefficient on the coated parts. Steel on steel has a typical friction coefficient of .7; Steel on DLC has a typical friction coefficient of .25; DLC on DLC has a typical friction coefficient of .02 to .10. For the math challenged, that means Ionbond finished parts have over 7 times less friction than untreated steel, so it does make the parts a lot more "slippery" and improves the performance of parts that wear on each other.

### Corrosion Resistance

Saltwater corrosion tests prove that DLC Ionbond coated firearms resist rust better than uncoated firearms. When DLC Ionbond is combined with a nickel plated substrate it has proven to be virtually resistant to corrosion.

### Sound Environment

Other firearms finishing options are quite toxic. Ionbond's coating process has no waste product and consumes only power, biodegradable soaps, and metal that is transformed from a vapor back to a solid on the part being coated.

**Diamond Black**  
FUNCTIONAL DURABLE FIREARM COATINGS