

DiamondBLACK IonBond finish

Who/what is IonBond?

IonBond is a global company with specializing in the thin-film coating market. IonBond continuously works to improve their coatings and develop new technologies in order to offer truly innovative products for coating services and equipment. IonBond is also solution provider; their surface engineering expertise goes beyond supplying wear resistant coatings. www.ionbond.com

What is the DIAMONDBLACK Ionbond finish?

This is a firearms finish that is applied through a Physical Vapor Deposition (PVD) process. This involves the depositing of diamond-like carbon coatings via a vacuum, and results in a finish that will provide years of protection against wear while retaining a nice appearance.

Why should I coat my firearm with the DIAMONDBLACK Ionbond finish?

The value of a firearm can be diminished by holster wear, trigger action, hammer, slides, recoil, corrosion, smoothness and appearance. It does not matter if your weapon is used for hunting, target practice, competition, self defense, or professionally, reliability and performance are the critical components for success.

What are the DIAMONDBLACK Ionbond colors options?

You can get any color you want as long it is black. This matte/satin black finish is essential for tactical pieces and is a result of the carbon treatment. This is a finish that does not wear quickly like black oxidized finishes do -- it will stay black.

IonBond has similar coatings to the DiamondBLACK in gray, flat dark earth, and copper that are available.

How thick is the DIAMONDBLACK Ionbond coating?

DIAMONDBLACK Ionbond is generally 4-5 microns *thin*. This is not a conventional coating that adds thickness to the material; this is a micron level coating, which is an excellent fit for custom fit guns. There is no distortion of details or build up in the corners, which means consistent performance every time.

How does the DIAMONDBLACK Ionbond perform as a corrosion deterrent?

Saltwater corrosion tests prove that DIAMONDBLACK Ionbond coated firearms resist rust far better than uncoated firearms.

Is DIAMONDBLACK Ionbond a finish that will chip, crack or peel like other finish?

DIAMONDBLACK Ionbond's unique application process makes it a finish that does not chip, crack or peel as it is a micron level coating.

How does applying the DIAMONDBLACK Ionbond finish impact the environment, as many of the finishing process are quite toxic?

DIAMONDBLACK Ionbond has no waste product and consumes only power, biodegradable soaps, and metal that is transformed to vapor and then transformed back to a solid on the part being coated.

How "tough" is the DIAMONDBLACK Ionbond finish?

The DIAMONDBLACK Ionbond finish is 1500-2000 HV. Typical hard chrome finishes are generally 1050 HV and melonite is in the 700 HV range. As you can see, the DIAMONDBLACK Ionbond finish is .5 – 2.5 times harder than common "tough" finishes.

Is DIAMONDBLACK Ionbond a "self lubricating" finish?

Not exactly, *BUT* DIAMONDBLACK Ionbond does have some characteristic that could make you think it is. The DIAMONDBLACK Ionbond finish absorbs oil and releases it over time due to the unique characteristics. DIAMONDBLACK Ionbond also reduces the friction coefficient on the coated parts. Steel on steel has a typical friction coefficient of .7; Steel on DIAMONDBLACK has a typical friction coefficient of .25; DIAMONDBLACK on DIAMONDBLACK has a typical friction coefficient of less than .2. For the math challenged, that means DIAMONDBLACK Ionbond finished parts have **3.5 times less friction** than untreated steel, so it does make the parts a lot more "slippery" and does improve the performance of parts that wear on each other.

Can you applying the DIAMONDBLACK Ionbond finish to materials other than steel?

It can be applied to carbon steel, stainless steel, titanium, and aluminum (we suggest a class III hard anodize for aluminum.)

Where can I get this incredible firearm coating?

Springer Precision LLC (www.springerprecision.com) is an authorized IonBond Distributor of DIAMONDBLACK IonBond and you can contact them directly for your finishing needs. They will have a list of dealers on their website that are taking advantage of the benefits the DIAMONDBLACK IonBond finish provides. If you are interested in becoming a dealer, there will be limited opportunities so please contact Springer Precision LLC for more information.

