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BLACK OXIDE KIT

Professional Results In Minutes

Simple Dip & Coat Method

The commercial gun blue manufacturers developed this new technique as a more environmentally friendly system than the commonly used hot application. Parts requiring blackening are simply placed in the liquid at room temperature. No electrical power is required.

Thoroughly clean the part to be blackened by sandblasting, wire brushing, wire wool abrasive cleaning, or by scrubbing in VIM or COMET household abrasive cleaner. Make sure you have removed all rust, paint, oil and grease. Thoroughly rinse prior to immersing into the concentrate.

Mix 1 Pint of Black Oxide Concentrate with 9 Pints of distilled water in a plastic pail. Immerse the part in the mixed Black Oxide Solution and swirl around for between 30 seconds to 5 minutes maximum. Remove the part from the solution and rinse in fresh water.

Immediately brush on or dip the part into the Penetrating Sealant and soak in the liquid for 1-2 minutes. Shake off any excess and allow too dry thoroughly before handling.

Some hardened or specialized steels will not readily accept the blackening process. Activation can be done using a 10% sulfuric acid and distilled water etch 2 to 5 minutes, then thoroughly rinse before immersing into the black oxide. To enhance blackening effect warm the part to approx. 120 degrees F, or warm the liquid to 80 degrees F before use.

Make a small test batch first to ensure the 9:1 dilution will work with your process, some parts may require a stronger mixture i.e. 4:1 or 2:1. Brush on or spray method may also require a stronger mixture. Some hardened or specialized steels will not readily accept the blackening process. Activation can be done using a 10% sulfuric acid and distilled water etch 2 to 5 minutes, then thoroughly rinse before immersing into the black oxide. To enhance blackening effect warm the part to approx. 120 deg F, or warm the liquid to 80 deg F before use. Some hardened and specialized steel alloys may blacken to a deeper black finish when activated using our Black Oxide Activator. Black Oxide works on steel or iron parts only and will not blacken Stainless Steel.

Black oxide is not a high corrosion resistant coating. The corrosion resistance comes from the top coat, which can be one of the following, penetrating oil, sealer concentrate, wax or clear coat can all be used. It is not suitable for severe outdoor applications or corrosive environments.

BLACK OXIDE SWAB ON INSTRUCTION

1. Degrease the area to be finished with a warm to hot soapy water. Do not use petroleum solvents as a replacement.
2. Rinse with running water, a damp sponge or damp cloth. Apply the damp sponge or cloth for several applications to thoroughly remove residual cleaning solution.
3. Remove any rust or welding scale with steel wool, abrasive paper or pad. A 10% sulfuric acid by volume in water then rinse thoroughly.
4. Apply the Black Oxide full strength generously with a sponge, or cloth saturated with the solution and use a light rubbing action. Use care to insure a smooth and even coverage. Allow the chemicals to react for 1 to 3 minutes. The depth of blackness is controlled by the length of time the solution is left in contact with the steel surface. Repeated applications may be required. The Black Oxide concentrated solution may be diluted with 2 to 4 parts distilled water to slow down the blackening reaction when finishing large areas.
5. Rinse with running water, a damp cloth or damp sponge several times to remove residual blackening solution. Adding a small amount of baking soda to the rinse water will help insure the complete removal of the residual Black Oxide solution. If the residual solution is not completely removed, it may cause rusting of the surface as it dries.
6. Wipe the area dry with a clean cloth and rub the area with soft cloths to remove any non-adherent layer of spent chemicals.
7. Repeat steps 4, 5, and 6 if a darker finish is desired.