

# BLACKENING & ANTIQUING



GUIDE TO ROOM TEMPERATURE  
FINISHING IRON STEEL BRASS BRONZE  
COPPER NICKEL SILVER ZINC  
TIN PEWTER ALUMINUM



# PRESTO BLACK® IN-HOUSE BLACKENING PROCESS FOR TOOLING, MACHINE COMPONENTS

## Why Blacken?

A PRESTO BLACK finish is a low-cost way to enhance sales appeal and corrosion resistance.

The clean, satin black surface absorbs a rust preventive topcoat to achieve up to 100-200 hours salt spray or 1,200 hours humidity resistance.

## Easy, Safe to Operate

Mild, room temperature solutions operate without hazardous fumes and make the system safe to work with and easy to manage. No prior experience needed. Operators learn the system quickly with support from our factory-trained personnel.

## Zero Drain Pollution

Through Ion Exchange technology, the PRESTO BLACK process line operates as a completely self-contained system, with no rinsewater discharge to the sewer. The Ion Exchange system purifies and recycles the rinsewaters, to be re-used over and over. No discharge permit needed.

## Rapid Payback of Capital Outlay

Today's manufacturing environment demands fast turnaround for part finishing and smooth workflow patterns throughout the plant – features available only with an in-house blackening system. With a 15-minute turnaround time, The PRESTO BLACK system directly replaces outside finishing and streamlines adjoining plant operations.

## The PRESTO BLACK® finish is ideal for many components

Castings, forgings, even powdered metal can be blackened easily, with no red-brown coatings or white salt leaching problems. Excellent results on tools, machine components, valves, pumps, power drive components, fasteners and other tight tolerance surfaces of all non-stainless alloys.

## Sample Blackening – No Charge

See what the PRESTO BLACK finish can do for your product. We'll blacken samples at No Charge and return them with recommendations. Call 952.937.7931.



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# PRESTO BLACK® PROCESS STEPS



**1. Safe Scrub®**  
140° F; 5 minutes  
Heavy-duty cleaner to  
remove surface soils

**2. Rinse**  
20 seconds  
(cold water)  
Purified by  
Ion Exchange

**3. Safe Prep®**  
Surface Conditioner  
Room Temp;  
2 minutes, Primes &  
Preps metal surface

**4. Rinse**  
20 seconds  
(cold water)  
Purified by  
Ion Exchange

**5. Presto  
Black® MKP**  
Room Temp; 3 minutes  
Blackens most alloys  
with a non-dimensional  
finish. Use with RPL  
Replenisher

**6. Rinse**  
20 seconds  
(cold water)  
Purified by  
Ion Exchange

**7. Sealant**  
Room Temp; 1  
minute Choose from  
below the product  
that best suits your  
requirements

See our finishing  
systems on page 6

## SEALANT OPTIONS

Solvent Based

### DRI TOUCH® AMBER IRP2

Heavy-duty, semi-dry film will not wick off into packaging.  
Good handling properties. 120 hour salt spray.

### SHEATH® RB1

A light oil water-displacer for added surface lubricity.  
96 hour salt spray.

### DRI TOUCH® IRP1

Super thin, dry film for raw steel surfaces. Water displacer.  
72 hour salt spray.



Water Based

### SATIN SHIELD® SS10

Acrylic wax sealant. Clear, satin-gloss finish. Ideal for parts  
requiring cosmetic appeal.

### CLEARLOK®

Polyurethane/acrylic sealant. Hard, glossy finish. For parts  
requiring cosmetic appeal and scratch resistance.

### SHEATH® WS12

Water-dilutable oil. Light oil finish with no flash point.  
For tools, machine components, bulk-handled parts.





# DECORATIVE ANTIQUING PROCESSES FOR ALL METALS:

*BRASS/BRONZE/COPPER, NICKEL, SILVER, IRON/STEEL, ZINC, TIN/PEWTER, ALUMINUM*

## **Decorative Antiquing is Easy!**

With the ANTIQUE BLACK® family of decorative antiquing products, it is easy to form attractive finishes on a wide variety of metals and alloys.

## **Easy, Safe to Operate**

Mild, room temperature solutions operate without hazardous fumes and make the system safe to work with. No prior experience needed. Operators learn the routine quickly with support from our factory-trained personnel.

## **Zero Drain Pollution**

Through Ion Exchange technology, the ANTIQUE BLACK process line operates as a completely self-contained system, with no rinsewater discharge to the sewer. The Ion Exchange System purifies and recycles the rinsewaters, to be re-used over and over. No discharge permit needed.

## **Broad Color Range**

A full range of oxidized colors can be produced: from golden to statuary, oil-rubbed bronze to chocolate brown, black, green and everything in between! BIRCHWOOD TECHNOLOGIES' antiquing expertise is unmatched.

## **Consistent Quality**

Batch to batch, day to day color matching is easy to achieve, without the guesswork and variation often seen with other products. Coloring operations are easily controlled via simple color-change test or titration. Brush-On antiquing is equally simple to control. Small or larger volume systems can be designed for optimum versatility and economy.

## **A Smart Option**

BIRCHWOOD TECHNOLOGIES is the leader in the industry and your best choice for high-quality decorative antiquing products and systems. Call us for professional assistance and recommendations for any decorative finishing project.





# ANTIQUING PRODUCTS FOR ALL METALS

## **ANTIQUE BLACK® M20 Immersion Concentrate**

For statuary, brownish/black on brass/bronze/copper.  
High coverage. Buffered to resist color shifting.



## **ANTIQUE BLACK® M21 Immersion Concentrate**

For medium dark browns on brass/bronze/copper or black on silver, nickel. Mid-speed reaction.



## **ANTIQUE BROWN® M38 Immersion Concentrate**

For golden to chocolate browns, Oil-rubbed finishes on brass/bronze/copper. Slower reaction.



## **ANTIQUE BLACK® M24 Brush-On Liquid**

For dark brown, black on brass/bronze/copper.  
Fast reaction. Easy to use.

## **ANTIQUE BLACK® Gel & ANTIQUE BROWN® Gel**

For Brush-On blackening/browning of brass/bronze/copper.  
Thickened formula slows reaction & prevents runs, drips.  
Ideal for large surfaces, sculpture.



## **PATINA GREEN™ Immersion/Brush-On Liquid**

Forms attractive green finish on brass/bronze/copper.  
Apply over a black/brown base coating for best results.



## **PEWTER BLACK™ PB1/PB2 Immersion Concentrates**

For blackening Tin/Pewter or Lead/Pewter alloys.  
For castings, terneplate, stained glass applications.



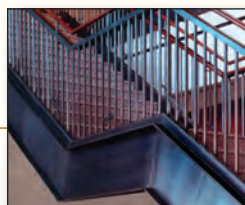
## **ZINC BLACK™ Immersion Concentrate**

A non-chromate blackener for die-cast, plated surfaces.  
Forms a hard, satin-gloss finish. Can be highlighted for pewter look.



## **PRESTO BLACK® BST4 Brush-On Liquid**

For black coatings on iron/steel surfaces. Fast reaction is ideal for tools or small decorative surfaces



## **PRESTO BLACK® Gel**

For Brush-On blackening of large iron/steel surfaces.  
Thickened formula slows reaction & prevents runs, drips.  
For "gunmetal" or "distressed pewter" finish.



## **ALUMA BLACK® A14 Brush-On Liquid**

For instant blackening of all aluminum alloys. Dark black for engravings, simulated pewter finishes.

# ROOM TEMPERATURE BLACKENING SYSTEMS

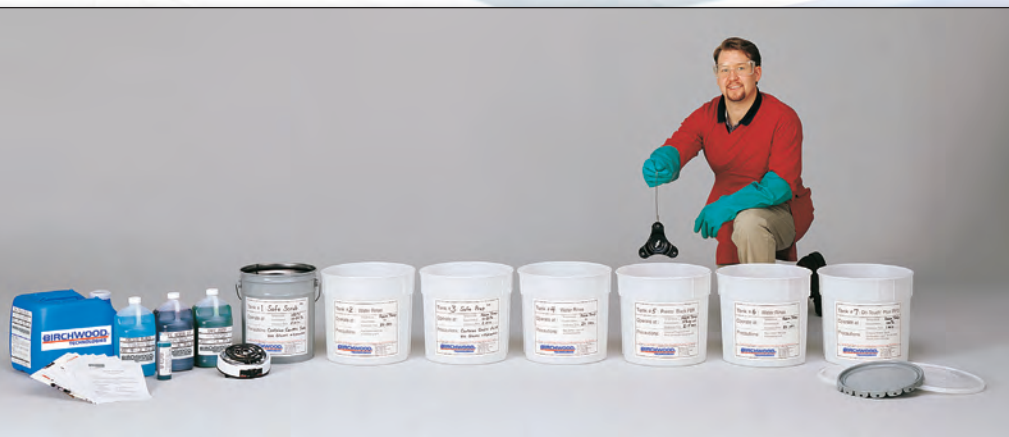
## BC40 Presto Black 40 Gallon Process Line



The BC40 tank line has eight tanks, each measuring 16" x 24" x 24" deep (I.D.). occupying a 3ft x 15ft area. Includes stainless steel heater, controller and all plumbing connections. This is a completely engineered design ready for easy installation anywhere in your plant.

System startup and operating aids include: video showing all operating steps, test kit and maintenance log, owner's manual detailing assembly, operation, troubleshooting and system maintenance. Factory technician is available to service your installation, including startup, system charging and operator training.

## BK-1 Presto Black Mini Kit



The ideal low cost system for those just-in-time jobs that must be out today. With the Presto Black Mini Kit, you can produce great looking parts in just minutes. No need to wait hours for tanks to heat up or days for the return of parts from your local black oxide vendor.

Kit contains seven tanks and covers, hot-plate (for heated cleaner), plus all the chemicals needed to operate a 5 gallon blackening line. Includes: 1 gallon Safe Scrub® biodegradable liquid cleaning concentrate, 1 gallon Safe Prep® surface conditioner, 1 gallon Presto Black® MKP blackening concentrate, 1 gallon RPL replenisher, 5 gallons Dri-Touch® Plus IRP3 water-displacing sealant. Shipped by FedEx ground or LTL carrier with complete operating instructions.



# ION EXCHANGE SYSTEM

The Ion Exchange System is designed to remove all solid particulates and dissolved ions from process rinse waters to generate pure, deionized water that is fed back to the rinse tanks in a closed-loop manner. Operated as designed, the system ensures clean rinses and Zero Discharge to outside sewer.

Assembly and operation is simple. The pump operates continually while the process line is in operation. When the conductivity light indicates a saturated condition, the primary resin tanks are shipped to an outside licensed regenerator who assumes legal ownership of the contents and returns fresh resin to the owner for re-use. Meanwhile, the system continues to operate, using the secondary set of resin tanks supplied with the system. Your process line is never down!

For use on new or existing finishing lines. Let our experts guide you. We can supply complete turnkey systems to meet your needs. We'll train your operators at your facility for correct system operation and provide continuing service after startup.

Questions? Please Call us at 952.937.7931.





ASK US ABOUT...



**TRU TEMP® Low Temp  
Black Oxide Process**

For iron and steel components. Operates safely at 200°F, complies with MIL-DTL-13924 and AMS 2485. Used as a direct replacement for conventional 290° hot oxide, but without red coatings or white salts.



**TRU TEMP® CNC  
Automatic Process Line**

Produces repeatable, high quality results and streamlines work flow with a rapid payback.



**LUMICLAD™ Black  
Oxide For Aluminum**

In-house replacement for black anodizing. Enhances sales appeal and corrosion resistance of all aluminum alloys.

**BIRCHWOOD®**  
**TECHNOLOGIES**

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