

InstaBlak[®] Turnkey Equipment

by **EPI** – The name you trust in metal finishing chemistry.

We have hundreds of installations throughout the world that are backed by EPI's warranty. Both barrel and rack systems are available.



An operator is blackening small parts in a slowly rotating acid resistant plastic barrel. The barrel is moved through the line from tank to tank, using an overhead manual hoist.



An end view of a seven tank system showing the final steel E-Tec tank and the steel drain board attached to the E-Tec tank. Below the drain board are several racks used to hold larger parts to be blackened rather than using a rotating barrel which could not be used because of the size of the parts.

The most commonly used process in commercial blackening with **InstaBlak 333** is the five-step process:

1. Cleaning in a warm solution of **E-Kleen 148-E**.
2. Cold water rinse.
3. Blackening at room temperature with **InstaBlak 333** solution.
4. Cold water rinse.
5. Sealer finish and in part corrosion resistance with immersion in one of the **E-Tec** water displacing rust preventives.

With difficult to blacken surfaces, a seven-step process is used and consists of the installation of an **E-Prep 258** activation solution after Step 2 followed by another cold water rinse prior to Step 3 above.

Turnkey tank systems are available from 50 gallons (24" x 24" x 20") to whatever size is desired. They come completely plumbed, ready for hook-up to the water inlet and the drain outlet.

Below is a front view of a seven tank system. The white tanks are constructed of acid resistant 1/2" polypropylene. The two tanks on the ends are constructed of steel. The first tank utilizes an immersion electric heater for the E-Kleen solution and for safety reasons, is constructed of steel to avoid the danger of fire with a plastic tank. The other tank is also steel, offering superior, long-term resistance to the solvent used in the E-Tec rust preventive.



A rear view of the tank system showing the plumbing for the water inlets to the overflowing rinse water tanks and the plumbing outlet pipes from the overflowing rinses along the bottom. Also shown is the vertical glass or clear plastic pipe used as a sight gauge to measure the volume of water displaced to the bottom of the tank by the water displacing E-Tec rust preventive. The water is periodically drained off.



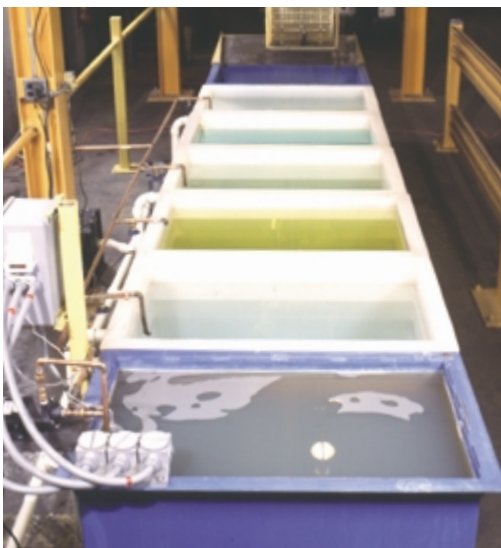
Top view of an overflow rinse tank. The pipe on the left is for the inlet water which is directed diagonally across the bottom of the tank where it is circulated to the top and exits the tank through the overflow pipe which is connected to the common drain pipe. Tanks may also be constructed with a dam type overflow along one side of the tank. It should be noted that the E-Kleen, E-Prep, InstaBlak and E-Tec tanks are not connected to the drain pipe.



Backside view showing the rinse water inlet pipes and the overflow pipes for the rinse tank, to the drain pipe. Also shows the filter for InstaBlak® 333 solution.



View of a tank system showing the filter used to filter the white by-product precipitate from the InstaBlak 333 solution. By continuously circulating the solution through the filter to remove this white precipitate, it extends the life of the blackening solution.



Front end view of a seven tank system with the first tank being the E-Kleen 148E solution. Three electric immersion heaters can be seen in the E-Kleen tank.



In those rare instances where local regulations require treatment of the rinse waters before discharging them to the sewer, EPI has an ion exchange unit available to add to the system for zero discharge of metals.



A top view of a custom made 30 foot long, 5-tank system for the InstaBlak process. This shows the versatility of the room temperature process as economical small volume tanks can be constructed to blacken extra long parts.



Request for a Custom InstaBlak® Turnkey Equipment Quote

Please print out this form and complete

Name _____

Company _____

Street _____

City _____ State/Province _____ Zip/Postal Code _____

Country _____

Telephone _____

Fax _____

E-mail _____

Please quote a tank system for:

Size of smallest part _____

Size of largest part _____

Total number of parts to be blackened per day _____

Total square footage of surface area of parts to be blackened per day _____

I will be sending sample production parts to your technical service laboratory to enable **EPI** to determine the process requirements by blackening my parts to determine if I require a five or seven stage system. If you will be blackening parts made of different alloys, send sample parts for each alloy to be blackened. This is required before a quote can be made. **Send a minimum of six (6) parts of each alloy.**

Please mail your parts with this completed form to :

EPI
Attn: Parts
17000 W. Lincoln Ave.
New Berlin, WI 53151-2781



17000 W. Lincoln Ave.
New Berlin, WI 53151

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