The Blackening Process

Pieces to be blackened may be processed in mild steel baskets, tumbling barrels, hung on racks or hooks, depending upon the shape, weight and production requirements.

1. **Cleaning**

   Thoroughly clean and degrease pieces with E-Kleen 101, 102, 102-E or 111 hot (180°F) soak cleaners. Typical cleaning time is only 5–10 minutes.

2. **Rinse**

   Rinse pieces in bottom-fed, overflowing cold water rinse.

3. **Hydrochloric Acid**

   50% by volume or E-Pik 215, 2#/gallon for 5–10 minutes.

4. **Rinse**

   Rinse in bottom-fed, overflowing cold water rinse.

5. **Blacken**

   Immerse in KOOL-BLAK 225 solution (220-240°F) until a uniform, deep black color is developed. Immersion time: 15-45 minutes, depending upon the mass of parts, type of steel alloy and condition of surface.

6. **Rinse**

   Rinse in bottom-fed, overflowing cold water rinse.

7. **Seal**

   Immerse for 1 minute in one of the following EPI products for your desired finish:

   - Oily Finish: E-Tec 501
   - Soft Dry Film: E-Tec 510
   - Hard, Dry Film: E-LAQ 525