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## Tru Temp<sup>®</sup> Neutralization Procedure

### BACKGROUND

During normal operation, the operating baths in the Tru Temp<sup>®</sup> line will require periodic change outs in order to maintain normal operating conditions. The alkaline cleaner has a general pH that is more basic (around pH 11), the Oxyprime<sup>®</sup> bath is acidic (pH 1 – 2), and the Tru Temp<sup>®</sup> is very basic (pH 14). Please note that you should discuss with your local waste water facility whether this is acceptable or not. In some cases, local municipalities will not allow localized treatment and flushing down the drain. They will be a great resource before proceeding.

### SUPPLIES NEEDED

\*Needed to neutralize a 100 gallon Tru Temp<sup>®</sup> tank – (50% v/v XL –or– 100% v/v MKP)

- pH meter
- safety glasses or face mask
- rubber gloves
- rubber apron (optional)
- pump
- 15 gallons of Tru Temp<sup>®</sup> Neutralizer (PN 611651 or PN 611658)
- A clean, empty tank or barrel large enough to hold the contents of the blackening tank

### PROCEDURE

#### **Alkaline Cleaner and Oxyprime<sup>®</sup>:**

Since the alkaline cleaner and Oxyprime<sup>®</sup> baths are approximately equal, and opposite pH values, these baths generally neutralize each other when mixed together. These baths should be allowed to cool, then carefully mixed together and sent to the city drain. This should be scheduled to occur about every 3 – 6 months (3 months if typical parts are oilier).

#### **Tru Temp<sup>®</sup>:**

The Tru Temp<sup>®</sup> may be neutralized in its own tank, or it may be pumped into a secondary holding tank.

1. Make sure blackening solution is cool (85°F or less)
2. With good stirring, slowly pump the Tru Temp<sup>®</sup> Neutralizer in the Tru Temp<sup>®</sup> solution.
  - a. Some foaming may occur. **ADD NEUTRALIZER VERY SLOWLY!**
3. Periodically check the pH of the solution. It will change very slowly at first, but the change in pH will accelerate as you go.

## **PROCEDURE (CONTINUED)**

4. When the pH of the solution has reached about pH 9, the solution may be considered non-hazardous. At this point, the solution may be sent to the city drain, with no further waste treatment (be sure to consult with local waste water treatment for appropriate range for discharge limits).
5. Hose down the blackening tank with fresh water including the sides and heaters. Any sludge on the bottom of the tank is iron oxide, a non-hazardous material. The may be rinsed down the drain.
6. Once the tank is clean, a fresh Tru Temp<sup>®</sup> solution can be mixed. Follow the mixing instructions shown in the Tru Temp<sup>®</sup> operating instructions or operating guide.
  - a. Mixing instructions can be found at:  
<https://birchwoodtechnologies.com/resources/sds-instruction-sheets/>

The Tru Temp<sup>®</sup> should be changed out every 3 – 9 months.