

### Case Study: Through-the-Tube Plugging Technique

## EST Group Provides Solution to Delaware City Refinery for Floating Head Heat Exchanger

### Industry/Facility

PBF Delaware City Refinery

### Application

Through-the-Tube (TTT) Plugging

### Location

Delaware City, DE, USA

### Challenge

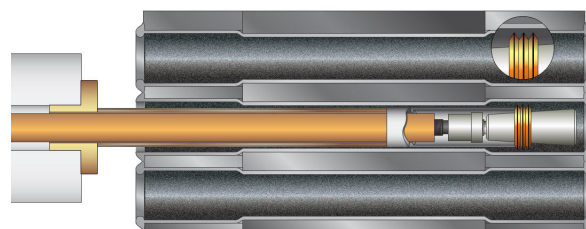
Plant had a floating head heat exchanger that had four 20ft (6.096m) long tubes that needed to be plugged via Through-the-Tube technique. The far end channel head was difficult and time consuming to remove and re-install.

### Solution

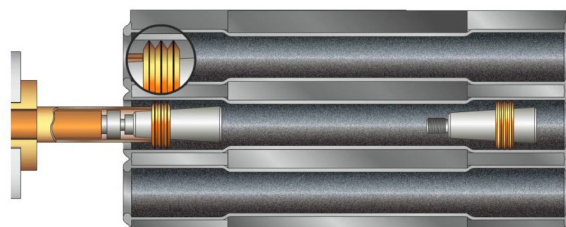
EST Group Field Service personnel mobilized to site with TTT equipment and plugs. EST Group was able to successfully plug the four tubes via Through-the-Tube plugging using CPI/Perma plugs.

### Benefits/Outcome

The Plant was able to close the heat exchanger and get it back up and running quickly after TTT plugging. Since the far end channel head did not have to be removed and reinstalled, there was significant cost and time savings.



Far End Installation



Near End Installation

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