



## CASE STUDY

**Date:** 6-25-2018

**Machine:** EMI TPC-2444-AHD CNC Plasma Tube Processing Machine

**Client:** A miscellaneous steel fabricator in South Alabama

**Goal:** Increase processing efficiency of steel pipe handrail components.

Prior to the installation of the EMI TPC-2444-AHD CNC Plasma Tube Processing Center, subject company was processing all handrail pipe and tube via manual means. Measurement of the material was performed by hand with a standard tape measure and soapstone. Cutting of the marked material took place on 4, relatively new, manual cold saws. Notching of the material was performed on multiple abrasive belt type notching machines. Weep holes were torched or drilled by hand.

After the installation of the EMI TPC-2444-AHD CNC Plasma Tube Processing Center, subject company loads raw material by the bundle into the machine. All cuts, notches and weep holes are placed and performed automatically by the machine.

A recent job performed by the subject company required approximately 900 individual pieces from 1.5" sch40 pipe. Run on the TPC-2444-AHD, one employee produced all part, complete with cuts, notches and weep holes, in approximately 9 hours. This time included the programming of the machine, material handling and part production. It is estimated that using their old production methods, it would have taken over 40 hours for one employee to accurately cut the pipe to length. Additional time would still have been required to perform the notching and weep hole processing.

The installation of the EMI Tube Processing Center has increased the subject company's overall handrail processing capacity and throughput while decreasing labor inputs. Additionally, the accuracy of produced parts has increased downstream efficiencies as pertains to fit-up, welding and cleanup.