

Vertical Heat Treat Furnace

A Metals Case Study

The Application

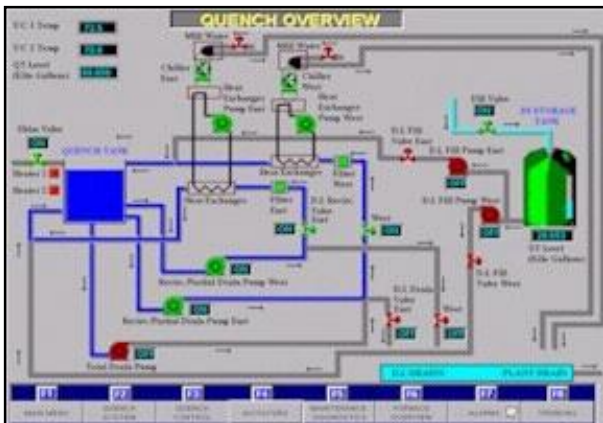
To keep up with the high demand for greater-sized aluminum sheets for the fabrication of new large aircraft, a major aluminum manufacturer decided to add another production center at its plant site.

PCT's extensive experience with furnace control systems, and previous project successes with the manufacturer, led the manufacturer to select PCT as the integrator of a complete furnace control system including a drop-bottom, vertical, heat treat furnace.



The PCT Solution

PCT provided three control systems for the production center: a control system for the furnace proper that included combustion controls and a light-up station HMI; positioning controls for a large quench tank using AC vector drives; and material handling controls, including radio-controlled cranes for carrying the sheets.



In addition to developing the furnace control systems, PCT also provided a motor control house and an operator control house; a motor control center and drive line-up equipment; a construction package and engineering support for the installation of the electric controls; and engineering support for the furnace start-up.

PCT's success with the vertical heat treat furnace was obvious when the manufacturer chose PCT to integrate a new flat mill system with the furnace that same year.