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Title: Dual Furnace N2/DA Control Panel Delivered to Tandem Metals

Atmosphere Engineering has delivered a custom designed Nitrogen / Dissociated Ammonia (DA) dual furnace mixing solution to Tandem Metals in University Park, IL. The system provides accurate gas mixture control and furnace safety integration during the hydrogen atmosphere annealing process within two "bell type" furnaces.

The two bell type furnaces share a single heating cap. This configuration maximizes the production efficiency of both furnaces but presented some unique safety interlocking challenges. Atmosphere Engineering confronted the task by designed a unique system to control the atmosphere introduction and quality for each furnace independently without compromising safety or production flexibility.

In addition to the flow controls, the system was designed and equipped with 2 atmosphere sample arrays to monitor the furnace atmosphere dew point, oxygen content, and part temperature while automatically modifying the gas mixtures to maintain the desired atmosphere quality throughout the annealing process.

Tandem Metals, Inc., is the leading metal service center in the Midwest providing many metal processing and fabrication operations for a wide variety of industries around the world.

Atmosphere Engineering designs and manufactures integrated flow control devices and solutions for industrial applications.

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