

Case History 4 *Process Improvement Project – Industrial Paint System*



Process Oven: Reduce the Fresh Air and exhaust volumes on the Prime and Tutone Ovens

Energy Savings Opportunity:

Air Flow Reduction, by means of changes to the Specification of the amount of fresh air required for ovens, allowed for this opportunity to reduce air flows of older ovens that were designed at higher ventilation rates. This opportunity will provide natural gas and electricity savings of each particular oven, along with additional savings from reducing the air flow of the RTO.

How Implemented:

To implement; we sheaved the fresh air and exhaust fans, replaced the exhaust fan wheel, adjusted damper positions, and replaced or upgraded components of the gas trains to allow for shorter hot repurge times, plus getting the gas trains up to NFPA code.

Air flow Reduction:

Prime Oven Exhaust & RTO Reduction – 2,800 SCFM.

Tutone Oven Exhaust Reduction – 9,200 SCFM

Implementation Cost: \$300,530

Energy Savings Achieved: \$201,400 annually