

QUADRANT SR-THERMAL OXIDIZER



A synthetic leather manufacturer worked with Catalytic Products International, Inc. to design a unique Thermal (recuperative) Oxidizer. A recuperative thermal oxidizer was chosen because of high solvent LEL (+25%) exhausted from the process and a desire to integrate a hot oil recovery system to work with the oil heated production coating/curing line.

After careful examination of the process characteristics, the oil recovery needs, and the overall building ventilation system, CPI recommended a system that allowed the highest VOC destruction, lowest overall cost of operation, and reliable oil heating for the process.

The system installed was our QUADRANT SR-35,000 Thermal Oxidizer. The system incorporates the following:

- CPI's unique FLOATING TUBE HEAT EXCHANGER that does not use any expansion joints.
- A highly efficient oil recovery coil to provide hot oil for the curing ovens.
- A highly efficient building ventilation system that provides over 100,000 scfm of building heat during winter months and cooled air during summer months.
- A user-friendly controls interface system that manages all the components and records specific data for use with Title V record keeping.
- +99% DRE at 1,250 F allows the unit to exceed the local air quality requirements at minimal expense.

Considering the extra expense taken on by the client for all the heat recovery equipment, CPI was able to assist with local gas and electric utilities for rebate programs that resulted in over \$ 150,000 being refunded to the client.

For more information about this or any of our other custom engineered solutions, please contact us.

***Thermal Oxidizers, Regenerative Thermal Oxidizer's, Catalytic Oxidizer's, Heat Recovery System's,
Energy Conservation, Repair and Retrofit Services, Maintenance Services, Engineering***