



SEMICONDUCTOR INDUSTRY

## SEMICONDUCTOR PROCESS TOOL; GAS WASTE ABATEMENT SYSTEM

### ■ The Situation

A leading manufacturer of semiconductor process (PVD/CVD) gas waste abatement systems was faced with upgrading one of their existing and mature systems. The situation was complicated by recent acquisitions of two competing products that used different components and had different industrial designs but each had compelling user features and benefits that they wanted to incorporate into one common product platform.

The customer's product engineers were already assigned to projects involving new product introductions. The decision to outsource this project leveraged Owens Design's expertise in frame and packaging, electrical power distribution, and fluid and gas handling.

### ■ The Challenge

The Owens Design engineering team was presented with this unique "value engineering" challenge that involved:

- Utilizing the customer's existing core technology, the high temperature reactor chamber design
- Redesigning the layout for manufacturability and serviceability utilizing lower cost standard components and the latest controls technologies
- Incorporating an improved industrial design and user access with touch screen system interface
- Reducing the footprint to make it easy to replace competitive products
- First unit not to exceed ten weeks to meet the industries major trade show of the year, Semicon

### ■ The Solution

Owens Design proactively met with each department within the client to "synthesize" the often competing interests of all parties. This included cultivating inputs from engineering, manufacturing, sales, marketing and field service groups. The result was a fast ramp project with the first unit being displayed on the Semicon show floor.

