

**Honeywell**

# Pillar of Productivity

Honeywell Enhances Efficiency for Sodium Silicate Manufacturer in Mexico.

The SLATE™ system – which combines programmable logic and greater control in a single, powerful platform – is hard at work decreasing chemical reaction time, increasing productivity, and shaking things up at this salt company.



Case Study





**Sodium Silicate is used in the manufacture of cement, fire protective materials, textiles and lumber processing, refractories, and automobiles. Creating sodium silicate requires a chemical reaction between sand, soda, and water mixed in a reactor under high pressure and temperature. When a sodium silicate manufacturer in Mexico needed a modern control system to increase efficiency and improve monitoring during production, they looked to Honeywell for a solution.**

### The Needs

Provide a way for operators to see process variables from a touchscreen display.

Design a burner control system with function blocks to minimize engineering time.

Diminish the number of errors on burner ignition.

Decrease the chemical reaction time and maximize production rate.

### For More Information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit [ThermalSolutions.honeywell.com](http://ThermalSolutions.honeywell.com) or contact your Honeywell Sales Engineer.

### Honeywell Process Solutions

Honeywell Thermal Solutions (HTS)  
1250 West Sam Houston Parkway  
South Houston, TX 77042  
[ThermalSolutions.honeywell.com](http://ThermalSolutions.honeywell.com)

### The Solution

The SLATE system can generate alarms when limit thresholds are met, start pumps, adjust set points for pressure and heater temperature, and provide operators with the critical information they need.

The solution comprises a Base Module, a Burner Control Module, a Fuel Air Ratio Control Module, an intuitive, easy-to-read 7-inch touchscreen display, and the SLATE AX Tool, which enables the customer to design a system with function blocks quickly and easily to reduce engineering time.

The manufacturer is able to generate virtual signals to minimize wiring with components inside the industrial cabinet. The AX Tool also provides a mechanism to create meaningful and informative visual analyses. The charts give the operators insight into the necessary variables to keep the process and reaction going.

With the new solution, fewer errors occur upon lighting the burner during the system operation sequence. Operators can also collect and look at data during the ignition procedure – a function unavailable with the previous system. The entire process is more efficient, increasing both the reaction time and the production rate.

### The Benefits

- The SLATE AX Tool provides visual analytics, giving the operators valuable insight for more informed decision-making.
- The tool enabled the customer to design a system with function blocks quickly and easily, reducing engineering time.
- Fewer errors when lighting the burner during the system operation sequence.
- The process is more efficient, increasing the reaction time and the production rate.