

Oxial Software Solution

- Analysis of oxygen Demand
- Flame-less combustion in Exhaust Gas
- Optimization of fuel consumption
- Reduction of CO and CO₂
- Simple integration into Control System

We specialize in delivering superior results for your industrial processes through our trusted Oxial Software Solution. With our expertise in analyzing, optimizing, and controlling raw material input, energy input, oxygen input, and company-specific temperature development, as well as exhaust flow, this innovative solution enhances efficiency, reduces emissions, and improves operational control to maximize your productivity. Experience the benefits of our tailor-made solutions and unlock the full potential of your furnace operations.

Key Features:

- Measure off-gas temperature
- Optimize burner power or fuel flow

- Control furnace rotary speed or step
- Manage oxygen flow with precision

Before



After





Unlocking the Potential: The Benefits of Oxial Software System

The Oxial software System offers the following benefits for efficient and controlled furnace operations:

Automatic Activation: The Oxial software system activates automatically thanks to our intelligent software surveillance and steps in, as soon as when the gradient rises (high delta of temperature over time). The automation eliminates the need for manual, time consuming and repetitive operator involvement tasks. It enables faster production cycles, reduces errors, and improves overall efficiency.

Enhanced Safety: Our automated system can be deployed in hazardous or physically demanding environments, removing workers from potentially dangerous situations. By taking over risky tasks, automation prioritizes workplace safety, protecting employees from accidents and injuries. This promotes a safer work environment and ensures compliance with safety regulations.

Precise Control: Our software solution surveys multiple factors and will automatically and precisely adjust the fuel flow, independent to the oxygen supply, while ensuring full safety ratios. Supervising the gradients and development of temperatures will further take over control over the rotation speeds and make needed adjustments to automatically arrive at the best performance and lowest possible fuel use as well as the lowest CO and CO₂ concentration for an optimal performance.

Gradual Adjustment:

As the gradient starts to adjust, our Oxial Software Solution will automatically control the rotation as well as the fuel flow until the set point has been reached for a smooth operation without the need of manual operator input.

Efficient Operation: Oxial Software Solution switches to stand by mode, as soon as the desired temperature gradient in comparison with other process data has been archived.

Lambda values ranging from 0.9 to 5.

The Solution offers High usage of VOC (volatile organic compounds) rather then admitting it into the atmosphere and thus reduces not only emissions tremendously but also increases energy efficiency.

Key Parameters for System Functionality:

- Temperature
- Power
- Oxygen flow
- Rotation speed
- Lambda (oxidant-fuel ratio)

Contact us today to learn more and optimize your industrial processes.



