

# Burner Management Systems

## Applying performance-based standards to BMS design

Kenexis provides the users of Burner Management Systems (BMS) with training required to cost-effectively implement systems that are highly reliable, easy to use, and ideally suited for their applications. This course presents practical insight into ensuring safe combustion in boilers, furnaces, heaters, kilns, and other fired equipment. The concepts of Safety Instrumented Burner Management Systems (SI-BMS) will be presented as the methodology to design BMS to be compliant with national codes and standards, including NFPA 85, NFPA 86, ANSI/ISA 84.01, API 556, API 14C and BLRBAC.



### Practical Skills Taught in this Course

- Understand the hazards associated with fired equipment
- Understand how to combine prescriptive requirements of application specific standards, such as NFPA 85/86, with performance-based analysis standards such as ANSI/ISA 84.01 to develop optimal designs
- Understand the Safety Lifecycle and how it provides a framework for functional safety of BMS
- Review the codes and standards that define common practice for permissives, light-off, and shutdown sequences
- Define the safety instrumented functions that are commonly employed to safeguard fired devices
- Design safety instrumented functions that achieve safety integrity level (SIL) performance targets

## Our Advantage

Kenexis is an engineering and consulting firm specializing in the application of engineering safeguards, such as burner management systems, to the process industries. Our years of experience give us unparalleled insight into specifying and verifying the safety requirements of a wide range of processes.

The Burner Management Systems training course includes the following topics:

- ✓ Section 1 Burner Management System Overview
- ✓ Section 2 Standard and Regulatory Requirements
- ✓ Section 3 Overview of ANSI/ISA 84.01 Safety Lifecycle
- ✓ Section 4 Permissives and Light-off Sequence
- ✓ Section 5 BMS Safety Instrumented Functions
- ✓ Section 6 Overview of SIL Selection and Verification
- ✓ Section 7 Comprehensive Example

### Who Should Attend?

- Control Systems Engineers
- Process Safety Professionals
- Process Engineers
- Process Hazards Analysis Leaders
- Engineering Management

Course Duration: 1 Day

*Kenexis courses are designed to instruct on the entire work process for engineering Burner Management Systems, from conceptual design through detailed specifications. In this way, we can ensure that the needs of the end user can be met, while achieving the greatest value for automation expenditures.*

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