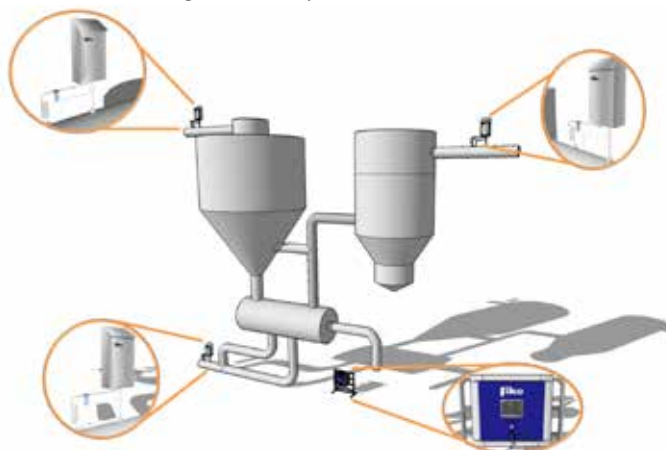


WARNEX™ SMOULDERING DETECTION SYSTEM

DESCRIPTION

Smouldering is one of the most common ignition sources of fires and dust explosions in industrial processes. Unfortunately it is also one of the most difficult to prevent by controlling process conditions or by making modifications to the equipment. The Fike WarnEx™ system will detect and signal smouldering at an early stage before damage to the process equipment has occurred. The alarm signals can be used to trigger safety systems, such as operator intervention, process shutdown or water injection.

The WarnEx™ system typically consists of multiple 'Sampling and Detection Units' (SDU's) placed on each air inlet and outlet. CO gas, created by smouldering, will be detected by the WarnEx™ SDU placed on the main air outlet of the process. In order to filter out nuisance CO entering the system from the outside, additional SDU's are placed on each air inlet. The WarnEx™ Control Unit processes the signals from the SDU's and alerts the process operators and safety systems in case smouldering material is present.



APPROVALS:

- ATEX
- IECEx



FEATURES AND BENEFITS

- Stable and reliable system
 - Proven in use CO sensor technology
 - Self monitoring sensor technology designed for industrial applications
 - Stray CO nuisance elimination
 - SIL2 certified
- Lost cost of ownership
 - Easy to install
 - Easy to use and maintain
 - Simple system, few components
 - Easy to extend
- Fast response times
 - Multiple sensors
 - Short sampling lines
- Process and safety management
 - Integrates with automatic fire suppression system
 - Event analysis through datalogging and visual trending
 - Complete system status on user panel

SPECIFICATIONS

Type	WarnEx™ Control Unit
Dimensions	635 x 698 x 242 mm
Input Voltage	85VAC - 264VAC, 47 - 63Hz
Power Consumption	160W + 15W per installed detection point
Ambient Temperature	-10°C to 30°C
IP Degree	IP65
Digital Outputs	3 redundant programmable alarms 4 redundant system status signals 24VDC - 0.5A
Digital Inputs	Remote disable System test initiation 24VDC - 6mA redundant
Detection Input	Supports up to 7 sampling and detection units

Type	WarnEx™ Sampling and Detection Unit
Dimensions	822 x 390 x 223 mm
Ambient Temperature	0°C to 40°C
IP Degree	IP66
Approvals	ATEX II 2D Ex tb IIIC T85°C Db -20°C ≤ Ta ≤ 65°C IECEx Ex tb IIIC T85°C Db -20°C ≤ Ta ≤ 65°C