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Viking Seminar Information Sheet

Oxeo Clean Agent Extinguishing Systems

vikinggroupinc.com/training

Oxeo Clean Agent Extinguishing Systems

Seminar Description: Through discussion, activities and interactive labs this seminar will explore the operation of the components of Nitrogen (IG-100) and Argon (IG-01) fire suppression systems. Topics covered will include components and hardware, system applications, system limitations, nozzle requirements, pressure venting, pipe and fittings, racking, test & inspection, Oxeo Estimator tool and how to use the vInert software. Classroom examples with vInert software will be reviewed for both Nitrogen and Argon. We will also review the Multizone Viking Oxeo Systems. In addition, we will introduce Viking Tools for Revit with Viking Oxeo. Finally, we will introduce the Viking VFR-500 Conventional and Potter ARC-100 Addressable releasing control panels.

Prerequisite: You must download the vInert software

Duration (Days): 14 hours +/-

Number of Modules: 15

Total Instructional Minutes: 795 +/-

Seminar Format(s): Instructor/In-Person

Participation Materials: vInert software, animation, Oxeo Design Manual, Oxeo Fire Extinguishing System Guide

Learning Outcomes: Upon completion of this seminar the attendee will be able to:

- Identify application, safety concerns and terms in NFPA 2001, review discharge video, and system differences in pressure
- Navigate operational/installation manuals
- Understand components for both PR and CF Oxeo systems, and basic installation of some components
- Test and inspection procedures per NFPA and manufacturer's requirements
- Understand piping and racking review
- Pressure venting intro and discussion
- Viking Oxeo Estimator review
- Discuss how to use the estimating tool and the vInert software for Nitrogen and Argon gas systems
- Understand Nitrogen and Argon system examples
- Introduce Viking Tools for Revit with example
- Introduce Viking Oxeo Multizone System with example
- Understand Potter VFR-500 Conventional releasing panel features and programming
- Understand Viking ARC-100 Addressable releasing panel features and programming

Assessment Method(s): Multiple choice and true/false question exam

Module 1: Oxeo Introduction

Duration: 60 minutes +/-

Learning Outcomes:

- Meet people/introductions, experience levels, occupations
- Review codes and standards
- Identify safety concerns, toxicity and terms in NFPA 2001
- Environmental impact considerations
- Identify inert gas agent applications for each Class fire (A, B, C & D)
- Review the two agents available in the Oxeo family
- Identify the differences in Halocarbon and Inert Gases regarding fire suppression
- Discuss the difference between the Pressure Reducing System (PR) and the Constant Flow System (CF)

Delivery Methods: Instructor/In-Person

Activity Descriptions: PowerPoint

Assessment Method(s): Class Discussion

Module 2: Oxeo Manual

Duration: 30 minutes +/-

Learning Outcomes:

- Utilize the Oxeo manual for clean agent projects
- Understand cylinder safety
- Understand the characteristics of the system
- Locate sections for design of inert system, commissioning, testing, safety data sheets and technical data sheets

Delivery Methods: Instructor/In-Person

Activity Descriptions: Review Oxeo Manual

Assessment Method(s): Class Discussion

Module 3: Oxeo Components and Hardware - In Lab with PowerPoint

Duration: 60 minutes +/-

Learning Outcomes:

- Review the components and hardware of Oxeo PR and CF systems
- Identify these components in the lab
- Install a portion of these components

Delivery Methods: Instructor/In-Person

Activity Descriptions: Hands on in the lab

Assessment Method(s): Class Discussion

Module 4: Oxeo - Test and Inspection

Duration: 30 minutes +/-

Learning Outcomes:
- Locate the NFPA 2001 (2022ed) monthly, semi-annual and annual inspections

Delivery Methods: Instructor/In-person

Activity Descriptions: Review NFPA 2001 (2022ed)

Assessment Method(s): Class Discussion

Module 5: Oxeo Piping, Hangers & Racking

Duration: 30 minutes +/-

Learning Outcomes:
- Locate the Oxeo CF and PR piping & rack for the PR system layout options
- Review components of the racking and manifold supports

Delivery Methods: Instructor/In-Person

Activity Descriptions: PowerPoint

Assessment Method(s): Layout racking and webbing per example of tank quantity given

Module 6: Pressure Venting and Room Integrity

Duration: 60 minutes +/-

Learning Outcomes:
- Discuss pressure venting preliminary calculation from design software
- Apply ISO 21805 pressure venting guidelines
- Discuss NFPA 2001 room integrity
- Discuss FSSA Pressure Venting Guide

Delivery Methods: Instructor/In-person

Activity Descriptions: Guest Speaker

Assessment Method(s): Class Discussion

Module 7: Oxeo Estimator Review

Duration: 30 minutes +/-

Learning Outcomes:
- Enter project data into the Viking Oxeo Estimator
- Complete a full list of materials for quote by VSN

Delivery Methods: Instructor/In-Person

Activity Descriptions: N/A

Assessment Method(s): Class Discussion

Module 8: vInert Software Review

Duration: 60 minutes +/-

Learning Outcomes:
- Enter project data into the vInert Software
- Complete a full design and create a list of materials to be quoted by VSN

Delivery Methods: Instruction/In-person

Activity Descriptions: N/A

Assessment Method(s): Create a sample project

Module 9: Oxeo Nitrogen

Duration: 90 minutes +/-

Learning Outcomes:

- Enter project information into Viking Oxeo vInert software
- Describe Protected Hazard Volumes/Enclosures
- Enter Pipe sections into Viking Oxeo vInert software
- Enter and select nozzles for protected hazard
- Calculate pressure drop for protected hazard

Delivery Methods: Instructor/In-person

Activity Descriptions: N/A

Assessment Method(s): PDF Print final report from software with no errors

Module 10: Oxeo Argon Dust Collector

Duration: 45minutes +/-

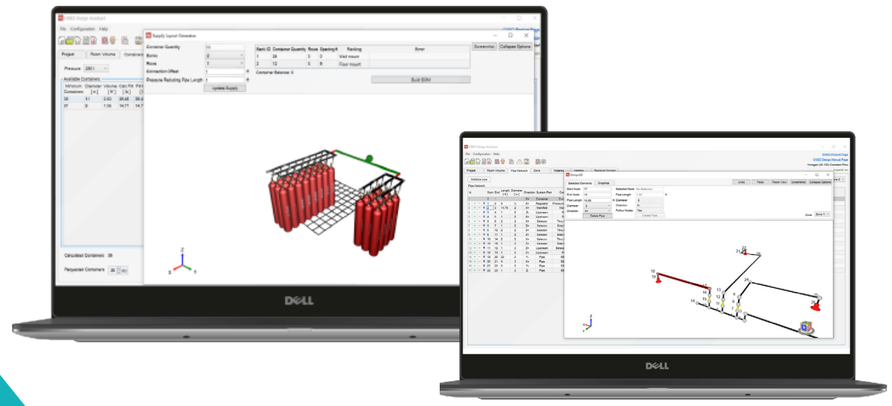
Learning Outcomes:

- Enter project information into Viking Oxeo vInert software
- Describe Protected Hazard Volumes/Enclosures
- Enter Pipe sections into Viking Oxeo vInert software
- Enter and select nozzles for protected hazard
- Calculate pressure drop for protected hazard

Delivery Methods: Instructor/In-person

Activity Descriptions: N/A

Assessment Method(s): PDF Print final report from software with no errors



Module 11: Viking Tools For Revit

Duration: 45 minutes +/-

Learning Outcomes:

- Enter project information into Viking Oxeo vInert software
- Describe Protected Hazard Volumes/Enclosures
- Enter Pipe sections into Viking Oxeo vInert software
- Enter and select nozzles for protected hazard
- Calculate pressure drop for protected hazard

Delivery Methods: Instructor/In-person

Activity Descriptions: N/A

Assessment Method(s): PDF Print final report from software with no errors

Module 12: Oxeo Multizone System Overview And Design Example

Duration: 45 minutes +/-

Learning Outcomes:

- Enter project information into Viking Oxeo vInert software
- Describe Protected Hazard Volumes/Enclosures
- Enter Pipe sections into Viking Oxeo vInert software
- Enter and select nozzles for protected hazard
- Calculate pressure drop for protected hazard

Delivery Methods: Instructor/In-person

Activity Descriptions: N/A

Assessment Method(s): PDF Print final report from software with no errors

Module 13: Review of Viking VFR-500 Conventional Release Control Panel

Duration: 90 minutes +/-

Learning Outcomes:

- Identify the applications for the conventional control panel
- Recognize the components used with the panel for releasing
- Programming

Delivery Methods: Classroom Discussion

Activity Descriptions: Lab Assignment

Assessment Method(s): Activity Participation

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Module 14: Review Of Potter ARC-100 Addressable Release Control Panel

Duration: 90 minutes +/-

Learning Outcomes:

- Identify the applications for the addressable control panel
- Recognize the components used with the panel for releasing
- Programming

Delivery Methods: Class Discussion

Activity Descriptions: Lab Assignment

Assessment Method(s): Activity Participation

Module 15: Final Review And Test

Duration: 30 minutes +/-

Delivery Methods: Instructor/In-Person

Assessment Method(s): Multiple choice and true/false question exam.