

## Viking Seminar Information Sheet

<b>Seminar (Event) Title:</b>	<b>Viking VSH1230 Clean Agent System with 3M Novec1230</b>
<b>Seminar Description:</b>	<p>Through discussion, activities and interactive labs, this seminar will explore the VSH1230 Clean Agent System with 3M Novec1230</p> <p>Topics covered will include a thorough review of the system components &amp; hardware, functionality, and pressure drop calculations with the VSH DesignManager software. Students will also be exposed to unique products from the Viking Group Inc.</p>
<b>Duration (Days):</b>	1 day
<b>Number of Modules:</b>	5
<b>Total Instructional Minutes:</b>	8 Hours
<b>Seminar Format(s):</b>	Classroom instruction coupled with hands-on Lab work, and demonstration
<b>Participant Materials:</b>	VSH1230 Installation Manual, VSH1230 Design Software Manual, laptop computer.
<b>Learning Outcomes:</b>	<p>Upon completion of this seminar the attendee will have:</p> <ol style="list-style-type: none"><li>1. Understand the functionality of the components and hardware for VSH1230 Clean Agent System with 3M Novec1230</li><li>2. The ability to design &amp; install VSH1230 Clean Agent System with 3M Novec1230</li></ol>
<b>Assessment Method(s):</b>	Participation and Test

**TITLE: MODULE 1:**                      **INTRODUCTION TO SPECIAL HAZARD CLEAN AGENT SYSTEMS**

**Duration:**                                      (120) minutes

**Learning Outcomes:**                      At the conclusion of this module the participant will be able to:  
Why we need clean agent systems  
Clean agent applications  
Understand how easy a clean agent system works  
Understand toxicity levels, health and safety considerations  
See

**Delivery Methods:**                      Lecture (Recorded or Live)

**Activity Descriptions:**                      Participation

**Assessment Method(s):**                      N/A

**TITLE: MODULE 2:**                      **COMPONENTS AND HARDWARE**

**Duration:**                                      (120) Minutes

**Learning Outcomes:**                      At the conclusion of this module the participant will be able to:  
  
1. Understand the components and hardware and installation of components and hardware.

**Delivery Methods:**                      Lecture, demonstration, and hands-on activity

**Activity Descriptions:**                      Hands on in the Suppression Lab

**Assessment Method(s):**                      Participation

<b><u>TITLE: MODULE 3:</u></b>	<b>REVIEW OF VSH1230 NOZZLES</b>
<b>Duration:</b>	(30 minutes)
<b>Learning Outcomes:</b>	At the conclusion of this module the participant will be able to: <ol style="list-style-type: none"> <li>1. Identify the application and placement for the VSH1230 Nozzles</li> </ol>
<b>Delivery Methods:</b>	Classroom discussion/Lecture
<b>Activity Descriptions:</b>	N/A
<b>Assessment Method(s):</b>	Participation

<b><u>TITLE: MODULE 4:</u></b>	<b>ADVANCES IN CLEAN AGENT</b>
<b>Duration:</b>	(30 minutes)
<b>Learning Outcomes:</b>	At the conclusion of this module the participant will be able to: <ol style="list-style-type: none"> <li>1. Identify the application for the 725 psi VSH1230 systems</li> <li>2. Understand pipe sizes and delivery of agent in 10 seconds</li> <li>3. Recognize the components of Halon System and comparisons to 725 psi with VSH1230.</li> <li>4. Understand pipe fittings for clean agent systems</li> </ol>
<b>Delivery Methods:</b>	Lecturing
<b>Activity Descriptions:</b>	N/A
<b>Assessment Method(s):</b>	Participation

**TITLE: MODULE 5:**

**REVIEW OF VSH “DESIGNMANAGER” SOFTWARE**

**Duration:** (180 minutes)

**Learning Outcome:** At the conclusion of this module the participant will be able to:

1. Navigate the design software for VSH1230 systems
2. Be able to enter enclosure information for a hazard and determine design concentrations to suppress a fire for the same hazard
3. Understand how to select a container with agent for a specific hazard
4. Understand how to enter pipe sections known as nodes in the program
5. Be able to select nozzles to add to the pipe network for a hazard
6. Understand the requirement for pressure venting for a hazard
7. Complete examples provided by instructor

**Delivery Methods:** Lecturing

**Activity Descriptions:** Navigate through software

**Assessment Method(s):** Complete examples provided by instructor

