

## AOV Data Acquisition & Basic Analysis

This course provides instruction on the proper installation and operation of the CRANE Nuclear Universal™ / VIPER™ 20 Air-Operated Valve (AOV) Diagnostic System through classroom instruction, hands-on laboratory training, and accounts of testing experience. Upon successful completion, the student shall be able to correctly set-up and operate the CRANE Nuclear Universal™ / VIPER™ 20 Diagnostic System to acquire test data and evaluate typical AOV performance parameters and common actuator/valve degradations through basic signature analysis techniques.

### TERMINAL OBJECTIVES:

Each student shall be required to pass a written test with a minimum score of 80% in order to successfully complete this course. Upon successful course completion, the student shall possess the knowledge to:

- perform a bench set adjustment and calibration using the manual control function of the Universal™ / VIPER™ 20 AOV software.
- evaluate typical AOV performance parameters and common actuator/valve degradations through basic signature analysis techniques.
- demonstrate the proper installation and removal of all applicable Universal™/ VIPER™ 20 diagnostic system transducers.
- demonstrate the proper software configuration for the Universal™ / VIPER™ 20 AOV diagnostic system and various transducers.
- acquire, store, and perform basic analysis of applicable signatures.
- identify the causes of common AOV degradations and perform necessary adjustments to correct the deficiencies.

### ENABLING OBJECTIVES:

At the conclusion of this course, the student shall have an increased understanding of:

- the aspects and concept of the CRANE Nuclear VIPER™ 20 / Universal™ AOV diagnostic system.
- the description and function of various AOV transducers.
- equipment installation and software configuration.
- data acquisition and basic signature analysis.

### SUPPLIED MATERIALS:

A *Training Manual* will be provided for each registered student.

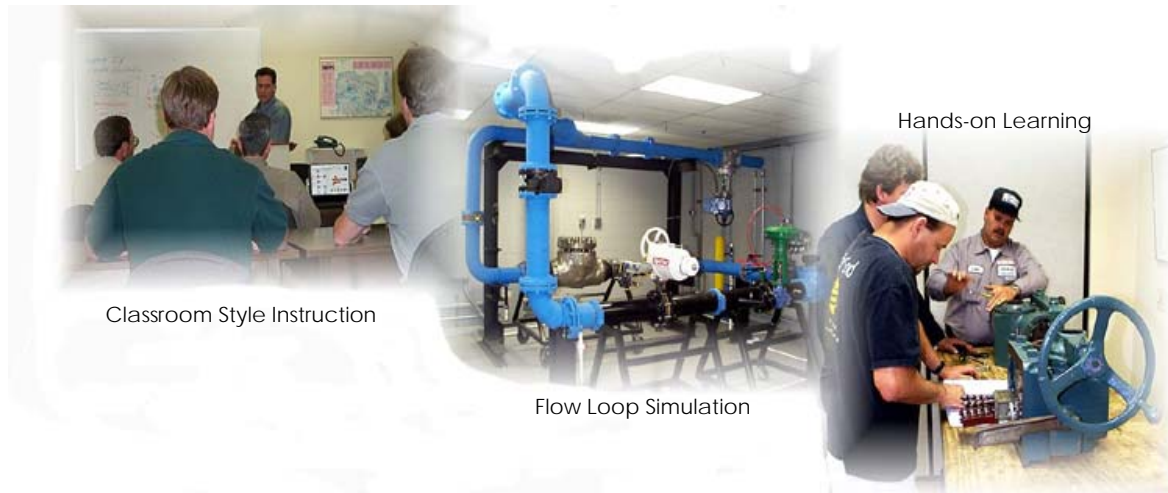
In-class *Training Aides*, for courses performed at a CRANE Nuclear facility, will include all or some of the following: CRANE Nuclear AOV Test Equipment, Various Actuators, Instruments and Accessories.



## AOV Data Acquisition & Basic Analysis

### Registration Guidelines

<b>Standard Class Size:</b>	6 Students per Instructor
<b>Maximum Class Size:</b>	8 Students
<b>Course Duration:</b>	5 Days
<b>Prerequisite:</b>	Familiarity with the basic principles of process control and valve fundamentals, and a working knowledge of pneumatic actuators and instrumentation
<b>Suggested Attendees:</b>	Plant Instrument and Control Technicians, Engineering, QC and Operations Personnel



**CRANE** NUCLEAR

TRAINING SERVICES

2825 Cobb International Boulevard

Kennesaw, GA 30152 U.S.A.

Phone: 770-424-6343 / Fax: 770-429-4752

Visit [www.cranenuclear.com](http://www.cranenuclear.com)  
or call **1-866-282-2600** for more information.

© 2007 CRANE Nuclear. All Rights Reserved.

The information contained herein is provided for general information purposes and is not intended as a warranty, an offer, or any representation of contractual or other legal responsibility.

N-TR-AOVDA-06/07