

## Check Valve Data Acquisition & Basic Analysis

This course provides instruction on the proper installation and operation of the CRANE Nuclear Universal™/VIPER™ 20 Check Valve (CV) diagnostic system through classroom instruction, hands-on laboratory training, and accounts of testing experience. Upon successful course completion the student will be able to properly utilize acoustics, eddy current, and ultrasonic devices to perform Check Valve (CV) diagnostics. Instruction covers installation techniques for the diagnostic transducers and operation of a check valve system, as well as acquisition, storage and analysis of the signatures to determine check valve condition and operability. Operational topics covered include: frequency of disk flutter, disk position in flow, and backseat disk tapping.

### 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 successfully:

- install acoustics and ultrasonic transducers and devices.
- operate the CRANE Nuclear VIPER™ 20/Universal™ check valve system to acquire and store signatures to provide information concerning the operation of check valves (i.e., frequency of disk flutter, disk position in flow, disk tapping the backseat, etc.).
- acquire, store, and determine software capabilities to analyze signatures from stable flow tests.

### ENABLING OBJECTIVES:

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

- how to acquire, store, and be familiar with software capabilities to analyze signatures from the different technologies available for check valve diagnostics.

### SUPPLIED MATERIALS:

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

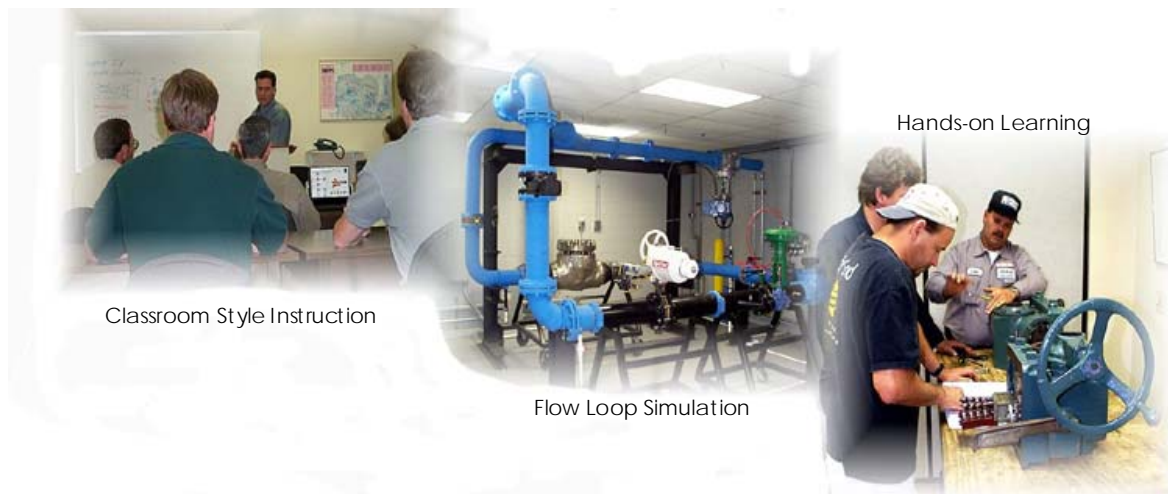
In-class *Training Aides*, for courses performed at a CRANE Nuclear facility, will include all or some of the following: CRANE Nuclear Check Valve Test Equipment, Various Check Valves, Instruments and Accessories.



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### Registration Guidelines

Standard Class Size:	6 Students per Instructor
Maximum Class Size:	8 Students
Course Duration:	5 Days
Prerequisite:	A Working Knowledge of Check Valves
Suggested Attendees:	Cognizant Check Valve Engineers



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