

Technical Description

CRANE Nuclear offers to supply the services as described in this Technical Description subject to the pricing, terms and conditions delineated in the Commercial Description.

MOV Frequency Domain Analysis Training Course

Standard Class Size:	6 Students per Instructor
Maximum Class Size:	8 Students
Course Duration:	3 days
Prerequisite:	UDS Data Acquisition Training Course or the stand alone MC ² System Data Acquisition and Analysis Training Course, and a working knowledge of Limatorque actuators
Supplied Materials:	Training manual for each student
Suggested Training Aides:	Three (3) laptops equipped with Crane Nuclear signature software

Course Description

The MOV Frequency Domain Analysis Training Course was designed to instruct students who have previously been trained in MC² System Data Acquisition and Analysis. This course shall instruct students in Actuator Frequency Identification, Frequency Domain Characteristics, FFT Tracking and Trending, and Repeatability of Acquisition/Analysis Techniques.

Course Terminal Objectives:

Upon successful completion of the course, the student will be able to perform the following:

- Select the proper data range and perform FFT analysis of MOV motor current data.
- Calculate/predict fundamental frequencies present in MOV frequency spectrum.
- Evaluate changes in MOV frequency domain data by using the various analysis tools provided and understand the methods necessary to track and trend frequency domain data over time.

Enabling Objectives:

- Upon successful completion of the course, the student will have an understanding of the history behind Fast Fourier Transform Analysis and be able to relate the application to MOVs.
- The student will be able to find and recognize changes in frequency domain data that reveal concerns, which may affect MOV operability.
- The student will understand and practice the importance of repeatability of acquisition and analysis techniques as they apply to tracking and trending frequency domain data over time.

Course Benefits:

- Increase the plant's self-sufficiency in MOV MC² testing.
- Reduce the plant's cost of MOV diagnostic testing.
- Reduce the impact of MOV testing on the outage schedule.