

Rite Track Technical Training Center Course Syllabus



Course: 9X Operations, Programming and Calibration
 Course ID: 9X-IN-OPC
 System Type: 90 Series Tracks (models 90, 90S, 90SE)

Prerequisite: This is an introductory course.

Course Objectives: Upon Completion of this course, the student will be able to:

- Explain the key process functions of the system and of individual modules.
- Perform proper system operation.
- Identify potential electrical, mechanical, thermal, chemical, and other safety hazards.
- Identify and clear alarms occurring on the system.
- Identify the types of files located in the three system software directories.
- Perform Flow Recipe Programming.
- Perform Module Recipe Programming.
- Download Flow Recipes.
- Download Module Recipes.
- Configure System Indexers.
- Program Machine Constants.
- Explain the three modes of the Service environment.
- List and identify all sensors in the sensor Monitor screen for each module.
- Select and perform module exercises through the Component Exercise Screen.
- Select and explain all calibration parameters in the Calibration Screen.
- Perform Calibration using the proper fixture.
- Soft boot power up/down the system.
- Recover the system from an Emergency Off (EMO) situation.

Day	Subject	Contents	Lecture vs. Lab	Reference
1	Student Orientation and Course Introduction	Training Center Rules and Safety briefing.	100% Lecture	Orientation and Course Checklists
1	Operations	Lithography Overview. System Overview. Module Purpose and Function.	100% Lecture	Presentation materials and Operations Manual.
1	Operations	Safety - Hazards and Interlocks. Training 9X track - Location of Interlocks. System Interface. Navigation using Keyboard and Touchpad. Major Menu Screens - explanation of Function Keys. Main Screen - explanation of Function Keys.	Computer lab Exercise	9X Simulator. Operations Manual
2	Operations	Operations - Cycle Power, Indexer Configuration, load Recipe, change Lot Size, Clear Track, explain Recipe Cascading, reset Indexers and flows. Alarm Screen - explanation of Function Keys.	Computer lab Exercise	9X Simulator. Operations Manual
2	Programming Course	Edit Screen - explanation of Function Keys. Explanation of Software Directories and Files. 90 Config Directory - Access 90 Config Software, explanation of Function Keys, modify 90 Config Software. Flow Recipe Programming - defining Flows - Parallel, Inward Bi-directional, Outward Bi-directional.	Computer lab Exercise	9X Simulator. Operations Manual
3	Programming Course	Module Recipe Programming - explanation of Function Keys, write Module Recipes. Auxiliary Recipes -explanation of Function Keys, write Auxiliary Recipes. complete Recipe Writing.	Computer lab Exercise	9X Simulator.

4	Programming Course/ Calibration Course	90 Config Software - explanation of Function Keys, edit, send, and save Changes. Service Screen - explanation of Function Keys. Sensor Monitor Keys - explanation of Function Keys, explanation of Sensors, locate Sensors for all Modules. Component Exercise - explanation of Function Keys, explanation of all Component Exercises. Exercise Modules on Training 9X Track.	10% Lecture/ 20% Computer Lab/ 70% Hands-on	9X Simulator. Operations Manual
5	Calibration Course	Fixtures. Calibration Screen. Explanation of Function Keys. Calibrate all Modules on Training 9X track. Calibrate Random Shuttle to all Stations. Calibrate CES Shuttle to all Stations.	100% Hands-on	9X Simulator. Operations Manual