

## 840Dsl Operations & Programming 1 w/HMI Operate

### General Information

Course Code SCT-SNSLP1A-OP  
Global Code NC-SINOP-B  
Length 4 Days  
CEUs 2.6

### Audience

This in person course is for Operator/Programmers of CNC machines that utilize the new SINUMERIK 840Dsl (Solution Line) controls. This course presumes the customer is using the PCU 50.3 or an HMI TCU (Thin Client Unit), with the SINUMERIK HMI Operate interface.

### Prerequisites

- None

### Profile

This course provides a complete overview of the soft key menus of the SINUMERIK 840Dsl (Solution Line) controls describing the basic principles of CNC operation along with the generation of a basic CNC part program. Demonstrations are given on how to create and manage part programs, define offsets and user data, save, and restore programs and user data. Class format is predominately exercises conducted in a virtual environment. Access to fully functional software and tools are provided through a cloud-based application. Students use SINUMERIK 840Dsl CNC simulators to build proficiency in moving through various menus, creating and managing part programs, and setting and editing work, tool offsets, and user data.

### Objectives

*Upon completion of this course, the student shall be able to:*

- Edit and store part programs in editing mode, using Siemens-installed editors.
- Back-up and restore work pieces, part programs, and user data to/from internal hard drive or the system CF Card.
- Back-up and restore work pieces, part programs, and user data to/from an external data medium.
- Use all Manual Mode operations.
- Use all MDI Mode operations.
- Use all Automatic Mode operations.
- Set and edit work offsets.
- Set and edit tool offsets.
- Set and edit user data.
- Create CNC part programs.

### Topics

Control operation management:

1. Manual Mode operations.
2. MDI Mode operations
3. Automatic Mode operations.
4. Parameter editing operations.
5. The Workpiece directory.
6. Program and subprogram directories.
7. Create part programs and sub programs.
8. Edit part programs and sub programs.
9. Saving and restoring workpieces, programs and setting data to internal and external data medium.