

C5\C5D Training Course

Day 1: Operation and Programming

Recommended participants: Individuals tasked with running, programming, or supervising the machine.

Intention: To train all aspects of the machine operation, set-up, and programming with instructor.

Curriculum covered

- Machine hardware and software overview
- Machine kitting options
 - EZ Kit
 - EZ Scan
 - EZ Scan with Traceability
- Create program using various applications
- Kitting of feeders
- Programming of feeders
- Nozzle bank configuration
- Operation of machine

Day 2: Operation and Programming

Recommended participants: Individuals tasked with running, programming, or supervising the machine.

Intention: Trainees will create a program without the assistance of the instructor. Advanced topics will include vision edit and cad importing.

Curriculum covered

- Create program using various applications
- Kitting of feeders
- Programming of feeders
- Nozzle bank configuration
- Operation of machine
- Vision edit of SMT parts
- CAD file importing

Day 3: Calibration and Software Diagnostics

Recommended participants: Individuals tasked with the calibration and repair of the machine.

Intention: To instruct personnel on how to calibrate purchased equipment to get stated specifications. Overview of software diagnostics and electrical systems to aid in the troubleshooting of equipment.

Curriculum covered

- Air requirements
- Vacuum checks
- Software limits for head and conveyors
- Fiducial Camera Mapping
- Fiducial Camera Angle
- Conveyors
- Spindle Heights
- Part Camera Mapping
- Head to Part Camera Distance
- Nozzle Bank
- Tray Bank
- Feeder Bank
- Dump Bucket
- Auto Calibration
- Saving of calibration data
- Electrical component layout
- I/O Board Utility Diagnostic Software
- Motion Control Diagnostic Software

Day 4: Machine Database Structure and Preventative Maintenance

Recommended participants: Individuals responsible for maintaining machine files and general care of machine.

Intention: Overview of machine files purpose and backup of database. Demonstrate how to maintain the machine and feeders properly.

Curriculum covered

- DB Utility
- Launcher
- Scheduled Task
- Machine maintenance
 - Greasing
 - Cleaning
 - Spindle replacement
 - Bellow replacement
 - Filter replacement
- Feeder Maintenance
 - Cleaning
 - Lubrication