

ROBOT PROGRAMMING AND MAINTENANCE





Objectives

Be able to analyse and program simple applications (part grip and release)

Be able to fix an electrical problem

Be able to carry out preventive maintenance



Program

PRINCIPLES OF THE NUMERIC CONTROL SYSTEM

Hardware Safety

Procedures for starting production

Production: start-stop

CREATING CYCLES

The Simple Pick & Place module Creating cycles with Simple Pick & Place The cycle parameters

PROGRAMMING

Program structure
Basic instructions
IMM / Robot interface
Creating and analyzing a production cycle

TROUBLESHOOTING

HARDWARE ARCHITECTURE

The pneumatic movements
CAN bus
The work zones
The numeric movements
The peripherals
The pendant
Safety
IMM / Robot interface
Inputs / Outputs
Repairing failures

THE MACHINE CONFIGURATION

The general parameters
Calibrating the numeric axes

PREVENTIVE MAINTENNCE

Pneumatic, mechanic and electric



Training Methods

All of our courses are based on alternating between the transfer of know-how and good practice, with concrete exercises and real-life situations.

All trainees will be given a folder containing the documents, exercises and corrections of the practical work done during the course.



Assessment Methods

Trainees are assessed by the trainer for each module to measure the knowledge acquired at each step of the course, through practical work.

Date

To be determined

Place

The SEPRO Campus (La Roche sur Yon/85)
The training center (Groissiat/01)

Duration

4 days or 2+2 days / 28 hours

Target trainee

Setters Maintenance technicians Methods technicians

Number of participant

3 to 8 people maximum

Equipment

Rooms equipped with board (interactive, paperboard, white board, video projector) Provision of robots with control systems (1 robot for 2 to 3 people)

Required knowledge

Be allowed to intervene in an electrical cabinet under voltage

Access to training

A copy of the electrical accreditation certificate must be provided before the start of the session

Formalization of the training

Attendance sheet provided by SEPRO