TRAINING
PROGRAM

At Marsilli we know how important training is in order to optimise the operation and production of machines and systems.

To this end we organise made-to-measure courses, in line with the machine and the operator's experience.

We organise interactive and local training sessions either in our facilities on our demo machines or in your facility with your equipment.

Different training sessions with beginner, intermediate and advanced levels are available:

- Winding machine
- Welding machine
- Automation module
- Bridge: advanced programming
- Combination of the previous training or customized training tailored to your specific need

Winding Machine

Marsilli have planned a complete course for our winding machines. All our winding machines: needle, flyer or spindle. After spending a few days with us you will know how to handle them throughout the whole process and the small daily maintenance activities.
If you have specific requirements, contact us. We will be able to offer you a course tailored to you and your winding machine.

Level 1 – OPERATOR

Duration: 1 Day
Participants: max. 5 Persons

- Operator Panel
- ICS 2000 (depending on the access level)
- Safety Guard Function
- Wire Change
- Tensioners
- Adjustment and Control of the Wire Guide Tube
- Checking the Wire Tension

- Product Changeover (depending on the Access Level)
- Adjustment and Control of the Cutting Device
- Winding Machine Reset
- Start up / Shut down
- Winding Machine Cleaning
- Machine Documentation
- Spare Part Identification

Level 2 – MAINTENANCE

Duration: 2 Days
Participants: max. 5 Persons

Requirement Level 1

- Maintenance (Lubrication, Grease etc.)
- Input / Output Menu
- Movement of the Axes
- Removal and Installation of complete Axes
- Calibration and Control of Axes (Mechanical Zero)
- Calibration of Tensioners
- Replacement of Motor and Belts
- Replacement / Backup of Servo Motor and Axis Driver

- Calibration of motor/axes with Infranor SW
- Replacement of Servo Control
- Replacement of Tensioners
- Creating a Backup (Machine, ICS, Axes Parameters)
- Electrics / Pneumatics
- Machine Documentation
- Spare Part Identification
- **Optional**: Repair and Maintenance of the Stripping Head

Level 3 – PROGRAMMING

Duration: 2 Days
Participants: max. 3 Persons

Requirement Level 1 and 2

- Introduction to Winding Programs
- Creation of a new Winding Program
- Adjustment of Parameters
- Adjustment of Wire Tension
- Adjustment of Cutting Position

- Adjustment of General Positions
- Creation and Modification of a copy of the Winding Program
- Renaming / Deleting the Winding Program

This course can be combined with one of the others in the program.

Welding Machine

Our MWS (Marsilli Welding Machine) is small but complex. This course has been thought out to assist the work of the welding operators. In three days they will become experts on our welding machine.

If you have specific requirements, contact us. We will be able to offer you a course tailored to you.

COMPLETE PACKAGE

Duration: depending on needs
Participants: max. 5 Persons

- Start up / Shut down
- ICS 2000
- Operator Panel
- Safety Guard Function
- Input / Output Menu
- Parameters of Welding Cycle
- Welding Recipes
- Mechanical Zero
- Replacement and Adjustment of Electrodes
- Replacement and Calibration of Load Cell
- Replacement of MWS Head Motor
- General Maintenance of the Welding Machine
- Replacement of Marsilli Inverter
- Backup and Restore of Parameters
- Machine Documentation
- Spare Part Identification
- Welding Test (incl. Cross section and analytical Evaluation)
- Calibration of motor/axes with Infranor SW

This course can be combined
with one of the others in the program.

Automation Module

Does your new line seem very complicated? Don't worry. We have thought of a course just for you, through which managing automation will become a walk in the park.
If you have specific requirements, contact us. We will be able to offer you a course tailored to you and your automation unit.

Level 1 – OPERATOR

Duration: 1 Day
Participants: max. 5 Persons

- Operator Panel
- ICS 2000 (depending on the Access Level)
- Safety Guard Function
- Unit Reset
- Start up / Shut down
- Cleaning Instructions
- Product Changeover (depending on the access level)

- Machine Documentation
- Spare Part Identification

Level 2 – MAINTENANCE

Duration: 2 Days
Participants: max. 5 Persons

Requirement Level 1

- Adjustment of Gripping Unit
- Adjustment of Shifter
- Replacement of Belt and Motor
- Replacement of Shock Absorber
- Adjustment of Pick and Place
- Replacement / Backup of Servo Motor and Axis Driver
- Calibration and Control of Axes
- Input / Output Menu
- Electrics / Pneumatics

- Machine Documentation
- Spare Part Identification
- Analysis of Axes drives (Error Log, Motor Current Analysis, Characteristic lines etc.)
- Replacement and Configuration of Memory Reader Module (Software and Electronics)
- Calibration of motor/axes with Infranor SW

CAMERA

Duration: depending on needs
Participants: max. 5 Persons

Requirement Level 1 and 2

Personalized trainings on (programming and basic functions using existing programs):
- SensoPart
- Cognex
- Datalogic
- Keyence

This course can be combined with one of the others in the program.

Bridge | advanced programming

We have thought of a course for expert programmers. Given the complexity of the subject matter, it requires skill and experience in programming and automation.

If you have specific requirements, contact us. We will be able to offer you a course tailored to you.

Level 3 – PROGRAMMING

Duration: 3 Days
Participants: max. 3 Persons

Day 1

- HW Architecture lines
- SW Architecture lines
- Description of the controller and boards used

- ICS2000
- PowerPlcBridge

Day 2

- BRIDGE SW
- Project structure
- Difference between program, function and function-block
- Analysis of a project in "run" and identification of the tasks
- Syntax of the programming language
- Use of libraries

- Programming a unit via BRIDGE SW
- Unit structure
- Special unit conditions
- Analysis of a unit program with and without recipes
- Implementation of new recipes in ICS2000
- Using a unit program from the panel

Day 3

- Debugging a unit program
- Error diagnosis of a unit program
- Calibration of axes with Infranor SW

- Diagnostic of axis movements with Bridge SW
- Debugging test, programs to carry out on the machine
- Insights and lessons learned

This course can be combined with one of the others in the program.