2026 TRAINING CATALOGUE

Operation and maintenance of our installations

POLYSOUDE

TOGETHER, SHAPING THE TECHNICAL AND OPERATIONAL EXCELLENCE OF TOMORROW

While recent years have marked a turning point in the evolution of industrial technologies and practices, 2025 represents for Polysoude a year of reinforced commitment to innovation, knowledge transfer, and customer support.

Our training catalogue reflects this momentum by offering an expanded programme tailored to the specific needs of companies and their employees. These training courses, dedicated to the operation and maintenance of our welding installations, have been designed to meet the growing demands for technical and operational skills.

Through this programme, we aim to:

> Ensure the development of your teams' skills through training paths combining theory and practice, closely aligned with real-world operational requirements;

> Offer tailor-made solutions that precisely address your specific needs in welding and maintenance;

> Integrate new learning technologies, such as remote and on-site training supported by effective and user-friendly teaching tools, for a more flexible and efficient learning experience;

> Support your training projects by facilitating access to funding through our partnerships with the relevant organisations.

Our training courses are delivered by passionate experts, within a certified environment that meets the highest standards. We are also proud to announce that our training centre complies with the requirements of the Qualiopi certification, ensuring the quality and reliability of our services.

As a key player in the field of industrial welding, Polysoude is committed to being a trusted and innovative partner for its customers. This catalogue is much more than a simple document: it is an invitation to collaborate and build the future of technical and operational excellence together.

All our teams are fully mobilised to support you and meet your expectations. Now more than ever, your success is our top priority at Polysoude.

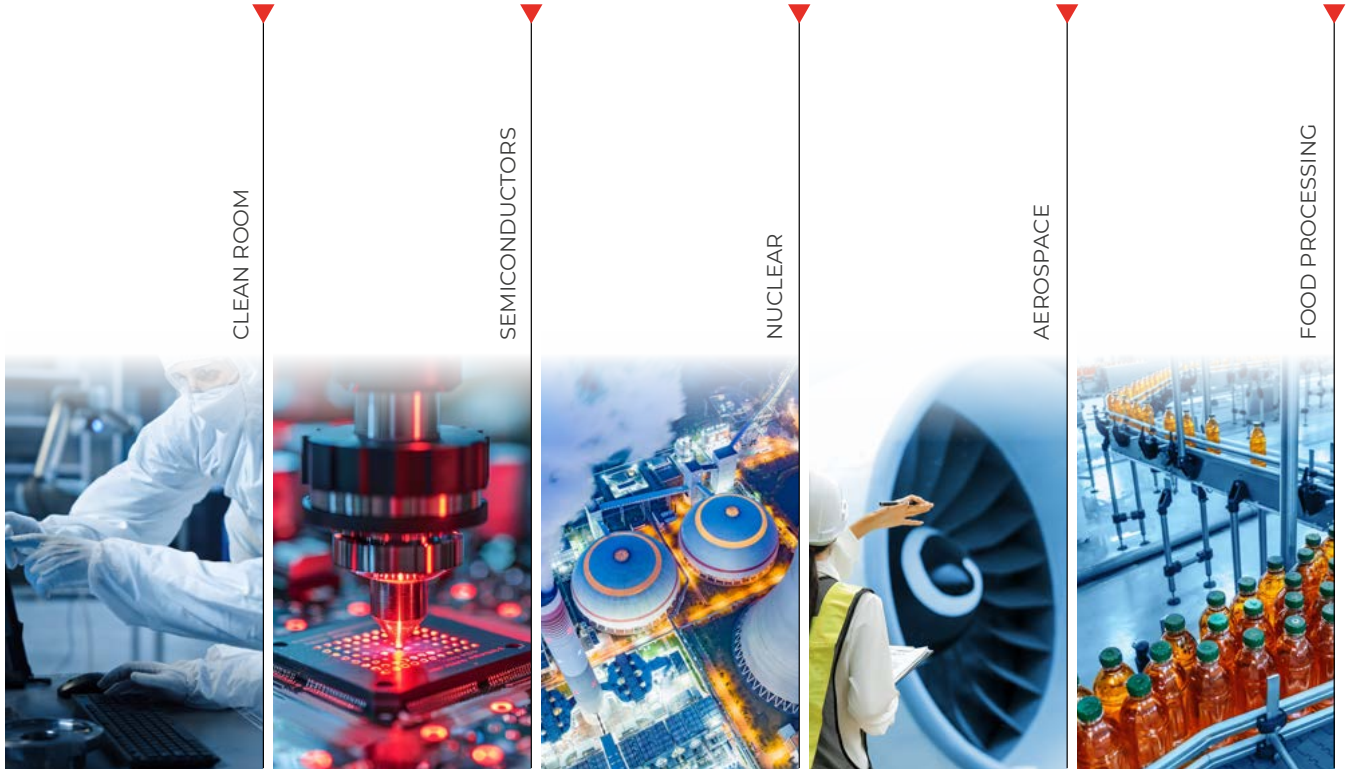
Pascal Weber
Polysoude Group Managing Director

POLYSOUDE

Welcome to Polysoude

Polysoude is a **global leader in orbital and automated welding**.
The company designs innovative TIG and Plasma solutions, used in demanding industries such as energy, aerospace, and nuclear. With over 50 years of expertise and an international presence, Polysoude embodies **French excellence** in welding engineering.

Applications across all sectors



1961
year of establishment in Nantes

+60 years
of expertise in orbital and automated welding

360
employees worldwide, including 220 in France

+50
countries served through an international network

Training centre

A centre dedicated to skills development

The Polysoude training centre supports customers worldwide in developing skills related to the operation and maintenance of our orbital and automated welding equipment. Our mission: ensure every customer achieves optimal equipment handling and long-term autonomy, regardless of the sector of activity or initial skill level.

A flexible, comprehensive, and international solution

Our training programmes cover both operation and maintenance, for all skill levels: from operators to experts. We deliver training worldwide, either on-site (at our centre or customer location) or remotely, adapting to all logistical constraints. Programmes can be standard or fully customised, built around the specific needs of each company for maximum effectiveness.

Expert trainers with instructional skills

The training courses are led by experienced professionals from the welding and industrial maintenance fields, trained in participatory teaching methods. They focus on hands-on learning, exchange, and active participation to ensure lasting skills acquisition and genuine ability to perform in real-world situations.

Recognised quality commitment: Qualiopi certification

Polysoude is Qualiopi-certified for its training activities, guaranteeing the quality of our educational processes. This certification reflects our commitment to customer satisfaction and continuous improvement: regular content updates, systematic feedback integration, and structured processes to enrich the learning experience.

Our educational vision

At Polysoude, our training method focuses on operational efficiency and learner autonomy. Our approach relies on:

> A strong connection to real-world professional practice, with concrete, field-based situations.

> Active learning, including experimentation, simulations, collaborative work, and experience sharing.

> Adaptability, to provide personalised learning for each audience and context.

> Continuous improvement, with systematic evaluation of objectives and integration of feedback to ensure quality.

Qualiopi processus certifié

RÉPUBLIQUE FRANÇAISE

The quality certification has been awarded for the following category of activity:
TRAINING ACTIVITIES

Administrative procedures

TRAINING LOCATION

All courses are held on your site or at Polysoude

2, rue Paul Beaupère
44300 Nantes
France

REMOTE TRAINING

Contact us to discuss your remote training needs.

SCHEDULE

Monday to Friday
8:00 AM to 5:00 PM

DATES

Customised

Polysoude works with you to schedule courses according to your needs.

CLASS SIZE

3 or 4 participants

The maximum number of participants per training session ranges from 3 (maintenance) to 4 (operation) to optimise the effectiveness and quality of our courses.

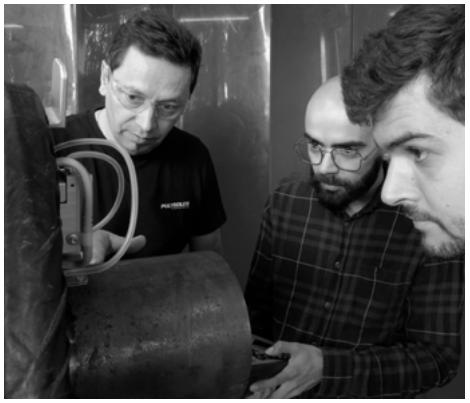
LANGUAGES

Our courses are delivered in French and English. For any request in another language, please contact us so we can work together to identify the most suitable solution.

ACCESSIBILITY

Contact us to arrange accommodations for participants with special needs.

Instructional methods


Teaching methods

Trainers alternate between theory and hands-on workshops on Polysoude equipment. They promote learning through individual or paired exercises, followed by group presentations and reflective analyses, to support both individual and collective skill development within the group.

Technical resources

Specialised digital teaching tools, dedicated training materials, and hands-on training on the equipment, these are innovative and cutting-edge methods used by our trainers to accelerate skill development and enable learners to gain practical experience as close to real operational conditions as possible.

Human resources

Training delivered by Polysoude Technicians and Engineers. Our trainers are experts in their fields and are trained both as instructors and in adult learning techniques.

Training duration

The duration of training sessions varies widely, depending on the equipment involved, the chosen topic (maintenance or operation of Polysoude equipment), and whether it is a standard catalogue course or a customised training programme.

Evaluation

Evaluations, in the form of presentations during practical workshops or quizzes at the end of the sessions, are organised by the trainers to ensure overall learner comprehension and to reinforce the retention of real-world situations and knowledge covered during the training.

Overview of training programmes and target profiles

To meet the diverse needs and skill levels of your teams, Polysoude offers training paths structured around three main themes, each adapted to the appropriate level for the learners' profiles.

01

EQUIPMENT

Power sources

TRAINING

Operation

LEVELS

Operator | **Expert**

Maintenance

LEVELS

Operator | **Expert**

02

EQUIPMENT

Welding heads

TRAINING

Operation | **Maintenance**

LEVEL

Expert

03

SPECIFIC EQUIPMENT

Specific training courses

TRAINING

Operation

LEVELS

Expert

Maintenance

LEVELS

Expert

Learner profiles and learning objectives

Operators, technicians or any person required to operate an automated or orbital welding installation

Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results.

Novice welding operator or maintenance technician

Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

Table of contents

TRAINING PROGRAMMES BY PRODUCT

01
WELDING POWER SOURCES

02
WELDING HEADS

03
SPECIFIC EQUIPMENT

GENERAL

01

TRAINING IN OPERATION OR MAINTENANCE

WELDING POWER SOURCES

WELDING POWER SOURCES CONCERNED BY THE TRAINING COURSES

	P3 UHP	P4	P6 (P6CW / P6HW)	PC-2
Process	TIG	TIG, TIG CW	TIG, TIG CW, TIG HW	TIG, TIG CW, TIG HW, Plasma
	Compact and ultra-light, 3-axis power source	4-axis welding power source	Advanced cold or hot wire 6-axis welding power sources	Unique - High-capacity, versatile, multi-axis, multi-process power source
Motion controls:				
Torch rotation	●	●	●	●
Wire feeding		●	●	●
AVC			●	●
OSC			●	●
Multi-axis				●
Input power	1 phase 115/230 V	1 phase 115/230 V	3 phase 400/480 V optional	3 phase 400/480 V optional

P3 Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
7 to 14 hours*
*depending on the welding head

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating** the welding installation on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme

TARGET AUDIENCE
Operators, technicians, or any person required to operate an automated or orbital welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Duplicating a Welding Procedure Specification (WPS)

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P3 Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
14 to 28 hours*
*depending on the welding head

OBJECTIVE
- **Mastering** power source programming
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Setting up the power source
> Searching / Duplicating / Creating / Exporting / Importing a Welding Procedure Specification (WPS)
> Selecting axes (controls)
> Completing the documentation
> Setting programme parameters
> Managing the programmes

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P3 Welding power source

TRAINING
Maintenance
LEVEL
Operator

DURATION
4 hours

OBJECTIVE
- **Describing** the operation of the welding power source
- **Diagnosing** a simple failure
- **Identifying** the significant symptoms
- **Performing** basic troubleshooting with support via Polysoude remote assistance
- **Performing** level 1 maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Novice welding operator or maintenance technician

PRECONDITIONS
Basic knowledge of electrical engineering and electronics

CONTENT

Introduction

Overview of the power source
> Various power sources in the range
> Options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Documentation
> Manuals and parts lists
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P3 Welding power source

TRAINING
Maintenance
LEVEL
Expert

DURATION
7 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Performing** level 1 and level 2 maintenance
- **Being autonomous** in power source maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of electrical engineering and electronics
- Maintenance experience

CONTENT

Introduction

Overview of the power source
> The different power sources in the range and their options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Introduction to the operation of the Graphical User Interface (GUI)

Operation of welding current control
> Current control
> Principle and operation of power sources
> High Frequency (HF)
> Welding set voltage

Operation of the rotation and wire functions
> Control principle
> Different motors and encoders
> Rotation and wire axis card

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Maintenance methodology
> Preventive maintenance
> Corrective maintenance

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P4 Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
7 to 14 hours*
*depending on the welding head

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating the welding installation on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme**

TARGET AUDIENCE
Operators, technicians, or any person required to operate an automated or orbital welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Duplicating a Welding Procedure Specification (WPS)

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P4 Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
14 to 28 hours*
*depending on the welding head

OBJECTIVE
- **Mastering** power source programming
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Setting up the power source
> Searching / Duplicating / Creating / Exporting / Importing a Welding Procedure Specification (WPS)
> Selecting axes (controls)
> Completing the documentation
> Setting programme parameters
> Managing the programmes

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P4 Welding power source

TRAINING
Maintenance
LEVEL
Operator

DURATION
4 hours

OBJECTIVE
- **Describing** the operation of the welding power source
- **Diagnosing** a simple failure
- **Identifying** the significant symptoms
- **Performing** basic troubleshooting with support via Polysoude remote assistance
- **Performing** level 1 maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Novice welding operator or maintenance technician

PRECONDITIONS
Basic knowledge of electrical engineering and electronics

CONTENT

Introduction

Overview of the power source
> Various power sources in the range
> Options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Documentation
> Manuals and parts lists
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P4 Welding power source

TRAINING
Maintenance
LEVEL
Expert

DURATION
11 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Performing** level 1 and level 2 maintenance
- **Being autonomous** in power source maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of electrical engineering and electronics
- Maintenance experience

CONTENT

Introduction

Overview of the power source
> The different power sources in the range and their options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Introduction to the operation of the Graphical User Interface (GUI)

Operation of welding current control
> Current control
> Principle and operation of power sources
> High Frequency (HF)
> Welding set voltage

Operation of the rotation and wire functions
> Control principle
> Different motors and encoders
> Rotation and wire axis card

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Maintenance methodology
> Preventive maintenance
> Corrective maintenance

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6CW Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
14 to 28 hours*
*depending on the welding head

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating the welding installation** on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme

TARGET AUDIENCE
Operators, technicians or any person required to operate an automated or orbital welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Duplicating a Welding Procedure Specification (WPS)

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6CW Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
28 to 32 hours*
*depending on the welding head

OBJECTIVE
- **Mastering** power source programming
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Setting up the power source
> Searching / Duplicating / Creating / Exporting / Importing a Welding Procedure Specification (WPS)
> Selecting axes (controls)
> Completing the documentation
> Setting programme parameters
> Managing the programmes

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

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Book your training

P6CW Welding power source

TRAINING
Maintenance
LEVEL
Operator

DURATION
4 hours

OBJECTIVE
- **Describing** the operation of the welding power source
- **Diagnosing** a simple failure
- **Identifying** the significant symptoms
- **Performing** basic troubleshooting with support via Polysoude remote assistance
- **Performing** level 1 maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Novice welding operator or maintenance technician

PRECONDITIONS
Basic knowledge of electrical engineering and electronics

CONTENT

Introduction

Overview of the power source
> Various power sources in the range
> Options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Documentation
> Manuals and parts lists
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6CW Welding power source

TRAINING
Maintenance
LEVEL
Expert

DURATION
14 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Performing** level 1 and level 2 maintenance
- **Being autonomous** in power source maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of electrical engineering and electronics
- Maintenance experience

CONTENT

Introduction

Overview of the power source
> The different power sources in the range and their options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Introduction to the operation of the Graphical User Interface (GUI)

Operation of welding current control
> Current control
> Principle and operation of power sources
> High Frequency (HF)
> Welding set voltage

Operation of the rotation and wire functions
> Control principle
> Different motors and encoders
> Rotation and wire axis card

Operation of arc voltage control and oscillation
> Unipolar and bipolar stepper motors
> Oscillation slide
> Arc voltage control principle
> Workpiece touchdown control
> AVC and Oscillation axis cards

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Maintenance methodology
> Preventive maintenance
> Corrective maintenance

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6HW

Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
28 hours

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating** the welding installation on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme

TARGET AUDIENCE
Operators, technicians or any person required to operate an automated or orbital welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Duplicating a Welding Procedure Specification (WPS)

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6HW Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
32 hours

OBJECTIVE
- **Mastering** power source programming.
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Setting up the power source
> Searching / Duplicating / Creating / Exporting / Importing a Welding Procedure Specification (WPS)
> Selecting axes (controls)
> Completing the documentation
> Setting programme parameters
> Managing the programmes

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation
> Studying and operating on hot wire parameters

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6HW Welding power source

TRAINING
Maintenance
LEVEL
Operator

DURATION
4 hours

OBJECTIVE
- **Describing** the operation of the welding power source
- **Diagnosing** a simple failure
- **Identifying** the significant symptoms
- **Performing** basic troubleshooting with support via Polysoude remote assistance
- **Performing** level 1 maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Novice welding operator or maintenance technician

PRECONDITIONS
Basic knowledge of electrical engineering and electronics

CONTENT

Introduction

Overview of the power source
> Various power sources in the range
> Options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Documentation
> Manuals and parts lists
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

P6HW Welding power source

TRAINING
Maintenance
LEVEL
Expert

DURATION
14 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Performing** level 1 and level 2 maintenance
- **Being autonomous** in power source maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of electrical engineering and electronics
- Maintenance experience

CONTENT

Introduction

Overview of the power source
> The different power sources in the range and their options
> Remote control
> Serial number

CONNECTORS
Layout, description and technology

Connections
> Connecting the mains power supply
> Connecting the welding head

Introduction to the operation of the Graphical User Interface (GUI)

Operation of welding current control
> Current control
> Principle and operation of power sources
> High Frequency (HF)
> Welding set voltage

Operation of the rotation and wire functions
> Control principle
> Different motors and encoders
> Rotation and wire axis card

Operation of arc voltage control and oscillation
> Unipolar and bipolar stepper motors
> Oscillation slide
> Arc voltage control principle
> Workpiece touchdown control
> AVC and Oscillation axis cards

Hot wire operation
> Current source
> Safety features

Flash drive and software
> Versions
> Installing and removing the flash drive
> Reading and writing data on the USB flash drive
> Disabling safety features on the Graphical User Interface (GUI) and precautions
> Operation and location of one-wire chips

Maintenance methodology
> Preventive maintenance
> Corrective maintenance

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
28 hours

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating** the welding installation on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme

TARGET AUDIENCE
Operators, technicians or any person required to operate an automated, orbital or cladding welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Opening a welding programme

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
32 hours

OBJECTIVE
- **Mastering** power source programming.
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated, orbital or cladding welding installation and to ensure the quality of the welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Configuring the machine fleet
> Selecting axes (controls)
> Creating/copying an application/programme
> Completing the documentation
> Changing programme parameters and deltas
> Managing the programmes

Operating the welding installation
> Preparing the installation
> Power supply and connections (USB/RS32)
> Selecting the appropriate programme
> Understanding and interpreting the remote control
> Starting the welding process
> Identifying the axes (controls) on the front of the power source

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation
> Studying and operating on hot wire parameters (if hot wire option selected)

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC Welding power source

TRAINING
Maintenance
LEVEL
Operator

DURATION
7 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Diagnosing** a simple failure
- **Identifying** the significant symptoms
- **Performing** basic troubleshooting with support via Polysoude remote assistance
- **Performing** level 1 maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Novice welding operator or maintenance technician

PRECONDITIONS
Basic knowledge of electrical engineering and electronics

CONTENT

Introduction

Overview of the power source
> Overview of the PC range
> Identification of power source components
> Power source supply
> Precautions

Description of the subassemblies

Axes (controls) overview and introduction to POWin programming software

Operation of the sequencer axis

Operation of the rotation and wire functions

Operation of arc voltage control and oscillation

Maintenance methodology
> Preventive maintenance

Documentation
> Manuals and parts lists
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC Welding power source

TRAINING
Maintenance
LEVEL
Expert

DURATION
17 HOURS

OBJECTIVE
- **Describing** the operation of the welding power source
- **Performing** level 1 and level 2 maintenance
- **Being autonomous** in power source maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of electrical engineering and electronics
- Maintenance experience

CONTENT

Introduction

Overview of the power source
> Overview of the PC range
> Identification of power source components
> Power source supply
> Precautions

DESCRIPTION OF THE SUBASSEMBLIES

Axes (controls) overview and introduction to POWin programming software

Operation of the sequencer axis
> Principle and operation

Operation of welding current control
> Current control
> Principle and operation of power sources
> High Frequency (HF)
> Welding set voltage

Operation of the rotation and wire functions
> Control principle
> Different motors and encoders
> Rotation and wire axis card

Operation of arc voltage control and oscillation
> Unipolar and bipolar stepper motors
> Oscillation slide
> Arc voltage control principle
> Workpiece touchdown control
> AVC and Oscillation axis cards

Hot wire operation (if option selected)
> Current source
> Safety features

Maintenance methodology
> Preventive maintenance
> Corrective maintenance

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC AC-DC
external source Tetrix

Welding power source

TRAINING
Operation
LEVEL
Operator

DURATION
28 hours

OBJECTIVE
- **Identifying** the characteristics of the power source and the welding head
- **Operating** the welding installation on the basis of Welding Procedure Specifications (WPS) from the library or an existing programme

TARGET AUDIENCE
Operators, technicians or any person required to operate an automated, orbital or cladding welding installation

PRECONDITIONS
Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Navigation skills
> Navigating through the menus
> Distinguishing the various icons

Using a programme
> Searching for / Opening a welding programme

Operating the welding installation
> Preparing and connecting the installation
> Graphical User Interface (GUI)
> Understanding the remote control
> Starting the welding process

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool
> Inspecting and working on the installation

Processing results
> Recording the deltas
> Printing reports

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PC AC-DC
external source Tetrix

Welding power source

TRAINING
Operation
LEVEL
Expert

DURATION
32 hours

OBJECTIVE
- **Mastering** power source programming
- **Operating** the welding installation
- **Developing** parameters for specific applications
- **Analysing and correcting** a welding cycle in progress
- **Processing** results

TARGET AUDIENCE
Technicians or any person required to operate an automated, orbital or cladding welding installation and to ensure the quality of the welding results

PRECONDITIONS
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

SERVICE SALES: +33 (0)2 40 68 11 14

CONTENT

Introduction

General welding knowledge
> TIG welding theory
> Welding positions
> Joint preparations and bevel types
> Welding defects

Knowledge of the power source
> Technical characteristics
> Introduction to the concept of axes (controls)

Knowledge of the welding head
> Technical characteristics
> Power supply and connections

Understanding the operation of axes (controls)

Mastering navigation
> Navigating through the menus
> Distinguishing the various icons

Mastering programming
> Configuring the machine fleet
> Selecting axes (controls)
> Creating/copying an application/ programme
> Completing the documentation
> Changing programme parameters and deltas
> Managing the programmes

Operating the welding installation
> Preparing the installation
> Power supply and connections (USB/RS32)
> Selecting the appropriate programme
> Understanding and interpreting the remote control
> Starting the welding process
> Identifying the axes (controls) on the front of the power source

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding
> Observing and adjusting the weld pool (JOB concept)
> Inspecting and working on the installation
> Studying and operating on hot wire parameters (if hot wire option selected)

Processing results
> Recording the deltas
> Printing reports
> Analysing the weld bead
> Modifying the programme
> Analysing data from the data acquisition unit (if option selected)

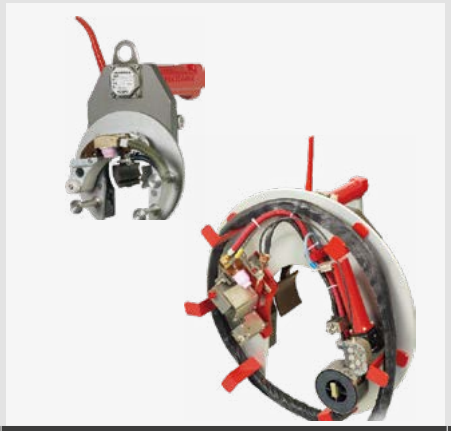
Book your training

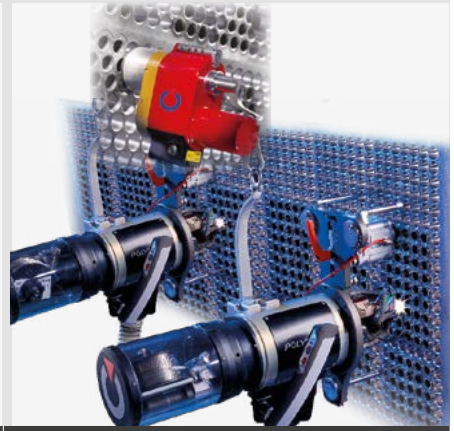
02

TRAINING IN OPERATION OR MAINTENANCE

WELDING HEADS

WELDING HEADS CONCERNED BY THE TRAINING COURSES





	Closed Welding Heads	Open Welding Heads	Carriage type welding heads	Tube/plate welding heads
	UHP - MW	**MU IV**	**POLYCAR**	**TS**
Process	TIG	TIG, TIG CW, TIG HW	TIG CW, TIG HW	TIG, TIG CW
	Precision welding for high-purity industries	With or without filler wire, AVC and OSC	The most versatile torch holder carriage	The result of 60 years of continuous improvement
Diameter range (*):	1.6 mm to 168.3 mm	8 mm to 275 mm	From 32 mm	8 mm to 75 mm
Equipped with:				
Wire feeder	-	With or without(*)	●	With or without(*)
AVC	-	With or without(*)	●	●
OSC	-	With or without(*)	●	-

(*) depending on the welding head model

UHP

Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
4 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use
> Gas flow selection
> Choosing and fitting the shells
> Selection and adjustment of the electrode

Overview and description of the subassemblies
> Drive unit
> Handle
> Motor drive assembly
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

MW Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
4 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use
> Gas flow selection
> Choosing and fitting the shells
> Selection and adjustment of the electrode
> Selection and adjustment of the electrode
> Elbow welding kit
> Choosing the type of electrode offset

Overview and description of the subassemblies
> Drive unit
> Handle
> Motor drive assembly
> Integrated remote control
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

MU Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
7 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use
> Adjusting electrode grinding
> Choosing and assembling the gas lens
> Gas flow selection
> Polygaine characteristics

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Clamp
> Plates
> AVC/Oscillation (if option selected)
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts
> Replacement of a pin
> Replacement of a roller
> Replacement of a bare Polygaine

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

TS34 Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
7 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Torch
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

TS 8/75 Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
14 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Torch
> Wire feeder system
> AVC (if option selected)
> Pneumatic system
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

TP 60 Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
14 HOURS

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Torch
> Wire feeder system
> AVC (if option selected)
> Pneumatic system
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

Polycar Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
14 to 21 hours*
*depending on model

OBJECTIVE
- **Describing** the operation of a welding head
- **Performing** complete maintenance
- **Being autonomous** in welding head maintenance using an appropriate methodology
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Overview of the welding head

Identification of welding head components

Precautions for use

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Torch
> Wire feeder system
> AVC/Oscillation
> Guide ring
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

PolyClad CNC

Welding head

TRAINING
Operation
LEVEL
Expert - Initial

DURATION
42 HOURS

OBJECTIVE
- **Knowing** the programming
- **Operating** the welding installation on the basis of Welding Procedure Specifications (WPS) of an existing programme
- **Analysing and correcting** a cladding cycle in progress
- **Processing** results

TARGET AUDIENCE
Operators, technicians, or any person required to operate an cladding installation

PRECONDITIONS
- Cladding or welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Introduction

Presentation of the equipment
> Power source (master/slave/cooling)
> Panel
> CN axes (controls)

Control panel
> Start-up of the installation
> Presentation of the GUI
> Explanation of the menu icons
> Creation of a tool
> Creation of a new welding programme

Presentation of NPAD
> Head movement in space
> Introduction to physical and touchscreen buttons
> Overview of software pages

TIG or TIGer process theory

Machine welding functions
> Sensing (centring) on tube*
> Sensing on positioner or SPX*
> Setting welding variables in the programme
> Operations possible during welding
> Changing welding parameters during the cycle
> Restart (simple)
> Work mode (downslope then show inter. mode)
> Welding (without arc, without wire, without hot wire, etc.)
> Using the NPAD
> Turning off the machine during a welding cycle
> Restarting the machine / resuming sensing mode
> Programming a tube application
> Programming a roller application
> Programming a welding sequence (automatic sequencing of applications)
> Demonstrating a repair programme
> Training on centre correction procedure

Welding practice
> Welding on an application provided by the customer

** According to your needs*

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Book your training

PolyClad CNC

Welding head

TRAINING
Operation
LEVEL
Expert - Supplementary

DURATION
7 to 32 hours*
*depending on the chosen module(s)

OBJECTIVE
- **Mastering** the programming of the numerical control
- **Operating** the cladding installation (up to 2 specific applications)
- **Developing** parameters for specific applications
- **Analysing and correcting** a cladding cycle in progress
- **Processing** results

TARGET AUDIENCE
Operators, technicians, or any person required to operate an cladding installation

PRECONDITIONS
- Initial training completed
- Significant welding experience
- Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

This training is to be composed of the following modules, which complement the initial training and your specific needs.

CONTENT

MODULE 1
> Programming a bore-to-bore application
> Programming a cross-bore application
> Hands-on practice

And/ or

MODULE 2
> Programming a groove application
> Programming a cone application
> Hands-on practice

And/ or

MODULE 3
> Programming using the patch application
> Hands-on practice

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Book your training

PolyClad

Welding head

TRAINING
Maintenance
LEVEL
Expert

DURATION
7 to 21 hours*
*depending on model

OBJECTIVE
- **Performing** complete maintenance
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Basic knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Presentation of the installation

Identification of cladding head components and safety precautions

Overview and description of the subassemblies
> Motor drive assembly
> Drive unit
> Rotating collector
> Torch
> Wire feeder system
> AVC/Oscillation
> Bundle

Welding head disassembly

Presentation and cleaning of regularly inspected parts
> Replacement of critical parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Welding head reassembly

Welding tests

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

03

TRAINING IN OPERATION OR MAINTENANCE

SPECIFIC EQUIPMENT

Polyfil

Specific equipment

TRAINING
Maintenance
LEVEL
Expert

DURATION
3 hours

OBJECTIVE
- **Understanding** the wire feeder operation
- **Performing** complete maintenance
- **Acquiring** a maintenance methodology for your Polysoude equipment
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Description of the wire feeder

Identification of wire feeder components

Precautions for use
> Selection of roller
> Selection of wire sheath
> Selection of wire nozzle

Overview and description of the subassemblies
> Motor drive assembly
> Wire feeder mechanism
> Wire spool

Disassembly of the wire feeder

Presentation and cleaning of regularly inspected parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Reassembly of the wire feeder

Wire feeding test

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

SPX

Specific equipment

TRAINING
Operation
LEVEL
Expert

DURATION
32 hours

OBJECTIVE
- **Understanding** the wire feeder operation
- **Performing** complete maintenance
- **Acquiring** a maintenance methodology for your Polysoude equipment
- **Using** manuals and parts lists

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Description of the SPX welding head

Identification of SPX welding head components

Precautions for use

Overview and description of the subassemblies
> Motorisation
> Drive
> Rotary collector
> Torch
> Wire feeder system
> AVC / OSC
> Beam

Disassembly of the wire feeder

Presentation and cleaning of regularly inspected parts
> Replacement of emergency parts
> Replacement of wear parts

Maintenance methodology
> Preventive maintenance
> Troubleshooting guide
> Corrective maintenance

Reassembly of the wire feeder Wire feeding test

Documentation
> Manuals
> Equipment return form

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

DAQbox

Specific equipment

TRAINING
Operation
LEVEL
Expert

DURATION
7 hours

OBJECTIVE
▶ **Configuring and using** the DAQbox software

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
▶ Significant welding experience
▶ Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Connecting the DAQbox to the power source

Configuration of the DAQbox software
> Hardware compatible with the welding installation operated (axis configuration)
> Recording parameters: trigger mode, alarms, safety, sampling, application type, etc.
> Synchronisation with Polyview software

Using the DAQbox software
> Software icons and menus
> Starting a recording
> Managing recording configuration files
> Record management

Do you only wish to attend this training course, without any additional training needs?
This programme is designed to meet a single, specific requirement. If you are considering other operational training courses, please note that this module is already included in our complete training courses.

SERVICE SALES: +33 (0)2 40 68 11 14

Book your training

Polyview

Specific equipment

TRAINING
Operation
LEVEL
Expert

DURATION
7 hours

OBJECTIVE
▶ **Installing, configuring and using** the Polyview software

TARGET AUDIENCE
Technicians or any person required to operate an automated or orbital welding installation and ensure the quality of welding results

PRECONDITIONS
▶ Significant welding experience
▶ Basic computer skills (basic knowledge, Windows environment, use of icons, menus, etc.)

CONTENT

Connection with the head and the power source

Configuration of the Polyview software
> Hardware compatible with the welding installation operated
> Camera optical settings (contrast, focus, etc.)
> Synchronisation with DAQbox and/or power source

Associated POWin programming
> Management of inputs/outputs

Using the Polyview software
> Software icons and menus
> Record management

Do you only wish to attend this training course, without any additional training needs?
This programme is designed to meet a single, specific requirement. If you are considering other operational training courses, please note that this module is already included in our complete training courses.

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Book your training

Polyview

Specific equipment

TRAINING
Maintenance of the camera
LEVEL
Expert

DURATION
7 hours

OBJECTIVE
▶ **Camera** and spotlight maintenance

TARGET AUDIENCE
Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS
▶ Knowledge of mechanical and electro-mechanical engineering
▶ Maintenance experience

CONTENT

Overview of different cameras and spotlights

Identification of components

Precautions for use

Maintenance operations
> Camera maintenance
> Spotlight maintenance
> Replacement of the LED
> Replacement of the CMOS sensor
> Lens type

Equipment tests
> Camera test
> Spotlight test

Documentation
> Manuals
> Equipment return form

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Book your training

TRAINING

HD installation maintenance

LEVEL

Expert

DURATION

7 hours

OBJECTIVE

- **Servicing** a video installation
- **Identifying** installation issues

TARGET AUDIENCE

Senior maintenance technician requiring autonomy in the maintenance of Polysoude equipment

PRECONDITIONS

- Knowledge of mechanical and electro-mechanical engineering
- Maintenance experience

CONTENT

Presentation of the installation

Identification of components
> Camera
> Lighting
> Container
> Console
> Fibre
> Converter
> Computer
> Bios
> Screens

Precautions for use
> Software installation and principle
> Using the software

Maintenance of the installation
> Fibre cleaning
> Replacement and/or cleaning of the protective glass

Troubleshooting

Documentation
> Manuals
> Equipment return form

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Book your training

Customised training

Why choose a Polysoude customised training programme?

A programme tailored to your needs

Can't find a course in our catalogue that exactly matches your requirements? We work with you to design a programme that takes your specific needs into account: type of equipment, participant skill levels, production constraints, and skill development objectives, etc.

Flexible and adaptable modules

Our customised training courses are organised into one-day modules (7 hours), with objectives and content defined in collaboration with your teams. Each session is designed to address your specific challenges, whether in operation, maintenance, or advanced technical training.

End-to-end support

From the first contact, our educational engineers and expert trainers guide you through needs analysis, defining learning objectives, and programme development. You thus benefit from a 100% personalised training path, fully aligned with your operational goals.

Formalised and transparent services

Each customised training course is provided with a detailed proposal outlining the programme, format, objectives, and expected outcomes. This approach ensures clarity, traceability, and the quality of our services.

Examples of customised training:

One-day Operation training

7-hour modules: Objectives and content defined according to your equipment and specific requirements (equipment handling, settings optimisation, safety, etc.).

One-day Maintenance training

7-hour modules: Programme designed around your needs for preventive or corrective maintenance on the equipment of your choice.

Choose Polysoude customised training and provide your teams with a skill development programme fully aligned with your industrial objectives.

Contact us to co-design your personalised training programme!

Detailed training references by level and product

OPERATOR LEVEL					
Training Code	Power source	Head / Software	Duration	Ref.	Page
FU-P3	P3	MW	7 hrs	100062140	11
	P3	UHP	7 hrs	100062144	11
FU-P4	P4	MU	14 hrs	100071589-A	15
	P4	MW	7 hrs	100062142-A	15
	P4	TS with wire	14 hrs	100062145-A	15
	P4	TS without wire	7 hrs	100062142-A	15
	P4	UHP	7 hrs	100062142-A	15
FU-P6CW	P6CW	MU	14 hrs	100062146-A	19
	P6CW	Polycar	28 hrs	100071590-A	19
	P6CW	TS	14 hrs	100062146-A	19
FU-P6HW	P6HW	MU	28 hrs	100071590-B	23
	P6HW	Polycar	28 hrs	100071590-B	23
FU-PC	PC	Aluminium (DC current)	28 hrs	100062151	27
	PC	Plasma	28 hrs	100062151	27
	PC	Cladding	28 hrs	100062183	27
	PC	Orbital welding heads	28 hrs	100071826	27
	PC	TIG CW/HW	28 hrs	100062151	27
FU-PC-ACDC	PC	TIG (AC) CW Aluminium	28 hrs	100062185	31

EXPERT LEVEL					
Training Code	Power source	Head / Software	Duration	Ref.	Page
FU-P3	P3	MW	14 hrs	100062147	12
	P3	UHP	14 hrs	100062139	12
FU-P4	P4	MU	28 hrs	100071593-A	16
	P4	MW	14 hrs	100062143-A	16
	P4	TS with wire	21 hrs	100071591-A	16
	P4	TS without wire	14 hrs	100062143-A	16
	P4	UHP	14 hrs	100062143-A	16
FU-P6CW	P6CW	MU	28 hrs	100071592-A	20
	P6CW	Polycar	32 hrs	100071594-A	20
	P6CW	TS	28 hrs	100071592-A	20
FU-P6HW	P6HW	MU	32 hrs	100071594-B	24
	P6HW	Polycar	32 hrs	100071594-B	24
FU-PC	PC	Aluminium (DC current)	32 hrs	100062152	28
	PC	Plasma	32 hrs	100062152	28
	PC	PolyClad TWINTIGer-C or -L	32 hrs	100069945-C	28
	PC	Cladding	32 hrs	100062184	28
	PC	Orbital welding heads	32 hrs	100071827	28
	PC	TIG CW/HW	32 hrs	100062152	28
FU-PC-ACDC	PC	TIG (AC) CW Aluminium	32 hrs	100062186	32
FU-PolyClad	PC	CNC	42 hrs	100069945	42
FU-DAQ		DAQbox	7 hrs	100062137	48
FU-Polyview		Polyview	7 hrs	100062149	49

ADDITIONAL OR CUSTOM TRAINING COURSE						
Training Code	Power source	Head / Software	Level	Duration	Ref.	Page
FU-PolyClad	PC	Module 1 CNC	Supplement	14 hrs	100069946	43
	PC	Module 2 CNC	Supplement	14 hrs	100069946	43
	PC	Module 3 CNC	Supplement	14 hrs	100069946	43
FU-XX	Customised	Customised	Customised	7 hrs	100062153	52

Detailed training references by level and product

OPERATOR LEVEL				
Training Code	Power source	Duration	Ref.	Page
FM-P3	P3	4 hrs	100062177	13
FM-P4	P4	4 hrs	100062170	17
FM-P6CW	P6CW	4 hrs	100062171	21
FM-P6HW	P6HW	4 hrs	100074582	25
FM-PC	PC	7 hrs	100062169	29

EXPERT LEVEL					
Training Code	Power source	Head / Software	Duration	Ref.	Page
FM-P3	P3		7 hrs	100062178	14
FM-P4	P4		7 hrs	100062173	18
FM-P6CW	P6CW		11 hrs	100062172	22
FM-P6HW	P6HW		14 hrs	100074583	26
FM-PC	PC		17 hrs	100062174	30
FM-PolyClad		Polyclad 3C	14 hrs	100062163-A	37
		Polyclad C&B	14 hrs	100062164-B	37
		Polyclad Easy	7 hrs	100062164-A	37
		Polyclad Elbow L - TIGer	14 hrs	100062164-C	37
		Polyclad SPX	18 hrs	100062163-B	37
		Polyclad TWINTIGer-C or L	21 hrs	100062163-C	37
FM-UHP		UHP	4 hrs	100062154-B	35
FM-MW		MW	4 hrs	100062154-A	36
FM-MU		MU	7 hrs	100062155	37
FM-TS		TS34	7 hrs	100062156	38
		TS 8/75	14 hrs	100062157- A	39
		TP60	14 hrs	100062157- A	40
FM-Polycar		Polycar 30	14 hrs	100062161	41
		Polycar 60-2	14 hrs	100062161	41
		Polycar MP	21 hrs	100062165	41
		Polycar PLC	14 hrs	100062161	41
FM-Polyfil		Polyfil	3 hrs	100083741	46
FM-SPX		SPX	32 hrs	100062166	47
FM-Polyview		Polyview - Camera	7 hrs	100062179	50
		Polyview - HD installation	7 hrs	100062187	51

CUSTOM TRAINING					
Training Code	Power source	Head / Software	Duration	Ref.	Page
FM-XX	Customised	Customised	7 hrs	100071588	52

Polysoude: associated services

Advice and technical assistance
An application welding specialist in your region will advise you on the appropriate welding process and equipment for your application.

Maintenance / Repair
Maintenance and repair operations can be carried out either at Polysoude sites or on-site via our service network.

Commissioning / Training
A comprehensive training programme ensures you can start using your equipment immediately and efficiently.

Equipment rental
Gain flexibility for your production!
A wide range of equipment is available for rental from our fleet.

Your partners worldwide

Polysoude operates globally and provides high-quality local services. Contact your nearest Polysoude representative from the list on the side, or find our subsidiaries and distributors on the global network map below.

SUBSIDIARIES AND DISTRIBUTORS

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A MEMBER OF GLOBAL WELDING TECHNOLOGIES

POLYSOUDE
THE ART OF WELDING

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