



Polysoude

Training Guide

Attentive to your needs to be better!

1 goal

Propose training courses based on your requirements

1 solution

Implement actions through accurate monitoring of satisfaction ratings

Satisfaction of trainees on Polysoude training courses* :

TRAINER

- Mastery of the subject: 99%
- Teaching quality: 98%
- Fulfilment of expectations: 94%

ENVIRONMENT AND TEACHING FACILITIES**

- Welcome: 95%
- Training room: 95%
- Equipment: 98%
- Course materials: 94%

TRAINING

- Prior information on the content and objectives: 95%
- Content adapted to my level: 92%
- Theoretical content: 94%
- Acknowledgement of your expectations: 96%

**96% of trainees
who attended our
courses are very
satisfied**



* Results based on a total of 88 satisfaction ratings from January 2018 to September 2019

** Results corresponding to trainings in Nantes only

Your success is our concern



With over 60 years' experience in the design of industrial TIG welding and cladding installations, Polysoude shares its know-how and its expertise through a multitude of training programmes in the welding field.

This year, the Polysoude team is once again delighted to present its updated Training Guide. This Guide will help you choose the right training for your staff to develop their know-how and leverage the use of your Polysoude equipment.

In the current economic climate, the competence of your training partner is a decisive factor which is why all our training courses are provided by Polysoude professionals – welding specialists whose priority is to improve your company's welding quality and productivity. Polysoude listens to the market, its stakeholders and, most importantly, to you in order to stay in tune with your training needs.

We offer user and maintenance training in both level 1 and level 2 so that everyone can find the formula that suits him best. Specially tailored custom training can also be provided by our trainers.

We look forward to meeting you to pass on our knowledge and hone your skills on Polysoude equipment.

A handwritten signature in blue ink that reads "Hani G.P.".

2014 - Original edition - revision 10/2019 - Polysoude S.A.S. Nantes France.

The photos, diagrams and drawings are given to promote understanding and are therefore not contractual.



All copyrights reserved. This product guide shall not be copied, either in part or whole, in any form or by any means whatsoever, whether electronic or mechanical, including photocopying, recording or the use of computer medium, without the publisher's written permission.

Printed in France.

Published by Polysoude, Nantes, France.

www.polysoude.com - info@polysoude.com

Contents

Why train with Polysoude!	7
User training on Power Sources with Polysoude welding or cladding equipment.....	9
P4.....	10
User Training - Level 1.....	10
User Training - Level 2.....	11
P6 CW.....	12
User Training - Level 1.....	12
User Training - Level 2.....	13
P6 HW.....	14
User Training - Level 1.....	14
User Training - Level 2.....	15
PC.....	16
PC 600 / PC 300 TR - Orbital.....	16
User Training - Level 1.....	16
User Training - Level 2.....	17
PC 600 / PC 300 TR / PC 100 TR - Automated	18
User Training - Level 1.....	18
User Training - Level 2.....	19
PC 350 AC-DC with external Tetrix source	20
User Training - Level 1.....	20
User Training - Level 2.....	21
PC 600 / PC 600 TIG ^{er}	22
User Training - Level 1.....	22
User Training - Level 2.....	23
PolyClad 	24
User Training - Initial.....	24
User Training - Additional.....	25
PolyClad 	26
User training	26

Maintenance of Polysoude power sources, welding heads & weld overlay installations.....	27
P4.....	28
Maintenance Training - Level 1.....	28
Maintenance Training - Level 2.....	29
P6 CW.....	30
Maintenance Training - Level 1.....	30
Maintenance Training - Level 2.....	31
P6 HW.....	32
Maintenance Training - Level 1.....	32
Maintenance Training - Level 2.....	33
PC.....	34
Maintenance Training - Level 1.....	34
Maintenance Training - Level 2.....	35
UHP.....	36
MW.....	37
MU IV.....	38
TS 34.....	39
TS 8/75.....	40
TP 60.....	41
Polycar 30, 60-2, PLC.....	42
Polycar MP.....	43
Polyfil.....	44
SPX.....	45
PolyClad.....	46
Tailored training courses.....	47
User training request.....	48
Maintenance training request.....	49
Practical Information.....	51
Training Conditions.....	51
Accommodation nearby.....	52

Why train with Polysoude!

Train directly with the manufacturer and benefit from its experience and accompaniment throughout the world.

With more than 60 years of experience, Polysoude has mastered the design and manufacture of orbital welding systems. This expertise enables us today to offer you our quality knowledge and adapted to the requirements of our clients. Beginners or experienced technicians, you will find at Polysoude the training that suits you. For this, Polysoude has developed comprehensive programs that allow the use of innovative technology adapted to the evolutions of the industrial sector.

High value expertise

Polysoude disposes of a team of experienced trainers that have worked in various projects both in France and abroad. With their strong knowledge, our trainers can adapt easily in response to your requirements, and give you appropriate solutions to your requests.

Our team of experienced trainers is able to meet specific requirements in various fields such as energy, petrochemical, aerospace, as well as other sectors such as food, pharmaceutical and microelectronics.

A wide range of training combining THEORY and PRACTICE for an efficient handling

At Polysoude, we have a choice of courses that allow us to offer you diversified programs adapted to all skill levels. We cover the most simple and complex needs, and we also offer tailor-made and flexible training according to you. All training courses in our catalog can be delivered both at home and on your site.

Our training courses are aimed at a wide public (beginner welders, level 1 technicians and experienced technicians) and are awarded with a certification.

A worldwide presence

Throughout its 60 years of existence, Polysoude has been able to expand its presence throughout the world and build a trusting relationship with its customers. Our strength: sustained collaboration with specialists working in synergy, serving a dynamic customer objective "zero risk / zero defect". Still at the forefront of research and development, our experts are today the leaders combining experience and innovation.



Icons & legends



Use & welding training



Maintenance training



Level 1 training



Level 2 training

User training on Power Sources with Polysoude welding or cladding equipment





P4

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of library welding procedures or an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated welding heads	Duration	Reference
MW or UHP or TS (without wire)	14h00 (2 days)	100062142-A
TS with wire	21h00 (3 days)	100062145-A
MU	21h00 (3 days)	100071589-A

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the P4 power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the welding head

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of programming

- Finding/duplicating a welding procedure
- Completing documentation
- Changing programme parameters
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme



P4 User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody with experience of using an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering programming

- Setting up the power source
- Finding/creating a welding procedure
- Selecting axes (controls)
- Completing documentation
- Setting programme parameters
- Managing the programs
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme

Associated welding heads	Duration	Reference
MW or UHP or TS (without wire)	14h00 (2 days)	100062143-A
TS with wire	21h00 (3 days)	100071591-A
MU	28h00 (4 days)	100071593-A



P6 CW

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of library welding procedures or an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated welding heads	Duration	Reference
MU or TS	28h00 (4 days)	100062146-A
Polycar	32h00 (4½ days)	100071590-A

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the P6 CW power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the welding head

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of programming

- Finding/duplicating a welding procedure
- Completing documentation
- Changing programme parameters
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme



P6 CW

User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody having experience with an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering programming

- Setting up the power source
- Finding/creating a welding procedure
- Selecting axes (controls)
- Completing documentation
- Setting programme parameters
- Managing the programs
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)

Associated welding heads	Duration	Reference
MU or TS	28h00 (4 days)	100071592-A
Polycar	32h00 (4½ days)	100071594-A



P6 HW

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of library welding procedures or an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated welding heads	Duration	Reference
Polycar or MU IV 195 Hot Wire	32h00 (4½ days)	100071590-B

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the P6 HW power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the welding head

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of programming

- Finding/duplicating a welding procedure
- Completing documentation
- Changing programme parameters
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme



P6 HW

User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody with experience of using an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering programming

- Setting up the power source
- Finding/creating a welding procedure
- Selecting axes (controls)
- Completing documentation
- Setting programme parameters
- Managing the programs
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections
- The Graphical User Interface (GUI)
- Selecting the appropriate welding procedure and programme
- Get to grips with the remote control
- Starting welding

Developing welding parameters on new and/or specific applications

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters

Process results

- Reading the deltas
- Printing tickets
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)

Associated welding heads	Duration	Reference
Polycar or MU IV 195 Hot Wire	32h00 (4½ days)	100071594-B



PC 600 / PC 300 TR - Orbital

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of a welding procedure of an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated welding heads	Duration	Reference
Orbital welding heads	32h00 (4½ days)	100071826

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the PC power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the Polycar or automated equipment

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of POWin programming

- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- Identifying the axes (controls) on the front of the power source
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme



PC PC 600 / PC 300 TR - Orbital

User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody having experience with an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated welding heads	Duration	Reference
Orbital welding heads	32h00 (4½ days)	100071827

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering POWin programming

- Setting the machine pool
- Selecting axes (controls)
- Creating/copying an application/programme
- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- 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
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)



PC PC 600 / PC 300 TR / PC 100 TR - Automated User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of a welding procedure of an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated equipment	Duration	Reference
TIG CW/HW, Plasma, Aluminium (DC) automated installation	32h00 (4½ days)	100062151

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the PC power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the Polycar or automated equipment

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of POWin programming

- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- Identifying the axes (controls) on the front of the power source
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme



PC PC 600 / PC 300 TR / PC 100 TR - Automated User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody having experience with an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering POWin programming

- Setting the machine pool
- Selecting axes (controls)
- Creating/copying an application/programme
- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- 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
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)

Associated equipment	Duration	Reference
TIG CW/HW, Plasma, Aluminium (DC) automated installation	32h00 (4½ days)	100062152



PC PC 350 AC-DC with external Tetrax source

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Understand the external Tetrax source functioning
- Use the welding installation on the basis of an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated equipment	Duration	Reference
TIG (AC) CW automated installation - Aluminium	32h00 (4½ days)	100062185

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes

TIG THEORY

- The welding positions
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the PC power source

- Technical characteristics

INTRODUCTION TO THE NOTION OF AXES (CONTROLS)

Knowledge of the Polycar or automated equipment

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of POWin programming

- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- Identifying the axes (controls) on the front of the power source
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool (JOB notion)
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme



PC PC 350 AC-DC with external Tetrax source

User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Master the external Tetrax source use
- Use the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody having experience with an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the TIG process
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering POWin programming

- Setting the machine pool
- Selecting axes (controls)
- Creating/copying an application/programme
- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- 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
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)

Associated equipment	Duration	Reference
TIG (AC) CW automated installation - Aluminium	32h00 (4½ days)	100062186



PC PC 600 / PC 600 TIG^{er}

User Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Discern the characteristics of the power source and welding head
- Understand power source programming
- Use the welding installation on the basis of library welding procedures or an existing programme
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Basic electrical engineering and electronics knowledge

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated equipment	Duration	Reference
Weld overlay installation —TIG CW - HW - TIG ^{er}	32h00 (4½ jours)	100062183

► Training course content

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes
- The weld overlay theory with POWin or CNC software use
- Preparations and groove types
- Weld standards, inspections and acceptance criteria

Knowledge of the PC 600 HW power source

- Technical characteristics

Knowledge of the cladding torch

- Technical characteristics
- Power supply and connections

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering the POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of POWin programming

- Completing documentation
- Changing programme parameters
- Exporting/importing a welding procedure

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- Identifying the axes (controls) on the front of the power source
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Analysing and correcting a cycle during welding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme



PC PC 600 / PC 600 TIG^{er}

User Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Master power source programming
- Using the welding installation
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody having experience with an automated or orbital welding installation

► Preconditions

- Level 1 training completed
- Significant welding experience on the installation.
- Basic theoretical and practical knowledge of the plasma process

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

INTRODUCTION

REMINDER OF LEVEL 1 TRAINING

PRACTICE

Mastering POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Mastering POWin programming

- Setting the machine pool
- Selecting axes (controls)
- Creating/copying an application/programme
- Completing documentation
- Changing programme parameters and deltas
- Exporting/importing a programme

Using the welding installation

- Preparing the installation
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting welding
- 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
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters (if Hot Wire available on the installation)

Process results

- Reading the deltas
- Analysing the weld bead
- Modifying the programme
- Analysing acquisition unit data (if acquisition unit available on the installation)

Associated equipment	Duration	Reference
Weld overlay installation —TIG CW - HW - TIG ^{er}	32h00 (4½ jours)	100062184



PolyClad CNC

User Training - Initial



► Objectives

At the end of the course, the trainees will be able to

- Understand the programming
- Use the weld overlay installation on the basis of library cladding procedures or an existing programme
- Analyse and correct a cycle during cladding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding or weld overlay installation

► Preconditions

- Welding experience
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated equipment	Duration	Reference
PolyClad 3C	42h00 (6 days)	100069945-A
PolyClad SPX	42h00 (6 days)	100069945-B

► Training course content

PRESENTATION OF THE INSTALLATION

- The power source (master/slave/cooling unit)
- The control cabinet
- CNC axes (main functions)

CONTROL CABINET

- Prepare the installation
- GUI presentation
- Understanding the various icons through the menus
- Create a tool
- Create a new welding programme

NPAD PRESENTATION

- Welding head moving in space
- Physical and tactile buttons presentation
- Presentation of software pages

THEORY OF TIG (GTAW) PROCESS OR TIG^{er} TECHNOLOGY

FUNCTIONS OF THE WELDING INSTALLATION

- Setting (centring) on a tube/pipe
- Setting by means of a positioner or SPX
- Programming of welding parameters
- Possible operations during a welding cycle
- Changing of parameters during a welding cycle
- Continuing an interrupted welding cycle
- Correction mode (downslope and continuing the welding cycle after a correction)
- Weld cycle simulation (without arc, wire, hot wire, etc.)
- Use of an NPad
- Stop of the installation during a welding cycle
- Restart of the installation / Continuing the interrupted welding cycle
- Creation of a welding program for a tube/pipe application
- Creation of a welding program for a disc application
- Creation of a chained welding sequence (execution of an entire multipass welding task)
- Application of a repair welding program
- Execution of a zero point correction

HANDS ON WELDING WITH A POLYCLAD CNC INSTALLATION

- Welding of a customer specific application

CNC: Computer Numerical Control

* Only for PolyClad SPX



PolyClad CNC

User Training - Additional



► Objectives

At the end of the course, the trainees will be able to

- Master the CNC programming
- Using the weld overlay installation (2 specific applications max.)
- Develop parameters on specific applications
- Analyse and correct a cycle during welding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding installation

► Preconditions

- Welding experience
- User initial training completed
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

UNIT 1 - 1 DAY

- Theory of TIG (GTAW) process or TIG^{er} technology

UNIT 2 - 2 DAYS

- Programming a bore-to-bore application
- Programming a cross-bore application
- Practice

UNIT 3 - 2 DAYS

- Programming a groove application
- Programming a cone application
- Practice

UNIT 4 - 1 DAY

- Programming with the application patch
- Practice

Associated equipment	Duration	Reference
PolyClad 3C or SPX	14h00 (2 days) ^(a)	100069946

(a) Duration for specific applications



► Objectives

At the end of the course, the trainees will be able to

- Understand the programming
- Use the weld overlay installation on the basis of library cladding procedures or an existing programme
- Analyse and correct a cycle during cladding
- Process results

► Target audience

- Operators, technicians or anybody required to use an automated or orbital welding or weld overlay installation

► Preconditions

- Welding experience
- Use of computers (basic knowledge, Windows environment, use of icons, menus, etc.)

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Associated equipment	Duration	Reference
PolyClad TWIN-TIG ^{er} -C or -L	32h00 (4½ days)	100069945-C

► Contenu de la formation

INTRODUCTION

THEORY

General welding knowledge

- The various arc welding processes
- Weld overlay theory by using POWin software
- Preparation and groove types

Knowledge of PC power source

- Technical characteristics
- Introduction to the notion of axes (controls)

Knowledge of axis operation (controls)

- Main functions of the axes (controls)

PRACTICE

Mastering the POWin navigation

- Finding your way through the menus
- Differentiating the various icons

Understanding the basics of POWin programming

- Completing documentation
- Changing programme parameters
- Exporting/importing a welding procedure

Using the weld overlay installation

- Preparing the installation.
- Power supply and connections (USB/RS32)
- Selecting the appropriate programme
- Getting to grips with and learning how to read the remote control
- Starting cladding
- Identifying the axes (controls) on the front of the power source
- Starting and setting parameters for the acquisition unit (if acquisition unit available on the installation)

Developing welding parameters on new and/or specific applications

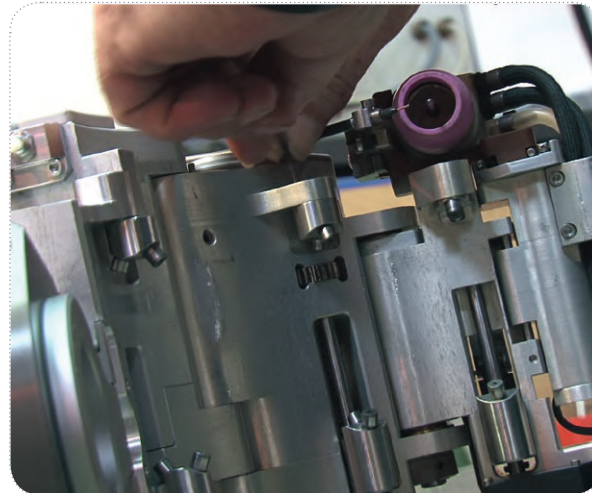
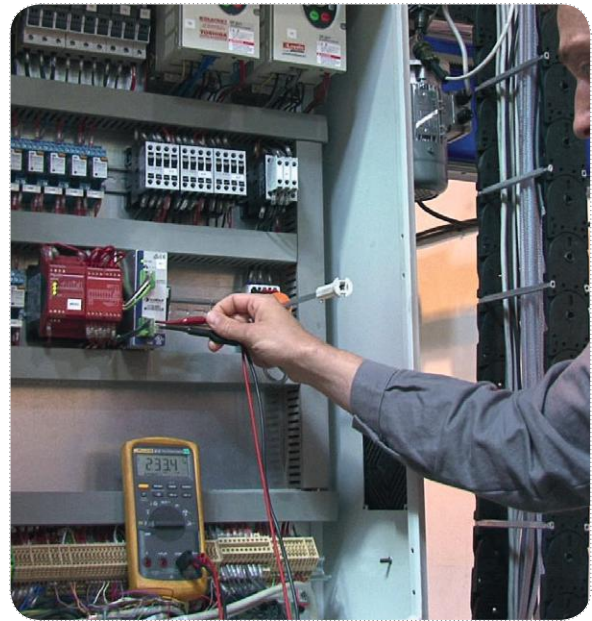
Analysing and correcting a cycle during cladding

- Observing and adjusting the weld pool
- Examining and intervening on the installation
- Studying and operating on Hot Wire parameters

Process results

- Reading the deltas
- Analysing the weld overlay bead
- Modifying the programme

Maintenance of Polysoude power sources, welding heads & weld overlay installations





P4

Maintenance Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Diagnose a simple failure
- Identify the significant symptoms
- Perform simple troubleshooting with the aid of Polysoude Telephone Support
- Perform level 1 maintenance
- Use the instruction manuals

► Target audience

- Welding operators or beginner maintenance technicians

► Preconditions

- Basic electrical engineering and electronics knowledge

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE P4 POWINER SOURCE

- The various power sources in the range
- The options
- The remote control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing on the USB flash drive
- Disabling safety features on the Graphical User Interface (GUI) and precautions
- Operation and location of One-Wire chips

DOCUMENTATION

- Instruction manuals
- Equipment Return form

Equipment	Duration	Reference
P4 power source	4h00 (½ day)	100062170

Find all maintenance training programmes for UHP, MW, MU, and TS welding heads from page 36 to page 39



P4

Maintenance Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Perform level 1 and level 2 maintenance including power source calibration*
- Maintain the P4 power source on their own using a suitable methodology
- Use the instruction manuals

*N.B. The tooling required to calibrate the power source is not supplied during training. Please contact us to procure it.

► Target audience

- Level 2 maintenance technician needing to be 100% self-sufficient in maintaining this Polysoude equipment

► Preconditions

- Electrical engineering and electronics knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Equipment	Duration	Reference
P4 power source	7h00 (1 day)	100062173

► Training course content

OVERVIEW OF THE P4 POWINER SOURCE

- The various power sources in the range
- The options
- The remote control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

INTRODUCTION TO GRAPHICAL USER INTERFACE (GUI) OPERATION

OPERATION OF WELDING CURRENT CONTROL

- Current control
- Principle and operation of the sources
- High Frequency (HF)
- Welding set voltage
- Current calibration

OPERATION OF THE ROTATION AND WIRE FUNCTIONS

- Control principle
- The various motors and encoders
- Rotation and wire axis card

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing 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

Find all maintenance training programmes for UHP, MW, MU, and TS welding heads from page 36 to page 39



P6 CW

Maintenance Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Diagnose a simple failure
- Identify the significant symptoms
- Perform simple troubleshooting with the aid of Polysoude Telephone Support
- Perform level 1 maintenance
- Use the instruction manuals

► Target audience

- Welding operators or beginner maintenance technicians

► Preconditions

- Basic electrical engineering and electronics knowledge

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE P6 CW POWINER SOURCE

- The various power sources in the range
- The options
- The remote-control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing 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
- Equipment Return form

Equipment	Duration	Reference
P6 CW power source	7h00 (1 day)	100062171

Find all maintenance training programmes for MU, TS, Polycar and SPX welding heads from page 38 to page 45



P6 CW

Maintenance Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Perform level 1 and level 2 maintenance including power source calibration*
- Maintain the P6 CW power source on their own using a suitable methodology
- Use the instruction manuals

*N.B. The tooling required to calibrate the power source is not supplied during training. Please contact us to procure it.

► Target audience

- Level 2 maintenance technician needing to be 100% self-sufficient in maintaining this Polysoude equipment

► Preconditions

- Electrical engineering and electronics knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE P6 CW POWINER SOURCE

- The various power sources in the range
- The options
- The remote-control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

INTRODUCTION TO GRAPHICAL USER INTERFACE (GUI) OPERATION

OPERATION OF WELDING CURRENT CONTROL

- Current control
- Principle and operation of the current source
- High Frequency (HF)
- Welding set voltage
- Current calibration

OPERATION OF THE ROTATION AND WIRE FUNCTIONS

- Control principle
- The various motors and encoders
- Rotation and wire axis card

OPERATION OF OSCILLATION AND ARC VOLTAGE CONTROL

- Single and double-pole stepper motors
- Oscillation slide
- Arc voltage control principle
- Controlling workpiece touchdown
- AVC and Oscillation axis cards

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing 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

Equipment	Duration	Reference
P6 CW power source	14h00 (2 days)	100062172

Find all maintenance training programmes for MU, TS, Polycar and SPX welding heads from page 38 to page 45



P6 HW

Maintenance Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Diagnose a simple failure
- Identify the significant symptoms
- Perform simple troubleshooting with the aid of Polysoude Telephone Support
- Perform level 1 maintenance
- Use the instruction manuals

► Target audience

- Welding operators or beginner maintenance technicians

► Preconditions

- Basic electrical engineering and electronics knowledge

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE P6 HW POWINER SOURCE

- The various power sources in the range
- The options
- The remote-control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing 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
- Equipment Return form

Equipment	Duration	Reference
P6 HW power source	7h00 (1 day)	100074582

Find all maintenance training programmes for MU, Polycar and SPX welding heads from page 38 to page 45



P6 HW

Maintenance Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Perform level 1 and level 2 maintenance including power source calibration*
- Maintain the P6 HW power source on their own using a suitable methodology
- Use the instruction manuals

*N.B. The tooling required to calibrate the power source is not supplied during training. Please contact us to procure it.

► Target audience

- Level 2 maintenance technician needing to be 100% self-sufficient in maintaining this Polysoude equipment

► Preconditions

- Electrical engineering and electronics knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Equipment	Duration	Reference
P6 HW power source	14h00 (2 days)	100074583

Find all maintenance training programmes for MU, Polycar and SPX welding heads from page 38 to page 45

► Training course content

OVERVIEW OF THE P6 HW POWINER SOURCE

- The various power sources in the range
- The options
- The remote-control
- The serial number

CONNECTORS

LAYOUT, DESCRIPTION AND TECHNOLOGY

CONNECTIONS

- Connecting the mains power supply
- Connecting the welding head

INTRODUCTION TO GRAPHICAL USER INTERFACE (GUI) OPERATION

OPERATION OF WELDING CURRENT CONTROL

- Current control
- Principle and operation of the current source
- High Frequency (HF)
- Welding set voltage
- Current calibration

OPERATION OF THE ROTATION AND WIRE FUNCTIONS

- Control principle
- The various motors and encoders
- Rotation and wire axis card

OPERATION OF OSCILLATION AND ARC VOLTAGE CONTROL

- Single and double-pole stepper motors
- Oscillation slide
- Arc voltage control principle
- Controlling workpiece touchdown
- AVC and Oscillation axis cards

HOT WIRE OPERATION

- Current source
- Safety features

FLASH DRIVE AND SOFTWARE

- The versions
- Fitting and removing the flash drive
- Reading and writing 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



PC PC 600 / PC 300 TR / PC 100 / PLASMA Maintenance Training - Level 1



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Diagnose a simple failure
- Identify the significant symptoms
- Perform simple troubleshooting with the aid of Polysoude Telephone Support
- Perform level 1 maintenance
- Use the instruction manuals

► Target audience

- Welding operators or Level 1 maintenance technicians

► Preconditions

- Basic electrical engineering and electronics knowledge

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

CONSTITUTION OF A PC POWER SOURCE

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

DESCRIPTION OF THE SUBASSEMBLIES

OVERVIEW OF THE AXES (CONTROLS) AND INTRODUCTION TO THE 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
- Equipment Return form

Equipment	Duration	Reference
PC 600 / PC 300 TR / PC 100 / PLASMA power sources	7h00 (1 day)	100062169

Find all maintenance training programmes for TP 60, Polycar and SPX welding heads from page 41 to page 45



PC PC 600 / PC 300 TR / PC 100 / PLASMA Maintenance Training - Level 2



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of the welding power source
- Perform level 1 and level 2 maintenance including power source calibration*
- Maintain the PC power source on their own using a suitable methodology
- Use the instruction manuals

*N.B. The tooling required to calibrate the power source is not supplied during training. Please contact us to procure it.

► Target audience

- Level 2 maintenance technician needing to be 100% self-sufficient in maintaining this Polysoude equipment

► Preconditions

- Electrical engineering and electronics knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

Equipment	Duration	Reference
C 600 / PC 300 TR / PC 100 / PLASMA power sources	17h00 (2½ days)	100062174

► Training course content

CONSTITUTION OF A PC POWER SOURCE

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

DESCRIPTION OF THE SUBASSEMBLIES

OVERVIEW OF THE AXES (CONTROLS) AND INTRODUCTION TO THE POWIN PROGRAMMING SOFTWARE

OPERATION OF THE SEQUENCER AXIS

- Principle and operation

OPERATION OF WELDING CURRENT CONTROL

- Principle and operation of the sources
- Current control
- Current calibration
- High Frequency (HF)
- Welding set voltage

OPERATION OF THE ROTATION AND WIRE FUNCTIONS

- Speed regulation principle
- The various motors and encoders
- Calibration of rotation and wire movements
- Rotation and wire axis card

OPERATION OF OSCILLATION AND ARC VOLTAGE CONTROL

- Single and double-pole stepper motors
- Oscillation slide
- Arc voltage control principle
- Controlling workpiece touchdown
- AVC and Oscillation axis cards

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Corrective maintenance

DOCUMENTATION

- Manuals
- Equipment Return form

Find all maintenance training programmes for TP 60, Polycar and SPX welding heads from page 41 to page 45



UHP

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a UHP welding head
- Perform full maintenance
- Maintain the UHP welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE UHP WELDING HEAD

IDENTIFICATION OF UHP WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

- Choosing the gas flow rate
- Choosing and fitting the tube clamp inserts
- Choosing and adjusting the electrode

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Drive unit
- Handle
- Motorisation
- Bundle

DISASSEMBLING OF THE UHP WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE UHP WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
UHP	4h00 (½ day)	100062154-B



MW Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a MW welding head
- Perform full maintenance
- Maintain the MW welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE MW WELDING HEAD

IDENTIFICATION OF MW WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

- Choosing the gas flow rate
- Choosing and fitting the tube clamp inserts
- Choosing and adjusting the electrode
- Elbow welding kit
- Choosing the type of electrode offset

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Drive unit
- Handle
- Motorisation
- Remote control
- Bundle

DISASSEMBLING OF THE MW WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE MW WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
MW	4h00 (½ day)	100062154-A



MU IV

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a MU IV welding head
- Perform full maintenance
- Maintain the MU IV welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE MU IV WELDING HEAD

IDENTIFICATION OF MU IV WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

- Adjusting electrode grinding
- Choosing and assembling the gas lens
- Choosing the gas flow rate
- Polygain characteristics

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Clamps
- Plates
- AVC/Oscillation (if available on the welding head)
- Bundle

DISASSEMBLING THE MU IV WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts:
- Changing a pin
- Changing a roll
- Changing a bare Polygain

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE MU IV WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
MU IV	7h00 (1 day)	100062155



TS 34

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a TS 34 welding head
- Perform full maintenance
- Maintain the TS 34 welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE TS RANGE

IDENTIFICATION OF TS WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Torch
- Bundle

DISASSEMBLING THE TS WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE TS WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
TS 34	7h00 (1 day)	100062156



TS 8/75

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a TS 8/75 welding head
- Perform full maintenance
- Maintain the TS 8/75 welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE TS RANGE

IDENTIFICATION OF TS WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Torch
- Wire feeder system
- AVC (if available on the welding head)
- Pneumatic system
- Bundle

DISASSEMBLING THE TS WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE TS WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
TS 8/75	14h00 (2 days)	100062157- A



TP 60

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a TP 60 welding head
- Perform full maintenance
- Maintain the TP 60 welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE TP 60 WELDING HEAD

IDENTIFICATION OF TP 60 WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Torch
- Bundle

DISASSEMBLING THE TP 60 WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE TP 60 WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
TP 60	14h00 (2 days)	100062157-B



Polycar 30, 60-2, PLC

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a Polycar welding head
- Perform full maintenance
- Maintain the Polycar carriage welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE POLYCAR WELDING HEAD

IDENTIFICATION OF POLYCAR CARRIAGE WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Torch
- Wire feeder system
- AVC/Oscillation
- Bundle
- Guide ring

DISASSEMBLING THE POLYCAR CARRIAGE WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

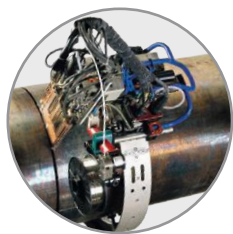
REFITTING THE POLYCAR WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
Polycar 30, 60-2, PLC	14h00 (2 days)	100062161



Polycar MP

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a Polycar MP welding head
- Perform full maintenance
- Maintain the Polycar MP welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE POLYCAR MP WELDING HEAD

IDENTIFICATION OF POLYCAR MP WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Torch
- Wire feeder system
- AVC/Oscillation
- Bundle
- Guide ring

DISASSEMBLING THE POLYCAR MP WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE POLYCAR MP WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
Polycar MP	21h00 (3 days)	100062165



Polyfil

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Understand of the functioning of the POLYFIL
- Be capable of making a level maintenance 1 and of level 2
- Acquire a methodology in the maintenance of your equipment
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE POLYFIL WIRE FEEDER

IDENTIFICATION OF THE POLYFIL WIRE FEEDER COMPONENTS

PRECAUTIONS FOR USE

- Choice of roller
- Choice of wire sheath
- Choice of wire nozzle

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Wire feeder mechanism
- Wire coil

DISASSEMBLING THE WIRE FEEDER

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing wear parts
- Changing consumable parts

MAINTENANCE METHODOLOGY

- Curative Maintenance
- Preventive Maintenance
- Help(Assistant) to the diagnosis

REFITTING THE POLYFIL WIRE FEEDER

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
External wire feeder, Polyfil-3, Polyfil compact	3h00 (½ day)	100083741



SPX

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Describe the operation of a SPX welding head
- Perform full maintenance
- Maintain the SPX welding head on their own using a suitable methodology
- Use the instruction manuals

► Target audience

- Experienced maintenance technicians

► Preconditions

- Mechanical and electro-mechanical engineering knowledge
- Maintenance experience

► Evaluating the course

- Trainee evaluation questionnaire
- Training certificate awarded
- Training evaluation form

► Training course content

OVERVIEW OF THE SPX WELDING HEAD

IDENTIFICATION OF SPX WELDING HEAD COMPONENTS

PRECAUTIONS FOR USE

- Adjusting electrode grinding
- Choosing the gas

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Rotating
- Torch
- Wire feeder unit
- AVC/Oscillation
- Bundle

DISASSEMBLING THE SPX WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE SPX WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

Equipment	Duration	Reference
SPX	32h00 (4½ days)	100062166



PolyClad

Maintenance Training



► Objectives

At the end of the course, the trainees will be able to:

- Be capable of making a complete maintenance
- Use the instruction manuals

► Target audience

- Technician or maintenance technician

► Preconditions

- Knowledge in mechanics and in electromechanical with experience in maintenance

► Evaluating the course

- Questionnaire of evaluation of the training course
- Trainees certificate (training course)

Equipment	Duration	Reference
PolyClad Easy	7h00 (1 day)	100062164-A
PolyClad 3C	14h00 (2 days)	100062163-A
PolyClad C&B	14h00 (2 days)	100062164-B
PolyClad SPX	18h00 (2½ days)	100062163-B
PolyClad TWIN-TIGer-C or L	21h00 (3 days)	100062163-C
PolyClad Elbow L - TIGer	14h00 (2 days)	100062164-C

► Training course content

OVERVIEW OF THE WELD OVERLAY INSTALLATION

IDENTIFICATION OF THE WELDING HEAD COMPONENTS

PRÉCAUTIONS FOR USE

OVERVIEW AND DESCRIPTION OF THE SUBASSEMBLIES

- Motorisation
- Drive unit
- Rotating
- Torch
- Wire feeder unit
- AVC/Oscillation
- Bundle

DISASSEMBLING THE WELDING HEAD

PRESENTATION AND CLEANING OF REGULARLY INSPECTED PARTS

- Changing emergency parts
- Changing wear parts

MAINTENANCE METHODOLOGY

- Preventive maintenance
- Troubleshooting guide
- Corrective maintenance

REFITTING THE WELDING HEAD

WELDING TESTS

DOCUMENTATION

- Manuals
- Equipment Return form

...Have you considered it?



If, having looked through our training programmes, you find them interesting but not quite suited to your needs, do not despair!

Polysoude can offer solutions specially tailored to your needs!

User training:

Ref.100062153

7-hour modules

Objectives and content: determined according to your equipment and needs

Maintenance training:

Ref.100071588

7-hour modules

Objectives and content: determined according to your equipment and needs

All custom training programmes are subject to quotation.

User training request

Date:

Company:

Email:

1. Trainee registration (to optimise training, we recommended registering no more than 3 trainees).

Trained staff - Name of trainees -	Level of qualification – please specify: Operator / Qualified Worker / Technician	Experience with the equipment concerned (please state duration)

2. For which welding process is training required?

- ☐ TIG (GTAW) ☐ PLASMA (PAW) ☐ Hot Wire option (for TIG or PLASMA)

3. Welding application :

Type of application:

Materials welded:

Conditions of use, constraints, etc.:

Diameter and thickness range:

Welding position:

Samples provided: ☐ Yes ☐ No

Filler wire provided: ☐ Yes ☐ No

4. On what type(s) of equipment or installation are you looking to train your staff?

- ☐ Equipment you have just acquired
☐ Equipment that you own
☐ Equipment made available by Polysoude

} Please specify the type of equipment below

o Type of Power Source:

.....

☐ Other: Specify which type:

.....

o Software (Only PC power sources):

.....

o Welding head:

.....

☐ With AVC/OSC ☐ With integrated wire feeder

o Type(s) of wire feeder (if external):

.....

o Special or mechanised installation:

.....

☐ Other: Please specify:

.....

5. What are your goals in terms of skills to be acquired for your staff?

☐ Level 1: Basic training

Goals:

- o Identifying power source and welding head characteristics
- o Programming the power source
- o Using the welding installation on the basis of library welding procedures or existing program

- o Analysing and correcting a cycle during welding
- o Processing results

☐ Level 2: Expert training (NB: level 1 must be assimilated to access this level)

Goals:

- o Mastering power source programming
- o Developing welding parameters on specific applications

- o Analysing and correcting a cycle during welding
- o Processing results

Special requests:

6. Where and when would you like the training to take place?

- ☐ Polysoude (Nantes) ☐ Other venue ☐ Preferred period:.....

7. Language requested for training?

- ☐ French ☐ English ☐ German ☐ Other please specify:

Please return your training request to the following address:
E-mail: training@polysoude.com - Fax: +33 (0) 240 68 57 02



Maintenance training request

Date:

Company:

Email:

1. Trainee registration (to optimise training, e recommended registering no more than 3 trainees)

Trained staff - Name of trainees -	Level of qualification – please specify: Operator / Qualified Worker / Technician	Experience with the equipment concerned (please state duration)

2. On what type(s) of equipment or installation are you looking to train your staff?

- ☐ Equipment you have just acquired
- ☐ Equipment that you own
- ☐ Equipment made available by Polysoude

} Please specify the type of equipment below

o Type of Power Source:

o Welding head:

- ☐ With AVC/OSC
- ☐ With integrated wire feeder

☐ Other: please specify which type

o Type(s) of wire feeder (if external):

o Software (only PC power sources):

o Special or mechanised installation:

☐ Other: Please specify:

3. What are your goals in terms of skills to be acquired for your staff?

☐ Level 1: Basic training

- Goals:**
- o State a simple breakdown
 - o Identify significant symptoms

- o Perform an easy repair by being helped by telephone support.

☐ Level 2: Expert training

- Goals:**
- o Perform a complete maintenance of your Polysoude welding equipment in autonomy including calibration (for power sources).

4. Where and when would you like the training to take place?

- ☐ Polysoude (Nantes)
- ☐ Other venue
- ☐ Preferred period:.....

5. Language requested for training?

- ☐ French
- ☐ English
- ☐ German
- ☐ Other please specify:

Special requests:

Please return your training request to the following address :
E-mail: training@polysoude.com - Fax: +33 (0) 240 68 57 02



Training Conditions

TEACHING, TECHNICAL AND SUPERVISORY MEANS

- Theoretical sequences alternating with practical application exercises.
- Training provided by a Polysoude technician, expert in his field.
- Training in the workshop and classroom. For on-site training, a classroom and video projector must be provided for the trainer.
- Personal protection equipment is mandatory during training.
- A welding installation with available representative samples must be supplied by the customer.

TRAINING CONDITIONS

- Training held in Nantes or on site.
- We recommend a maximum of 3 trainees for optimum effectiveness.
- All training sessions cancelled lately (less than 10 working days before the beginning of training) will lead to the invoice of 100% of travel costs and 50% of labour costs for this service. For last minute cancellation (less than 1 week before the beginning of intervention), the full amount of the training will be invoiced.
- Our interventions or services are limited to non-classified areas for radiation protection.
- The training courses are available in French, English or any other language agreed in the training contract. The trainees should be able to understand the training course in their chosen language, in addition to being able to ask technical questions. Normally the responsibility for arranging a translator rests with the client. If a translator is deemed necessary, Polysoude should be informed so that the trainer can take it into consideration when organising the training course.
- The trainer has the right to exclude persons from the training that are under the obvious influence of alcohol or drugs
- The indicated training fees exclude taxes and cover only the educational costs and the documentation provided with the training. As a result, the travel and maintenance expenses of the trainees or trainer shall be provided by the customer.
- The Commerce Tribunal of Nantes shall be entirely competent for any dispute which can not be resolved by mutual agreement within a reasonable time.

For user training only

- We wish to emphasise that the aim is to train trainees and not to develop welding procedures on samples.

For Level 2-level maintenance training on power sources only:

- Each trainee for maintenance training power source level 2 Level 2 should show an authorisation duly signed by his company certifying that he has the technical skills authorising him to follow this maintenance training.



E-mail: training@polysoude.com

Tel.: +33 (0) 2 40 68 11 14 • Fax: +33 (0) 2 40 68 57 02

Web: www.polysoude.com

Accommodation nearby

Hotels	Contact information
1. Radisson Blu ★★★★	Tel.: +33 (0)2 72 00 10 00 Web: https://www.radissonblu.com/en/hotel-nantes
2. Novotel Nantes Centre Bord de Loire ★★★★	Tel.: +33 (0) 2 40 47 77 77 Web: http://www.novotel.com/fr/hotel-7296-novotel-nantes-centre-bord-de-loire/index.shtml
3. Mercure Nantes Centre Gare ★★★★	Tel.: +33 (0) 2 40 35 30 30 Web: http://www.mercure.com/fr/hotel-3448-mercure-nantes-centre-gare/index.shtml
4. B&B Hotel Nantes Parc Expos La Beaujoire ★★	Tel.: +33 (0) 8 92 78 80 69 Web: http://www.hotel-bb.com/fr/hotels/nantes-la-beaujoire.htm
5. Hotel ibis Nantes La Beaujoire ★★★	Tel.: +33 (0) 2 40 93 22 22 Web: http://www.ibis.com/fr/hotel-0855-ibis-nantes-la-beaujoire/index.shtml
6. Hotel ibis Nantes Centre Gare Sud ★★★	Tel.: +33 (0) 2 40 20 21 20 Web: http://www.ibis.com/fr/hotel-0892-ibis-nantes-centre-gare-sud/index.shtml

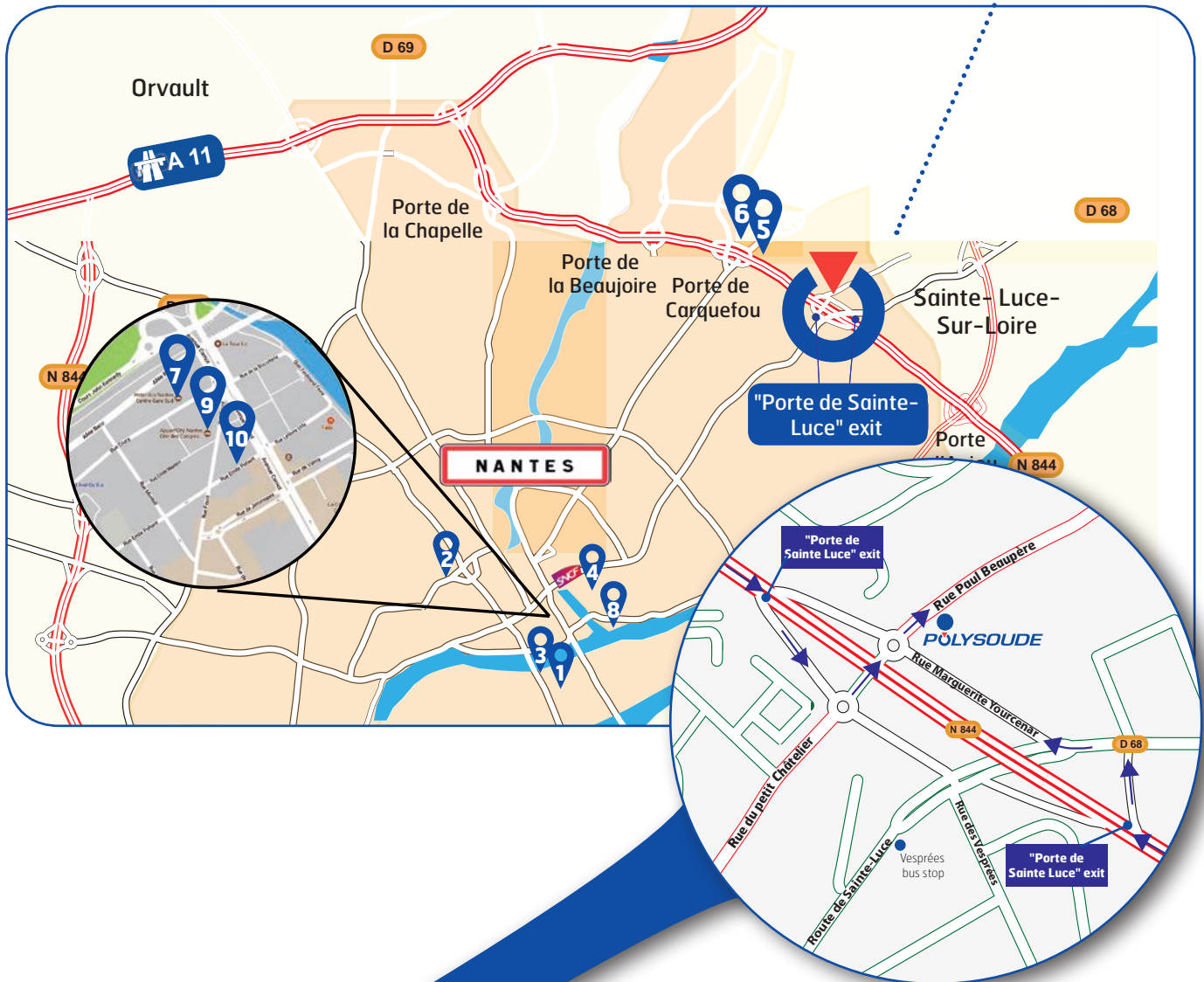
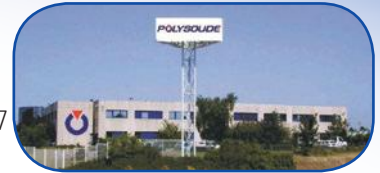
Apartments for short term rent	Contact information
7. Seven Urban Suites ★★★★	Tel.: +33 (0) 2 51 72 97 00 Web: http://nantes.7urbansuites.fr/
8. Residhome Nantes ★★★★	Tel.: +33 (0) 2 40 99 07 07 Web: http://www.residhome.com/residence-hoteliere-aparthotel-nantes-198.html
9. Appart' city Nantes Cité des Congrès ★★★	Tel.: + 33 (0) 2 51 89 76 10 Web: https://www.appartcity.com/fr/appart-hotel/nantes-cite-des-congres-a-nantes.html
10. Résidence Ducs de Bretagne* (minimum 4 nights)	Tel.: +33 (0) 2 40 35 25 02 Web: http://www.sejours-affaires.com/residence-hoteliere-aparthotel-nantes-31.html

Access

POLYSOUDE S.A.S.

2, rue Paul Beaupère
44300 Nantes - FRANCE

Tel: +33 (0) 2 40 68 11 14 • Fax: +33 (0) 2 40 68 57
training@polysoude.com
www.polysoude.com



From Paris

- Arriving via the A11 (Le Mans/Angers) Direction Nantes-Nord/St-Nazaire
- Exit 22 for A811/Périphérique-Sud towards Bordeaux/Nantes-Centre/Sainte-Luce-sur-Loire
- On the A811, exit 24 to Sainte Luce-Centre/Thouaré-Centre
- Take the D68 and go through Sainte-Luce
- Just before the bridge, take the first right and continue along Rue Marguerite Yourcenar
- At the roundabout, take the first exit for Rue Paul Beaupère

From Nantes train station

- Exit station on "Nord" side and take tram line 1 towards Beaujoire or Ranzay
- Get off at the Souillarderie stop
- Go down the stairway and take bus C7 towards Trianon
- Get off at the Vesprées bus stop
- Walk up to Rue Paul Beaupère

From Nantes airport

- Head north-west along the D85 towards Nantes
- At the roundabout, take the first exit (N844) towards A83/Bordeaux/Poitiers/Périphérique Sud/D844
- Join the ring-road N844
- Take exit 42-Porte de Sainte Luce to Nantes-Est
- Turn left along Route de Sainte-Luce
- Take the first right and continue along Rue Marguerite Yourcenar
- At the roundabout, take the first exit for Rue Paul Beaupère



POLYSOUDE : Related services

► Guidance and technical support

A welding application specialist in your area will advise you on the welding process and appropriate equipment for your application.

► Commissioning / Training

A complete training program will enable you to start using the equipment immediately and in the best way possible.

► Maintenance / Repair

Maintenance and repair operations can be carried out at the Polysoude plant as well as on site by our service network.

► Rental service

Increase the flexibility of your production! A large range of equipment is available for rental from our hire fleet.



Your partners worldwide

ARGENTINA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

AUSTRALIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

AUSTRIA

POLYSOUDE AUSTRIA GmbH
☎ +43 (0) 653 84 23 36
austria@polysoude.at

BAHRAIN

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

BELGIUM

POLYSOUDE BENELUX
☎ +31 (0) 653 84 23 36
k.meurs@polysoude.com

POLYSOUDE BENELUX

(SERVICE)
☎ +31 (0) 653 84 23 36
service.benelux@polysoude.com

BRAZIL

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

BULGARIA

KARWELD EOOD
☎ +359 (0) 29 73 32 15
karweld@bg400.bg

CANADA

MAG Tool - West
EDMONTON - ALBERTA
☎ +1 800 661 9983
magtool@magtool.com

MAG Tool - East

TORONTO - ONTARIO
☎ +1 905 699 - 5016
ray@magtool.com

CHINA

POLYSOUDE SHANGHAI CO. Ltd
☎ +86 (0) 21 64 09 78 26
jm.pan@polysoude.com.cn

CROATIA

EUROARC D.O.O.
☎ +385 (0) 12 40 60 77
euroarc@euroarc.hr

CZECH REPUBLIC

POLYSOUDE CZ
☎ +420 602 60 28 55
m.matousek@polysoude.cz

DENMARK

HALL & CO. INDUSTRI
☎ +45 (0) 39 56 06 76
p.lorenzen@polysoude.com

EGYPT

POLYSOUDE UK
☎ +44 (0) 1942 820 935
info@polysoude.com

ESTONIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

FINLAND

SUOMEN TEKNOHAUS OY
☎ +358 (0) 927 47 2 10
info@teknohaus.fi

FRANCE

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

GERMANY

POLYSOUDE DEUTSCHLAND GmbH
DUSSLINGEN
☎ +49 (0) 7072 60076 0
info@polysoude.de

GREECE

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

JAPAN

GMT CO Ltd - KAWASAKI
☎ +81 (0) 44 222 6751
gmt@e-gmt.co.jp

GMT CO Ltd - OSAKA

☎ +81 (0) 798 35 6751
gmt.kansai@e-gmt.co.jp

JORDAN

POLYSOUDE UK
☎ +44 (0) 1942 820 935
info@polysoude.com

KUWAIT

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

LATVIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

OMAN

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

PAKISTAN

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

PHILIPPINES

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

POLAND

UNIDAWELD - BEDZIN
☎ +48 (0) 32 267 05 54
dariusz.szota@unidaweld.pl

SUPRA ELCO

☎ +48 500 004 804
jacek.szulc@supraelco.waw.p

SINGAPORE

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
jmapan@singnet.com.sg

SLOVAKIA

POLYSOUDE CZ
☎ +420 602 60 28 55
m.matousek@polysoude.cz

SOUTH AFRICA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

SOUTH KOREA

CHEMIKO CO Ltd
☎ +82 (0) 2 567 5336
chemiko@chemiko.net

SPAIN

POLYSOUDE IBERIA OFFICE
☎ +34 609 154 683
la.deandres@polysoude.com

SWEDEN

HALL & CO. INDUSTRI
☎ +45 (0) 39 56 06 76
p.lorenzen@polysoude.com

SWITZERLAND

POLYSOUDE (SWITZERLAND) Inc.
☎ +41 (0) 43 243 50 80
contact@polysoude.ch

TAIWAN R.O.C.

FIRST ELITE ENT. CO. Ltd
☎ +886 (0) 287 97 88 99
auto.pipe@msa.hinet.net

THAILAND

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

TURKEY

EGE MAKINE
☎ +90 (0) 212 237 36 00
onurakin@egemakina.com.tr

UNITED ARAB EMIRATES

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

UNITED KINGDOM

POLYSOUDE UK
☎ +44 (0) 1942 820 935
admin.uk@polysoude.com

UKRAINE

POLYSOUDE RUSSIA
☎ +7 (0) 495 564 86 81
polysoude@co.ru

UNITED STATES

ASTRO ARC POLYSOUDE Inc.
☎ +1818 (859) 7600
sales@astroarc.com

VENEZUELA

ENRIVA C.A.
☎ +58 (0) 412 34 82 602
enriva@gmail.com

VIETNAM

ANH DUONG IT Ltd
☎ +84 22 159 532
an@anhduongco.com



HUNGARY

POLYWELD Kft.
☎ +36 (0) 20 29 88 708
polyweld@polyweld.hu

INDIA

POLYSOUDE INDIA
☎ +91 (0) 20 271 27 678
ab.kulkarni@polysoude.in

INDONESIA

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
jmapan@singnet.com.sg

IRAN

STD CO
☎ +98 21 88525206-7
najco_ir@hotmail.com

ISRAEL

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

ITALY

POLYSOUDE ITALIA SRL
☎ +39 02 93 79 90 94
info@polysoude.it

LITHUANIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

MALAYSIA

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
jmapan@singnet.com.sg

NETHERLANDS

POLYSOUDE BENELUX
☎ +31 (0) 653 84 23 36
k.meurs@polysoude.com

POLYSOUDE BENELUX

(SERVICE)
☎ +31 (0) 653 84 23 36
service.benelux@polysoude.com

NEW ZEALAND

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 11 00
info@polysoude.com

NORWAY

TEMA NORGE AS
☎ +47 (0) 51 69 25 00
tema@tema-norge.no

PORTUGAL

POLYSOUDE IBERIA OFFICE
☎ +34 609 154 683
la.deandres@polysoude.com

QATAR

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

REPUBLIC OF IRELAND

POLYSOUDE UK
☎ +44 (0) 1942 820 935
admin.uk@polysoude.com

ROMANIA

DEBISUD CONCEPT S.R.L.
☎ +40 (0) 255 21 57 85
office@debisud.ro

RUSSIA + C.I.S.

POLYSOUDE RUSSIA
☎ +7 495 564 86 81
info@polysoude.ru

SAUDI ARABIA

SALWO TRADING Ltd.
☎ +971 (0) 48 81 05 91
salwo@emirates.net.ae

Find us on



Polysoude S.A.S.

Z.I. du Bois Briand • 2 rue Paul Beaupère

F - 44300 NANTES

☎ +33 (0) 2 40 68 11 00 • ☎ +33 (0) 2 40 68 11 88

🌐 www.polysoude.com • ✉ info@polysoude.com

A Member of



POLYSOUDE
THE ART OF WELDING