

# SEHO ACADEMY

KNOWLEDGE CREATES FUTURE

Seminars **2019** 

Soldering is our Passion

Gained in **Practice** for Use in **Practice** 

# Welcome to SEHO Academy

# Successful Production Begins with an Educated Employee

In such a dynamic industry as electronics production, it is important to build up and continuously improve know-how. This will help to ensure production at highest quality level and simultaneously reduce manufacturing cost. The SEHO Academy lays the foundation for this. Our competent and experienced trainers with many years of practice provide their knowledge in intensive seminars about the soldering processes, the operation and maintenance of machines. Such expertise can then be directly implemented in your own production: To optimize processes, reduce cycle times, increase machine availability, thus reducing overall manufacturing costs.

# Advantages of the SEHO Academy

The efficiency of the SEHO training courses is based on a simple principle: To provide a perfect balance of theory and practical application.

#### Our Goal

To help you increase the quality level of your production process and decrease manufacturing cost, thus enabling you to realize a higher level of profitability.

#### Participation Fee / Scope of Services:

The participation fee per person is  $610.00 \in$  for a one day seminar, and  $305.00 \in$  for a half day seminar. Please note that German fiscal law requires to add 19 % VAT.

Price includes comprehensive seminar paper, personal certificate of participation and refreshment.

If two training days in one seminar block are booked at the same time, the second day will be discounted with 10 %. If all training days in one seminar block are booked, the total price will be discounted with 10 %.

Please note that seminars only take place with a sufficient number of registrations.

Profit from the know how of our experts: Especially our seminars about soldering processes are absolutely independent from the machine type, used in production.



# One-Day Seminar Maintenance of Wave Systems

The quality of solder joints in the wave soldering process in many cases depends on the condition of the machine. Therefore, an effective and regular maintenance of the soldering system provides a basis for remarkable quality improvements at simultaneously reduced production costs.

Attendees will learn how to maintain all parts of a wave soldering system. The theoretical introduction is followed by an extensive practical part.

This seminar will focus on the wave soldering systems MWS 2300 and PowerWave N2.

**Dates:** 6 August 2019 10 December 2019

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 053

# Half-Day Seminar Software and Programming

This seminar will enable you to handle the key elements of the software professionally, thus improving the overall performance of the wave system. This includes editing of soldering programs, management data system, configuration etc.

This seminar will focus on MWS 2300 and PowerWave N2.

Dates: 7 August 2019 11 December 2019

**Duration:** 1/2 day **Registration Fee:** 305.00 €

8:30 a.m. - noon Seminar no. DL 4100 101

# Half-Day Seminar **Diagnostics and Adjustments**

This half day seminar will provide comprehensive knowledge for an experienced handling of possible machine errors. Attendees will learn a structured approach to successful debugging and machine adjustments to increase overall efficiency.

The focus of this seminar will be on machine types MWS 2300 and PowerWave N2.

Dates: 7 August 2019 11 December 2019

**Duration:** 1/2 day **Registration Fee:** 305.00 €

1 p.m. - 4:30 p.m. Seminar no. DL 4100 100

# One-Day Seminar The Wave Soldering Process

This one day seminar will impart comprehensive knowledge about the wave soldering process and its parameters, with a particular focus on lead-free aspects. In addition, typical wave soldering defects will be reviewed and possible corrective actions being discussed.

This seminar is independent from the machine type and provides general know-how.

Dates: 8 August 2019 12 December 2019

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 054

# One-Day Seminar The Reflow System in Practice

Experienced handling of the machine, maintenance work at regular intervals and the operator being able to fix machine errors, increase the productivity and life time of the system. In the medium to long term this will lead to considerable cost savings.

This seminar is particularly aimed at users of MaxiReflow systems.

## What you will learn

- handling of the important components of the machine
- maintenance work and intervals
- machine reports 'error' what now?

### Who should attend

Maintenance staff and assembly staff working in SMT productions.

Date: all dates on request

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 058

## One-Day Seminar The Reflow Soldering Process

In the electronic assembly production, the surface mount technology becomes more and more important.

Although being considered as no too complicated, it is essential to know about the fundamental correlation and the important parameters in reflow soldering.

This one day seminar will shed light on the process with a particular focus on lead-free aspects and it is fully independent from the machine type used.

#### What you will learn

- typical parameters in reflow soldering
- · essential physical background information
- · optimizing temperature profiles
- consideration of the process participants, i.e. PCB, components, solder paste
- · inert atmosphere
- cycle time and conveyor speed
- machine configuration to optimize the process

#### Who should attend

 $\label{lem:smooth} Assembly \, staff in \, SMT \, production \, environments, \, process \, control, \, quality \, control.$ 

Date: all dates on request

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 057



# One-Day Seminar The Efficient Selective System

The main criterion in selective soldering processes is the precision of the machine. An effective and regular maintenance often provides a basis for considerable quality improvements. Attendees will learn an experienced handling of all parts of a selective soldering system.

This maintenance training consists of an extensive practical part. Due to the machine-specific differences we offer separate dates for the PowerSelective and SelectLine.

# Who should attend

Maintenance staff and assembly staff for selective soldering processes.

**Dates 2019** 

5 February 2019

PowerSelective: SelectLine:

9 July 2019

8:30 a.m. - 4:30 p.m.

Duration: 1 day

Registration Fee: 610.00 €
Seminar no. DL 4100 056

22 October 2019

# One-Day Seminar The Selective Soldering Process

This one-day seminar will provide comprehensive knowledge about the selective soldering process and its parameters. Different selective soldering methods will be considered as well as process-related soldering defects and optimization options.

This seminar is fully independent from the machine type in use and provides general know how.

#### Who should attend

Assembly staff for selective soldering processes, process control, quality control.

#### **Dates 2019**

6 February 2019 10 July 2019 23 October 2019

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 055

# One-Day Seminar Selective Software / OTP 2

This seminar is designed to give you an excellent understanding of the structure and functions in the Offline Teach Program OTP 2, that can be used with all selective soldering systems from SEHO. Practical exercises ideally complete this seminar.

Number of participants is limited to 6 persons.

#### Dates 2019:

7 February 2019 11 July 2019 24 October 2019

**Duration:** 1 day **Registration Fee:** 610.00 €

8:30 a.m. - 4:30 p.m. Seminar no. DL 4100 060

Whether in our modern and fully equipped Technology Center or at your factory:

The SEHO Academy provides more for You.

- AOI Seminars: Tailored to your specific needs, from setting up test programs to optimization of test parameters at your AOI system from SEHO.
- Ramp-Up Service: The optimum start with your new SEHO soldering system.
- Process Optimization: Soldering advice onsite at your production floor for your specific process. The contents of such training is individually adapted to your specific requirements and may cover subjects such us optimization of the soldering process or manufacturing sequence, reduction of soldering defects or improvement of the first pass yield.
- Process Evaluation: Profit from our know how and our equipment. We evaluate for you your new processes at our soldering systems in the SEHO Technology Center.
- Customer-Specific Trainings: At your factory, at SEHO Germany or at SEHO North America.

#### Your Advantages

- Improved process stability in your production.
- Cost reduction due to higher efficiency of your employees and increased reliability of your processes.



# Registration Form

# We bindingly register the

	seminar no.: date/s:
Company	
First Name	
Name	
Department	
Address	
P.Code/City/Country	
Phone	
E-mail	
Additional Attendees:	_
First Name, Name First Name, Name	
First Name, Name	
	Do you have particular issues to be trained?
	Which soldering system are you using?

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Please send by mail to: SEHO Systems GmbH Academy Frankenstr. 7 - 11 97892 Kreuzwertheim or fax: 0 93 42 / 8 89 - 303 or E-mail: academy@seho.de or register online: www.seho.de/Academy