

## DATES, PRICE AND REGISTRATION\*

Dates, prices and the online registration can be found on our website at: [www.slv-muenchen.de](http://www.slv-muenchen.de)

This three-week course offers a blended learning approach.

- the first two-weeks with theoretical lessons can be attended in person or online.
- for the final week, including practical lessons and the final exam, physical attendance is mandatory.

Due to visa requirements, an early registration is recommended.

\*Draft of *the conditions of participation SLV München* at [www.slv-muenchen.de](http://www.slv-muenchen.de).

This information is supplied without liability.

## REGISTRATION

Manuela Knoll  
Tel.: 089 126802-27  
Fax: 089 12393911  
[ta@slv-muenchen.de](mailto:ta@slv-muenchen.de)  
[www.slv-muenchen.de](http://www.slv-muenchen.de)



## TECHNICAL COUNSELLING

Dipl.-Ing. Annegret Ohliger-Volmer  
Tel.: 089 126802-827  
[ohliger@slv-muenchen.de](mailto:ohliger@slv-muenchen.de)



# EUROPEAN THERMAL SPRAYING SPECIALIST

according to EWF 459

**GSI – Gesellschaft für Schweißtechnik  
International mbH  
Branch SLV Muenchen**

Schachenmeierstraße 37  
80636 München

T +49 089 126802-0  
F +49 089 12393911

[ta@slv-muenchen.de](mailto:ta@slv-muenchen.de)  
[www.slv-muenchen.de](http://www.slv-muenchen.de)



[www.slv-muenchen.de](http://www.slv-muenchen.de)



## INTRODUCTION

High-quality and economic thermal spraying requires specialized technical knowledge. Thermally sprayed coatings are applied in many areas. The requirements to the quality of the sprayed coatings are often very high. The necessary quality of the coating is effective only if planning, execution and controlling of a thermally sprayed layer is carried out from the initial draft to the completion of the workshop job by a skilled expert.

Within the scope of the common professional education the manifold details to be considered for experts spraying cannot be taught to the required extent. A supplementary education is required, which has been created by the EWF – European Federation for Welding, Joining and Cutting – with the course of the European Thermal Specialist.

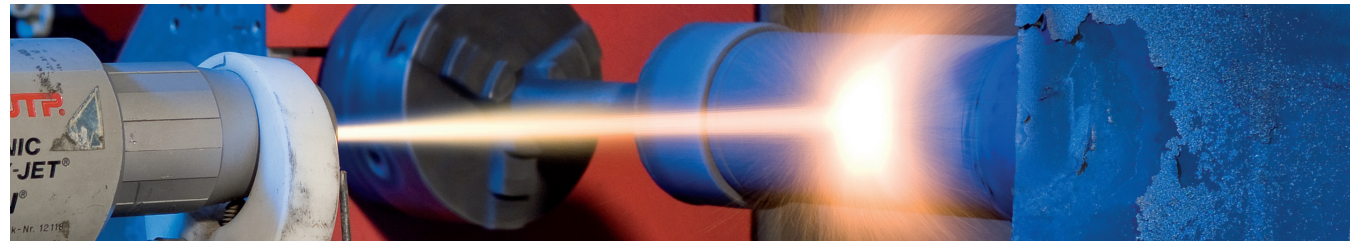
This course is implemented according to the training guideline EWF 459.



## PARTICIPANTS

Supervising/coordinating personnel, foremen, executives in the field of thermal spraying

Limited number of participants



### Course Topics - Focus

## PART 1: THEORETICAL TRAINING

### 1. Thermal spraying processes:

#### Introduction, process fundamentals, environmental aspects

- Mechanical, chemical, thermal material corrosion attack; surface protection options; flame spraying; high-velocity flame spraying; electrical arc spraying; plasma spraying, low-pressure plasma spraying; handling all spraying processes; environmental aspects and waste disposal

### 2. Material selection and bonding mechanisms

- Coating function & related materials, spray materials, bonding mechanisms

### 3. Spraying; health/work safety

- Prerequisites for thermal spraying, surface preparation/pre treatment, base materials, substrates, bond coats, intermediate layers, working procedure of thermal spraying, post treatments/processing, work safety, accident prevention

### 4. Spray results and documentation

- Spray results, defects/imperfections; measuring, recording, inspecting and documentation

### 5. Spray results and documentation

- Economic aspects, quality management; other spraying processes and new developments; typical applications, and case studies

## PART 2: PRACTICAL TRAINING

- P1: Practical demonstration of the different spray processes
- P2: Practical instructions – thermal spraying
- P3: Practical demonstration of fusioning and post treatment
- P4: Visual inspection and testing

### Required Qualification

- a) Specific technical qualifications as a master in trade or industry, education either as a technician or engineer with two-years of professional experience (Annex 1 of EWF-GL 549)
- b) EWF qualification acc. to training guideline (EWF 507) as European Thermal Sprayer (ETS) and min. 2 years of experience
- c) Thermal Sprayer and 5 years of experience or qualification as skilled worker in the metal processing trade and min. of 3 years of experience in a technology similar to spraying (skilled worker with certificate by the IHK – Industry of Trade and Commerce) (Annex 0 of EWF-GL 549)

For participants, who only fulfill the required qualification according to b) and c) a qualification test is required.

### TRAINING STRUCTURE AND DURATION(teaching units)

Part 1	Theoretical Training	81
Part 2	Practical Training	27
Exam		4
In total		112

### FULLTIME COURSE OF TRAINING

Monday - Thursday 8.00 a.m. until 4.00 p.m., partially until 4.50 p.m.  
 Friday 8.00 a.m. until 2.20 p.m. or until 3.10 p.m.

### EXAMS

written

### COMPLETION OF THE COURSE

After having passed the exam, the participant will receive an EWF-diploma European Thermal Spraying Specialist.