

TRAINING COURSES

MESSER CUTTING SYSTEMS

DVS Training Centre

DVS PERSZERT

MESSER 
Cutting Systems



FORWORD

TRAINING COURSES OF THE MESSER CUTTING SYSTEMS DVS TRAINING CENTRE

In times of increasing competition it is the only logical response to invest in the know-how and competence of your employees. Increasing the quality and productivity of the company is thus the focus of our activities as a certified DVS training centre.

We train and test technical and management staff according to the DVS guidelines for thermal cutting and related processes. Training and testing is carried out by us in the areas legally regulated by the IHK (International Chamber of Commerce) or the DVS (German Welding Association). In addition we carry out certification systems for staff and companies in compliance with European and International standards.

At the DVS training centre of Messer Cutting Systems in Gross-Umstadt technical knowledge on a wide spectrum such as, for example, flame straightening, flame cleaning, flame cutting and brazing will be taught methodically and perfectly with **the practice** always in focus.

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**FLAME STRAIGHTENING –
CRAFTSMAN – MILD STEEL**
Module 1 (DVS guidelines 1145)

You are familiar with the basics of metal processing and want to correct distortion in parts quickly and economically.

Training course subjects:

- >> Applicable safety regulations
- >> Material behaviour: causes of distortion and possibilities to prevent it
- >> Basics of flame straightening:
 - >> Selection of the gas supply
 - >> Selection of the torch for a material
 - >> Flame adjustment and flame straightening temperatures
 - >> Thermal conductivity and thermal expansion of materials
 - >> The meaning of preventing thermal expansion
 - >> Professional correct application of various flame straightening figures
 - >> Operating rules of flame straightening of unalloyed and low alloyed steels up to S355

- >> Flame straightening of semi-finished items and objects from production
- >> Practical exercises on various work-pieces (sheets, pipes, sections, plate areas)

The successful completion of Module 1 qualifies you for the participation in further modules. It finishes with a test of knowledge and a practical test. A certificate will be issued for the participation in the course. For passing the examination, a DVS attestation and a certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

Duration: 2 days plus 1 day examination

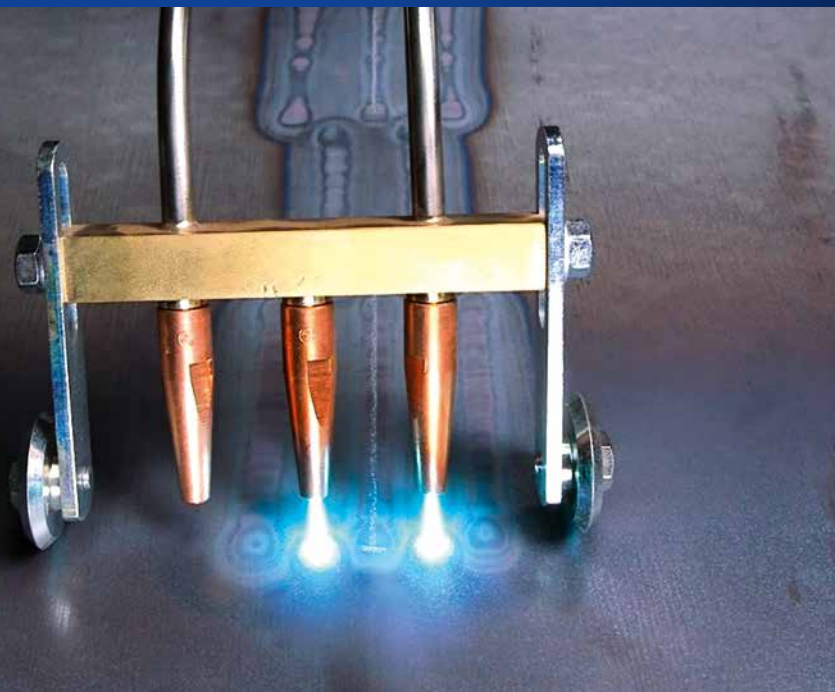


FLAME STRAIGHTENING – CRNI STEELS AND FINE GRAIN MILD STEELS

Module 2 (DVS guidelines 1145)

You have passed the exam for flame straightening skills, Module 1 and want to build on your practical experience and knowledge? Does your workshop work in a controlled area with higher or high strength fine grain and CrNi steels?

Duration: 3 days plus 1 day examination



Training course subjects:

- >> Material behaviour: causes of distortion and possibilities to prevent it
- >> Advanced knowledge of CrNi-steels and fine grain mild steels
- >> Operating rules of flame straightening of unalloyed and low alloyed steels from S420 upwards and for CrNi steels
- >> Flame straightening of semi-finished items and objects from production
- >> Practical exercises on various work-pieces (sheets, pipes, sections, plate areas)

Module 2 ends with a test of knowledge and a practical test. A certificate will be issued for the participation in the course. For passing the examination, a DVS certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

**FLAME STRAIGHTENING FOR
CRAFTSMEN – ALUMINIUM**
Module 3 (DVS guidelines 1145)

You have passed the test from Module 2 or have comparable technical knowledge and experience in flame straightening.

Duration: 2 days plus 1 day examination



Training course subjects:

- >> Production and characteristics of Aluminium
- >> Flame straightening work on welded assemblies, pipes and rolled sections from Aluminium
- >> Flame straightening on simple and multiple pipe branches

Module 3 ends with a test of knowledge and a practical test. A certificate will be issued for the participation in the course. For passing the examination, a DVS attestation and a certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

FLAME SCARFING – CRAFTSMEN **(DVS guidelines 1147)**

You work in surface treatment in the area of steel, concrete or natural stone, whether as career starter or experienced person.

Duration: 2 days plus 1 day examination



Training course subjects:

- >> Selection of the gas supply
- >> Working with compressed gasses, compressed gas equipment and compressed gas cylinders
- >> Torch types and flame scarfing operating techniques
- >> Measures for working, environmental and health safety
- >> Practical exercise flame scarfing

The training course ends with a test of knowledge and a practical test. A certificate will be issued for the participation in the course. For passing the examination, a DVS attestation and a certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

FLAME SCARFING – EXPERT (DVS guidelines 1150)

You work in surface treatment in the area of steel, concrete or natural stone and have at least 12 months' experience in the area of flame scarfing or gouging or can provide evidence of comparable knowledge. You have passed the test as flame scarfing craftsman.

Duration: 2 days including examination



Training course subjects:

- >> Flame scarfing, planning and calculation
- >> Determining the necessary technical requirements for flame scarfing operations
- >> Determining the necessary number of workers and the daily output
- >> Setting up the site and defining the sequence of flame scarfing operations on the components
- >> Determining the safety requirements, ensuring and monitoring their execution

The training course ends with a test of knowledge and a practical test. A certificate will be issued for the participation in the course. For passing the examination, a DVS attestation and a certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

SOLDERING METALLIC MATERIALS
MODULE 1: SOLDERING COPPER
MATERIALS
(DVS guidelines 1183)

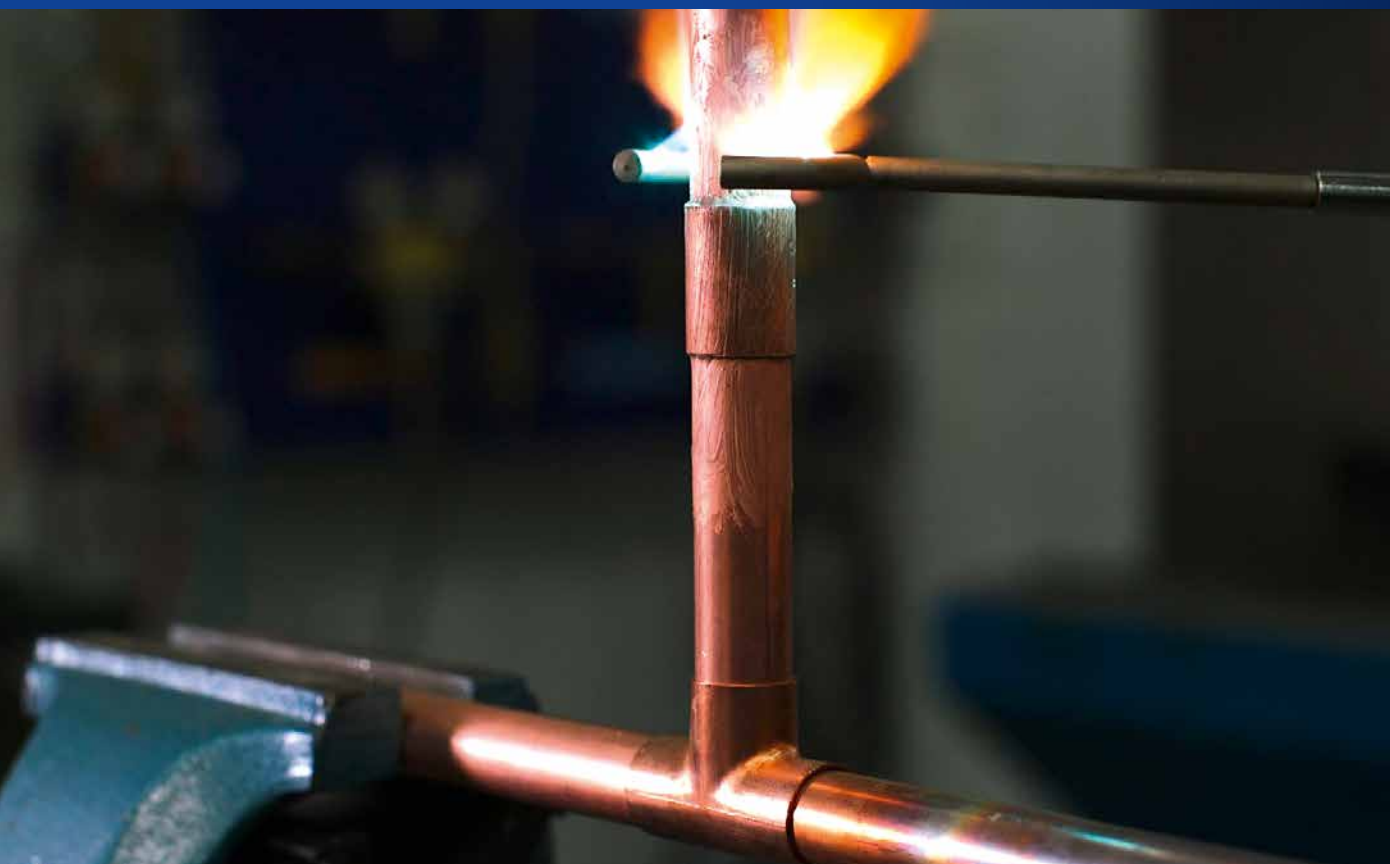
You work in a production company and want to join metallic components safely and simply.

Training course subjects:

- >> Solder, flux, heat input
- >> Soldering, classification of the processes
- >> Flame soldering
- >> Gasses and soldering equipment
- >> Suitability for soldering of the base materials
- >> Solder seam preparation
- >> Regulations and standards
- >> Working safety and accident prevention

The training course ends with a test of knowledge and a practical test according to DIN EN ISO 13585. A certificate will be issued for the participation in the course. For passing the examination, a DVS attestation and a certificate will be awarded to the participant. This certificate has a validity of 3 years. Participation in DVS approved further training workshops/experience exchanges extends the validity by a further 3 years.

Duration: 5 days including examination



**OXYFUEL CUTTING FOR STEEL
PLATES AND SECTIONS**
(based on DVS guidelines 1185)

Are you a manufacturing company operating in a controlled area and want to cut steel parts manually with flame cutting?

Duration: 4 days



Training course subjects:

- >> Cutting gasses and cutting equipment
- >> The functional principle of oxyfuel cutting
- >> Suitability of materials for oxyfuel cutting
- >> Applicable standards and regulations, quality and dimensional tolerances, safe working and environmental guidelines
- >> Correct cutting of plates, pipes and sections
- >> Analysis of cutting faults and cut optimisation
- >> Prevention of accidents and damage

A participant's certificate will be issued for taking part in our training course.

Are you interested in Module 2 – Plasma cutting of steel sheets and sections (based on DVS guide lines 1185 – Module 2)? We would be happy to prepare an offer for you.

IN-HOUSE WORKSHOPS
FLAME CUTTING / FLAME
STRAIGHTENING/ BRAZING
Training individually tailored

Are you looking for a tailor made solution for your organisation? Then our in-house workshops are just right for you. Here we convey Know-how in theory and practice on site.

Duration: individual 1-5 days



Topics for instruction:

>> Will be agreed individually in a consultancy discussion.

Working with your staff we establish optimum solutions for your production. What is more, the training offers evidence of trained and qualified personnel ideally for quality assured companies.

A certificate of attendance will be issued for all participants in the training course.

Would you like an in-house DVS training course?

We would be happy to prepare an offer for you.

**QUALIFIED PERSON WORKING
MEDIA OXYFUEL TECHNOLOGY**
(to DGV-R 500 chapter 2.26)

Our specialists impart practically based knowledge from theory and practice on all aspects of professional repair of our oxyfuel equipment and cylinder pressure regulators as well as the testing and repair of working media.

Duration: 2.5 days



Training topics:

- >> Working principles and construction of oxyfuel equipment
- >> Standards and regulation, quality and measuring tolerances, safe operating and environmental guidelines
- >> Fault analysis
- >> Repair tools and auxiliary devices
- >> Test methods, test equipment and test instruction manuals

The training ends with a test of competence and a practical test. A certificate of participation will be issued for all course participants. A certificate with 3 years' validity will be issued to those participants who passed the test. Taking part in an experience exchange will extend the certificate's validity by 3 years.

INSTRUCTION / WORKSHOP
SAFE HANDLING OF
TECHNICAL GASSES
(Training to BetrSichV. §12)

Is an annual instruction of your employees due in your company? Are you looking for a partner, who can convey in a simple and practical manner to your employees the subject "safe handling of technical gasses" in a way they will remember? Then this workshop will convince you.

Duration: 2 hours – 1 day



At the core is an experimental lecture which makes the characteristics of gasses really visible.

Training topics:

- >> Characteristics of gasses (flammable, oxidising,...)
- >> Experimental lecture

- >> Correct commissioning of individual cylinder battery installations, cylinder carriages and torch systems
- >> Correct and professional handling of work equipment (e.g. pressure regulators, safety devices, hoses...)

Do you need instruction about a different theme?

Just speak to us!



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