



# MAHA TRAINING CENTER

Technician Training

Program

PL106105\_002-en

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# 1 Brake Testing Technology

## 1.1 MBT 2100

### VS T11001 Technician training

1.5 days at MAHA premises, without accommodation, per person

Content:

- Structure of floor assembly
- Structure of displays: Functional diagram of electronics
- Functional sequence: measurement principle
- Technology: operation of calibration program, calibration of brake tester

Objectives:

- Obtaining fundamental technical information about the device generation

## 1.2 MBT 2200 LON with PC-Desk

### VS T11003 Technician training

2 days at MAHA premises, without accommodation, per person

Content:

- Application: Software in theory and practise, Setting up measurements, database maintenance
- Technology: circuit boards, calibration, foundation installation, Loading variables, tools

Objectives:

- Technical expertise for maintenance, repair and installation

## 1.3 MBT 2250 EUROSYSYSTEM

### VS T11022 Technician training

2 days at MAHA premises, without accommodation, per person

Content:

- Application: Software in theory and practise, Setting up measurements, database maintenance
- Technology: circuit boards, calibration, foundation installation, Loading variables, tools

Objectives:

- Technical expertise for installation, commissioning, service and maintenance

## 1.4 MBT 4250/7250 EUROSYSYSTEM

### VS T11024 Technician training

3 days at MAHA premises, without accommodation, per person

Content:

Theory:

- Function, measuring principle
- Roller set, mechanics and components  
(range spring, proximity switch)
- Control boards
- LON-Manager (configuration variables, firmware update)

Practice:

- Installation of the test stand in foundation
- Wiring of floor assembly with control cabinet
- Commissioning
- Calibration
- Service and maintenance

Objectives:

- Technical expertise for installation, commissioning, service and maintenance

## 1.5

### **CONNECT C\_MBT C 3.5/4.0/5.0** **CONNECT C\_MBT S 15.0/18.0/20.0**

**VS T11035**

#### **Technician training**

1.5 days at MAHA premises, without accommodation, per person

Prerequisite:

- Technician has already taken part in a LON or EUROSYSYSTEM - installer training

Content:

Assembly:

- Mechanical installation – floor assembly, control cabinet
- Electrical installation
- Functional test
- Calibration/adjustment
- Radio pressure sensors and radio remote control
- Pit safety device
- Load simulation

Commissioning:

- Safety devices
- LAN und WLAN connection
- Integration of the test stand into its own network

Testing and maintenance:

- Testing and maintenance plan:
- Troubleshooting and fault elimination

Objectives:

- Technical knowledge for installation, commissioning, service and maintenance

**VS T11036****Basic Technician training**

3 days at MAHA premises, without accommodation, per person

Basic training:

- Technician has no experience with brake testers  
LON or EUROSYSYSTEM

Contents:

Assembly:

- Mechanical installation – floor assembly, control cabinet
- Electrical installation
- Function test
- Calibration/adjust
- Radio pressure sensors and radio remote control
- Pit safety device
- Load simulation

Commissioning:

- Safety devices
- LAN and WLAN connection
- Integration of the test bench into your own network

Testing and maintenance:

- Test and maintenance plan
- Troubleshooting and fault rectification

Objectives:

- Technical expertise for installation, commissioning,  
service and maintenance

**VS T11030****Online basic training**

Two modules each approx. 3 h online, per person

Content:

Assembly:

- Mechanical installation floor assembly, control cabinet
- Electrical installation
- Functional test
- Calibration/Adjustment

Commissioning:

- Safety devices
- LAN und WLAN connection
- Integration of the test stand into own network

Testing and maintenance:

- Testing and maintenance plan
- Troubleshooting and elimination

Objectives:

- Basic technical knowledge for installation, commissioning  
service and maintenance

## 1.6 Update/advanced training in braking technology

### **VS T11014      Update training Test technology** (for experienced technicians)

2 days at MAHA premises, without accommodation, per person

Content:

- Technical information about new products
- Elektrics: Construction, connections, function, necessary - settings, important electrical conditions for correct operation circuit board description
- Installation: Foundation, mechanics, hydraulics
- Troubleshooting
- Maintenance plans
- Assembly
- News on additional devices
- Workshop brake technology  
(Exchange of experiences, troubleshooting, solutions)

Objectives:

- Deepen technical knowledge trough basic training  
Exchange of experience with other technicians  
Getting to know new products

Requirements:

- Error description/questions by participants in advance upon registration
- Technician/basic training



## 2 Performance Measurement Technology

### 2.1 MSR and LPS or ASM-FPS

#### **VS T21002 Technician Training**

4.5 days at MAHA premises, without accommodation, per person

Content:

Measurement principle:

- Basis of performance measurement

Application:

- Software in theory and practise, OBD (onboard diagnostics)

Technology:

- Circuit boards, calibration, installation of the foundation,  
Load variables

Objectives:

- Technical knowledge for maintenance, repair and installation-  
of products

#### **VS T22002 Technician Training**

4.5 days one site, Extra charge: € 1,20/journey kilometre plus VAT  
or flight/train ticket + overnight accommodation

Content:

Measurement principle:

- Basis of performance measurement

Application:

- Software in theory and practise, OBD (onboard diagnostics)

Technology:

- Circuit boards, calibration, installation of the foundation,  
Load variables

Objectives:

- Technical knowledge for maintenance, repair and installation-  
of products

## **3 Emission Measurement Technology**

### **3.1 MET 6.1/6.2/6.3 / MGT 5 / MDO2 LON**

**VS T31004**

#### **Service Centre Training**

3 days at MAHA premises, without accommodation, per person

Content:

- Maintenance/Service
- Devices/Calibration/Adjustment
- Performing update

Introduction:

- General information about the exhaust gas tester

Application:

- Software in theorie und practice, Conducting customer briefings

Technology:

- Components (structure, function, etc.) Calibration, commissioning, Basics of network technology

Accessories:

- Replace parts/repairs,
- MAHA homepage and spare parts lists

Objectives:

- Passing the final exam, the participant can apply for authorization as a MAHA service centre
- They are hereby authorized to carry out commissioning, service and repairs for the exhaust gas tester MET 6.1/6.2/6.3 MGT 5 / MDO 2 LON

**VS T32004****Technician Training**

3 days one site, Extra charge: € 1,20/journey kilometre plus VAT or flight/train ticket + overnight accommodation

Content:

- Maintenance/Service
- Devices/Calibration/Adjustment
- Performing updates

Introduction:

- General information about the exhaust gas tester

Application:

- Software in theory and practice, Conducting customer briefings

Technology:

- Components (structure, function etc.), calibration, commissioning Basics of network

Accessories:

- Replace parts/repairs
- MAHA Homepage and spare parts lists

Objectives:

- Passing the final exam, the participant can apply for authorization as a MAHA service center
- They are hereby authorized to carry out commissioning, service and repairs for the exhaust gas tester MET 6.1/6.2/6.3 / MGT5 / MDO2 LON

**VS T31008****Online basic training**

Emission MET 6.1/6.2/6.3

Two modules each approx. 4 h online, per person

Content:

- Maintenance / Service
- Devices/Calibration/Adjustment
- Carrying out updates

Introduction:

- General information about the exhaust gas tester

Application:

- Software in theory and practice, Conducting customer briefings

Technology:

- Components (structure, function etc.), calibration, commissioning Basics of network

Objectives:

- After passing the final examination, the participant can apply for authorization as a MAHA service center
- He hereby authorized to commissioning and service the MET 6.1/6.2/6.3 / MGT5 / MDO2 LON emission gas tester
- see service information V-LPS-16.06 from 30.09.16 Service Support Points for Emission Gas Testers

## 3.2 M4GT / MO

### VS T31009

#### Technician Training

1 day at MAHA premises, without accommodation, per person

Content:

- Maintenance/Service
- Equipment/Calibration/Adjustment

Introduction:

- General information about the emission gas measuring device

Application:

- Software in theorie and practice

Technology:

- Components (construction, function etc.) and Commissioning
- Information on spare parts and their procurement

Objectives:

- Authorization to carry out commissioning, servicing, maintenance and minor repairs for the emission gas measuring device M4GT and MO

## 3.3 Particle Counter

### VS T31010

#### Technician Training

1 day at MAHA premises, without accommodation, per person

Content:

- Commissioning with DSS software or as stand-alone unit
- Self-test and functional principle
- Maintenance and repair with documentation
- Dealing with error messages
- Adjustment and calibration

Objectives:

- Authorization to carry out commissioning, servicing, maintenance and minor repairs for the emission gas measuring device Particle Counter

## 4 Headlight Testing Technology

### 4.1 MLT 1000/3000 | LITE 3

<b>VS T11008</b>	<b>Technician training</b> MLT 1000/3000  1 day at MAHA premises, without accommodation, per person  Content: - Software update - Operation - Replacing components  Objectives: - The participant is hereby authorized to carry out service and maintenance for the MLT 1000/3000 light adjustment device
<b>VS T11026</b>	<b>Expert customer training</b> MLT 3000  1 day at MAHA premises, without accommodation, per person  Requirements: - Qualified person according to current directive  Content: - Adjustment according to current directive and manufacturer's specifications - Inspection book - Software update - Operation - Troubleshooting  Objectives: - Participants are authorized to carry out calibrations / adjustments for MLT 3000 headlight testers

## 5 Lifting Technology

### 5.1 Scissors Lift

#### VS T41001 Technician Training

1 day at MAHA premises, without accommodation, per person

Content:

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Electrics/ hydraulics (construction, connections, function, settings, important conditions for correct operation)
- Maintenance plans
- Board description
- Installation (foundation, mechanics, hydraulics)
- Fault diagnosis
- Maintenance plans
- Assembly

Objectives:

- Technical knowledge for maintenance, repair and installation of the lifting platform
- Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

## 5.2 Post Lift

### VS T41002

#### Technician Training

1 day at MAHA premises, without accommodation, per person

Content:

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Elektrics (construction, connections, function, settings, important conditions for correct operation)
- Maintenance plans
- Board description
- Installation (foundation, mechanics, hydraulics)

Objectives:

- Basic technical knowledge for maintenance, repair and installation of the lifting platform
- The Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

## 5.3 MA STAR

### VS T41015

#### MA STAR | Online basic training

(3 h online) pro person

Content:

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Elektrics (construction, connections, function, settings, important conditions for correct operation)
- Maintenance plans
- Board description
- Installation (foundation, mechanics, hydraulics)

Objectives:

- Technical knowledge of maintenance, repair and installation of the lifting platformlift
- Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

## 5.4 Cylinder Lift

### VS T41003 Technician Training

1 day at MAHA premises, without accommodation, per person

Content:

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Elektrics/ hydraulics (construction, connections, function, settings, important conditions for correct operation)
- Maintenance plans
- Board description
- Installation (foundation, mechanics, hydraulics)
- Fault diagnosis
- Maintenance plans
- Assembly

Objectives:

- Basic technical knowledge for maintenance, repair and installation of the lifting platform
- The Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)



## 5.5 Wheel Grabbing Lift

### **VS T41004      Technician Training RGA / RGE**

1 day at MAHA premises, without accommodation, per person

Content:

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Elektrics (structure, connections, function, settings, important conditions for correct operation)
- Maintenance plans
- Circuit board description

Objectives:

- Technical knowledge for maintenance, repair and installation of the lift
- The Training also includes the proof of eligibility for the implementation of the German Accident Prevention Regulations

### **VS T41016      Technician Training C\_RGA**

0.5 day at MAHA premises, without accommodation, per person

Requirement:

The technician already has experience with Wheel Grabbing Lifts

Content:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Elektrics (structure, connections, function, setting)
- Maintenance plans
- Circuit board description
- Commissioning
- Application

Objectives:

- Technical knowledge for maintenance, repair and installation
- The Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

## 5.6 Scissors-/Post-/Cylinder-Lift

### VS T41005 Technician Basic training

3 days at MAHA premises, without accommodation, per person

Content

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Installation (foundation, mechanics, hydraulics)
- Fault diagnosis
- Maintenance plans
- Assembly

Objectives:

- Technical knowledge for maintenance, repair and installation of the lifting platform
- The Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

4.5 days at MAHA premises, without accommodation, per person

Technician training Sciccors/Column/Inground lifts & Basic training  
Electrical engineering, reading circuit diagrams

Content

Application:

- Operating principle
- Explanation of available documentation and plans

Technology:

- Installation (foundation, mechanics, hydraulics)
- Troubleshooting
- Maintenance plans
- Assembly

Basic knowledge of electrical engineering

- The seminar provides a basic introduction into electrical engineering
- The training course helps non-experts develop a better understanding of electrical installations and the ability to roughly dimension them

Basics and terminology of electrical engineering

- Definition of current, voltage, resistance
- Inductive and capacitive components, transformers and capacitors
- Direct current, one-phase alternating current and three-phase current
- Simple circuits, circuits with switchgears and protection devices
- Electrical power and work
- Marking of electrical equipment
- Description of electrical installations by using symbols and circuit documentation
- How to read circuit, cable and terminal diagrams
- Electrical troubleshooting
- Professional handling of the multimeter

Objectives:

- Technical knowledge of maintenance, repair and installation the Lift
- Structured electrical troubleshooting via circuit diagram
- The Training also includes the credentials for performing the UVV inspection (German Accident Prevention Regulation)

## 5.7 Update/Advanced training in lifting technology

### VS T41010 Technician Update-Training

1 day at MAHA premises, without accommodation, per person

Content

Application:

- Functional principle
- Explanation of existing documentation and plans

Technology:

- Electrics (construction, connections, functions, settings)  
import conditions for correct operation)
- Board description
- Installation (foundation, mechanics, hydraulics)
- Fault diagnosis
- Maintenance plans
- Assembly
- Workshop lifting technology  
(Exchange of experience, problem solving, solutions)

Objectives:

- Deepen the technical knowledge from the basic training courses
- Exchange of experience with other technicians
- Getting to know new products

**If you have not found the right training course, we will be happy to provide you with non-binding advice or create an individual training course for you.**

**Please feel free to contact us at:**

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