Operating instructions





**Transport systems** 

**Trolly 35-1** 

099-008629-EW501

Observe additional system documents!

16.07.2013

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# **General instructions**

### **CAUTION**



### Read the operating instructions!

The operating instructions provide an introduction to the safe use of the products.

- Read the operating instructions for all system components!
- · Observe accident prevention regulations!
- · Observe all local regulations!
- · Confirm with a signature where appropriate.

### NOTE



In the event of queries on installation, commissioning, operation or special conditions at the installation site, or on usage, please contact your sales partner or our customer service department on +49 2680 181-0.

A list of authorised sales partners can be found at www.ewm-group.com.

Liability relating to the operation of this equipment is restricted solely to the function of the equipment. No other form of liability, regardless of type, shall be accepted. This exclusion of liability shall be deemed accepted by the user on commissioning the equipment.

The manufacturer is unable to monitor whether or not these instructions or the conditions and methods are observed during installation, operation, usage and maintenance of the equipment.

An incorrectly performed installation can result in material damage and injure persons as a result. For this reason, we do not accept any responsibility or liability for losses, damages or costs arising from incorrect installation, improper operation or incorrect usage and maintenance or any actions connected to this in any way.



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#### 2 Safety instructions

#### 2.1 Notes on the use of these operating instructions

# **DANGER**

Working or operating procedures which must be closely observed to prevent imminent serious and even fatal injuries.

- Safety notes include the "DANGER" keyword in the heading with a general warning symbol.
- The hazard is also highlighted using a symbol on the edge of the page.

# WARNING

Working or operating procedures which must be closely observed to prevent serious and even fatal injuries.

- Safety notes include the "WARNING" keyword in the heading with a general warning symbol.
- The hazard is also highlighted using a symbol in the page margin.

# CAUTION

Working or operating procedures which must be closely observed to prevent possible minor personal injury.

- The safety information includes the "CAUTION" keyword in its heading with a general warning symbol.
- The risk is explained using a symbol on the edge of the page.

### **CAUTION**

Working and operating procedures which must be followed precisely to avoid damaging or destroying the product.

- The safety information includes the "CAUTION" keyword in its heading without a general warning symbol.
- The hazard is explained using a symbol at the edge of the page.

### NOTE

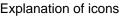
Special technical points which users must observe.

Notes include the "NOTE" keyword in the heading without a general warning symbol.

Instructions and lists detailing step-by-step actions for given situations can be recognised via bullet points, e.g.:

• Insert the welding current lead socket into the relevant socket and lock.

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#### 2.2 **Explanation of icons**

Symbol	Description
PE	Press
	Do not press
	Turn
	Switch
	Switch off machine
	Switch on machine
ENTER	ENTER (enter the menu)
NAVIGATION	NAVIGATION (Navigating in the menu)
EXIT	EXIT (Exit the menu)
4 s	Time display (example: wait 4s/press)
-//-	Interruption in the menu display (other setting options possible)
***	Tool not required/do not use
	Tool required/use
	Correct
- O	Wrong



#### 2.3 General



### **DANGER**



Do not carry out any unauthorised repairs or modifications!

To avoid injury and equipment damage, the unit must only be repaired or modified by specialist, skilled persons!

The warranty becomes null and void in the event of unauthorised interference.

Appoint only skilled persons for repair work (trained service personnel)!

# WARNING



Risk of accidents if these safety instructions are not observed! Non-observance of these safety instructions is potentially fatal!

- Carefully read the safety information in this manual!
- Observe the accident prevention regulations in your country.
- Inform persons in the working area that they must observe the regulations!



#### Validity of this document!

This document is only valid in combination with the operating instructions for the power source being used (welding machine)!

Read the operating instructions, in particular the safety instructions for the power source (welding machine)!

#### **CAUTION**



Obligations of the operator!

The respective national directives and laws must be observed for operation of the

- National implementation of the framework directive (89/391/EWG), as well as the associated individual directives.
- In particular, directive (89/655/EWG), on the minimum regulations for safety and health protection when staff members use equipment during work.
- The regulations regarding work safety and accident prevention for the respective country.
- Setting up and operating the machine according to IEC 60974-9.
- Check at regular intervals that users are working in a safety-conscious way.
- Regular checks of the machine according to IEC 60974-4.

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#### 2.4 Transport and installation

# **WARNING**



Improper work carried out!

In the event of improper work carried out on the display stand, the display stand may lose stability, tip over and result in serious injury!

- Only use the construction and fitting parts supplied!
- Do not load the display stand without reinforcement panels affixed!



Risk of accident due to improper transport of machines that may not be lifted! Do not lift or suspend the machine! The machine can fall down and cause injuries! The handles and brackets are suitable for transport by hand only!

· The machine may not be lifted by crane or suspended!

# CAUTION



Improperly secured equipment!

Equipment, equipment combinations and accessories incorrectly fastened onto transport systems can tip over during transport and cause injuries!

- Only used the original parts supplied to fasten the equipment.
- Use the systems only for transporting the machines given in the "Intended use" chapter.
- Check the fixing points before each transport and at regular intervals.



Damage due to supply lines not being disconnected!

During transport, supply lines which have not been disconnected (mains supply leads, control leads, etc.) may cause hazards such as connected equipment tipping over and injuring persons!

· Disconnect supply lines!



#### Risk of tipping!

When moving or setting up, the transport vehicle can tip over and injure persons or become damaged.

- Move or set up the machine on level, firm surfaces.
- Secure add-on parts using suitable equipment.
- Replace damaged transport rollers and their fixing elements.



# NOTE

The warning signs are illustrated with different machines.

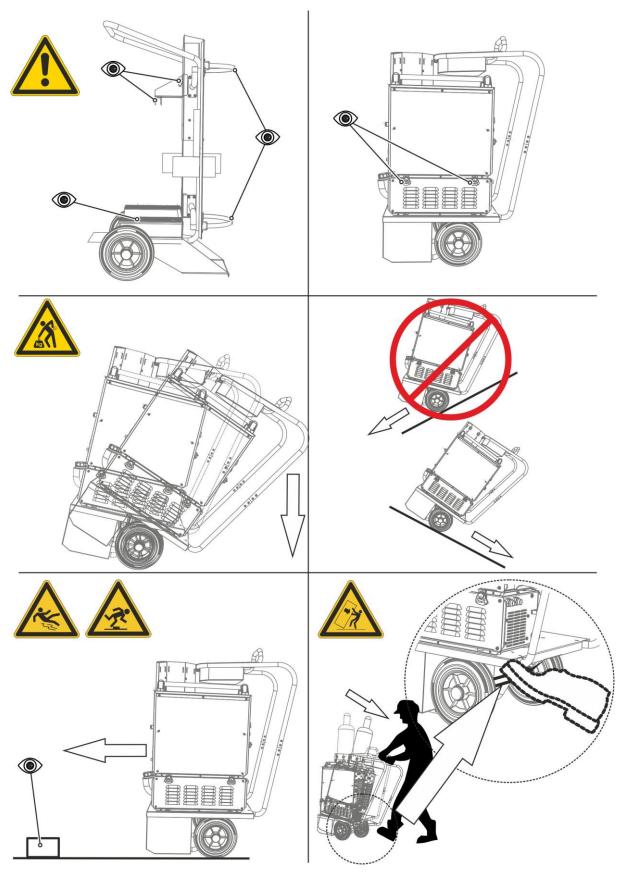


Figure 2-1



# 3 Intended use

### 3.1 Overview

# **MARNING**



Hazards due to improper usage!

Hazards may arise for persons, animals and material objects if the equipment is not used correctly. No liability is accepted for any damages arising from improper usage!

- The equipment must only be used in line with proper usage and by trained or expert staff!
- · Do not modify or convert the equipment improperly!

#### **CAUTION**



Damage due to the use of non-genuine parts!

The manufacturer's warranty becomes void if non-genuine parts are used!

- Only use system components and options (power sources, welding torches, electrode holders, remote controls, spare parts and replacement parts, etc.) from our range of products!
- Only insert and lock accessory components into the relevant connection socket when the machine is switched off.

# 3.2 Applications

Only for transporting the following machines and combinations of machines:

- Picomig 180
- Picotig 180/200
- Pico 180/220
- Tetrix 180/200

# 3.3 Documents which also apply

### 3.3.1 Warranty

### NOTE



For further information, please see the accompanying supplementary sheets "Machine and Company Data, Maintenance and Testing, Warranty"!

### 3.3.2 Service documents (spare parts and circuit diagrams)

# DANGER



Do not carry out any unauthorised repairs or modifications!

To avoid injury and equipment damage, the unit must only be repaired or modified by specialist, skilled persons!

The warranty becomes null and void in the event of unauthorised interference.

Appoint only skilled persons for repair work (trained service personnel)!

Spare parts can be obtained from the relevant authorised dealer.



#### Machine description – quick overview 4

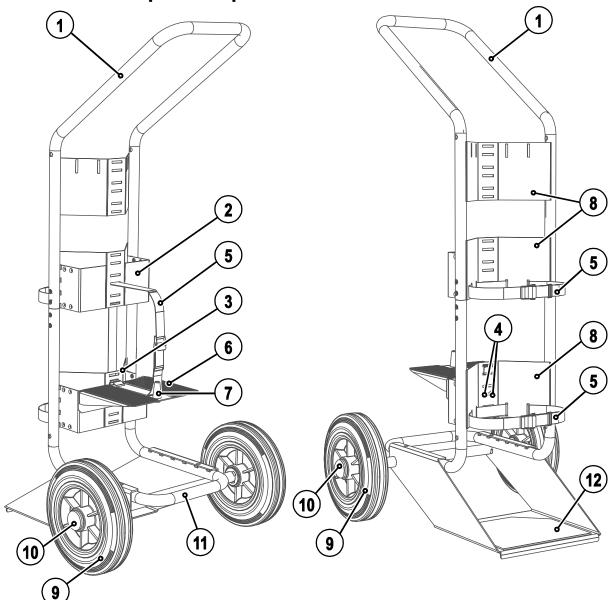


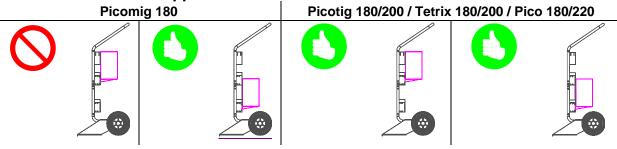
Figure 4-1

Item	Symbol	Description
1		Carrying handle
2		Upper machine support
3		Lower machine support
4		Threaded grooved pin, M5
5		Straps
6		Machine carrier plate
7		Securing pin (Picomig)
8		Retainer panel for gas cylinder
9		Wheels
10		Cap, wheel fastening
11		Foot bar
12		Shielding gas cylinder holder Carrier plate for the shielding gas cylinder



#### 5 **Design and function**

#### 5.1.1 **Position of machine support**



Symbol	Description
	Correct
)	Wrong



#### 5.1.1.1 **Mounting of machine support**

# NOTE

Select the position of the machine support in accordance with the machine and adapt the machine support adequately.

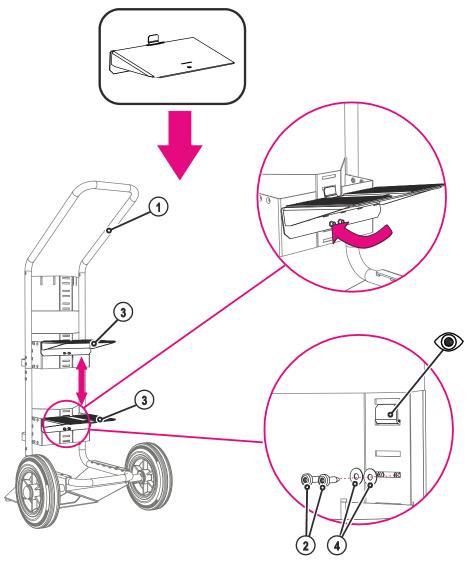


Figure 5-1

Item	Symbol	Description
1		Trolly 35-1
2		Threaded grooved pin, M5
3		Machine carrier plate
4		Plain washer M5

- Unfasten fixing screws M5.
- Remove machine support from lower position.
- Fix machine support to upper position.
- Fasten fixing screws M5.



### 5.1.2 Securing pin

# **CAUTION**



Risk of accidents due to improperly prepared transport vehicle! Depending on the machine series used the transport vehicle has to be adequately converted so as to prevent the machines from slipping!

- Picomig series: Secure pin on the machine support!
- All except for Picomig series: Remove securing pin from machine support!

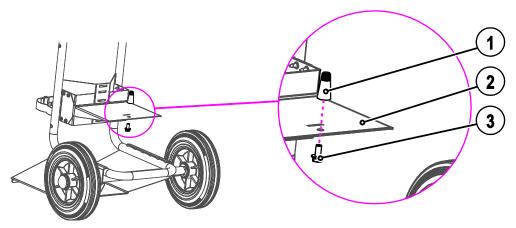


Figure 5-2

Item	Symbol	Description
1		Securing pin (Picomig)
2		Machine carrier plate
3		Retaining bolt

• Fix securing pin to machine support using the hexagonal screw.



#### 5.1.3 Fixing the welding machine

#### 5.1.4 Picomig 180

# **CAUTION**



Improperly secured equipment!

Equipment, equipment combinations and accessories incorrectly fastened onto transport systems can tip over during transport and cause injuries!

- Only used the original parts supplied to fasten the equipment.
- Use the systems only for transporting the machines given in the "Intended use" chapter.
- Check the fixing points before each transport and at regular intervals.

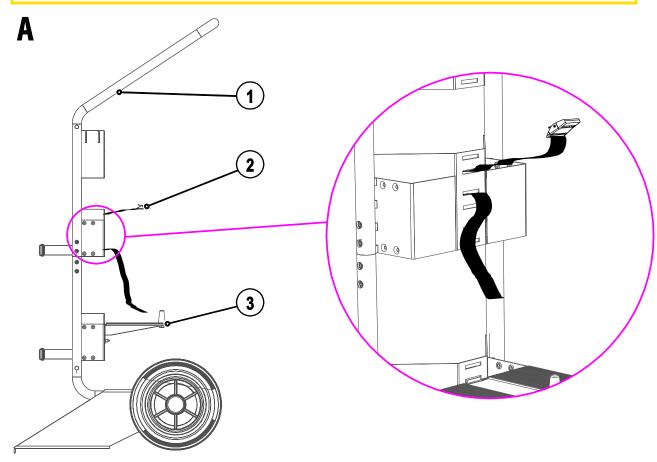


Figure 5-3

Item	Symbol	Description
1		Trolly 35-1
2		Strap, fastening the machine
3		Machine carrier plate

Thread strap as shown.



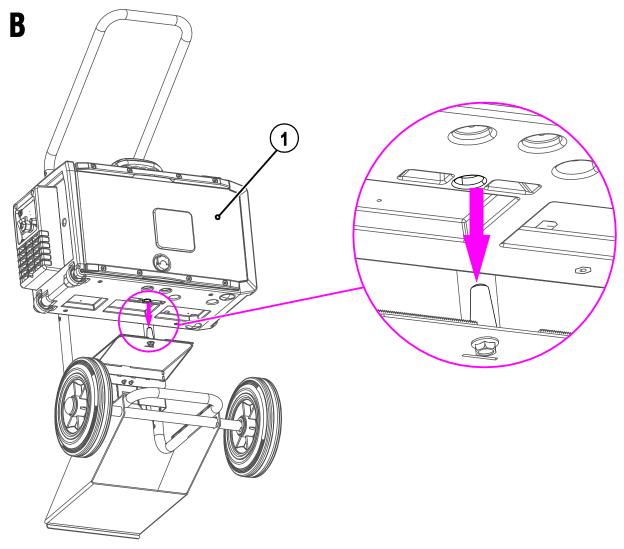


Figure 5-4

Item	Symbol	Description
1		Welding machine

• Place machine on supporting plate.

# NOTE

The welding machine has be to placed onto the securing pin on the machine support using the round socket situated on the underside of the machine!



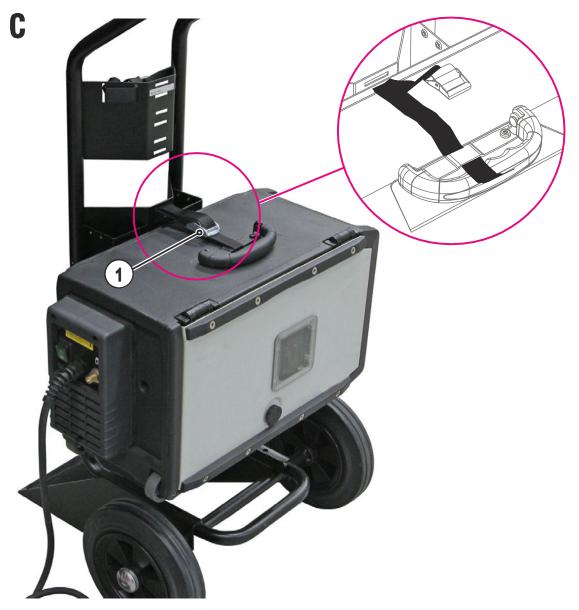


Figure 5-5

		Ç
Item	Symbol	Description
1		Strap, fastening the machine

- Securely fix the machine using the strap.
- Make sure the closure is securely fastened!



# 5.1.5 Picotig 180/200; Pico 180/220; Tetrix 180/200

# **CAUTION**



Improperly secured equipment!

Equipment, equipment combinations and accessories incorrectly fastened onto transport systems can tip over during transport and cause injuries!

- · Only used the original parts supplied to fasten the equipment.
- Use the systems only for transporting the machines given in the "Intended use" chapter.
- · Check the fixing points before each transport and at regular intervals.

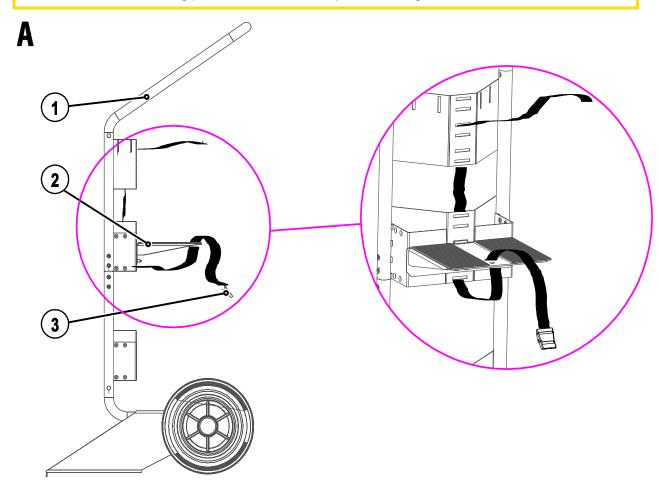


Figure 5-6

Item	Symbol	Description
1		Trolly 35-1
2		Machine carrier plate
3		Strap, fastening the machine

· Thread strap as shown.



B

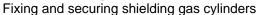


Figure 5-7

Item	Symbol	Description
1		Trolly 35-1
2		Strap, fastening the machine
3		Welding machine

- Place machine on supporting plate.
- Securely fix the machine using the strap.
- Make sure the closure is securely fastened!







# 5.2 Fixing and securing shielding gas cylinders

# **MARNING**



Risk of injury due to improper handling of shielding gas cylinders! Improper handling and insufficient securing of shielding gas cylinders can cause serious injuries!

- Secure shielding gas cylinders using the standard fastening elements on the unit (chain/belt)!
- The fastening elements must tightly enclose the shielding gas cylinder!
- Do not attach any element to the shielding gas cylinder valve!
- Adjust the height of the fastening elements to the shielding gas cylinder size!
- Observe the instructions from the gas manufacturer and any relevant regulations concerning the use of compressed air!
- · Avoid heating the shielding gas cylinder!
- Do not use shielding gas cylinders with a capacity of more than 20\~l and a size above 1\~m!



Incorrect handling of shielding gas cylinders!
Incorrect handling of shielding gas cylinders can result in serious and even fatal injury.

- Observe the instructions from the gas manufacturer and in any relevant regulations concerning the use of compressed air!
- Place shielding gas cylinders in the holders provided for them and secure with fixing devices.
- · Avoid heating the shielding gas cylinder!



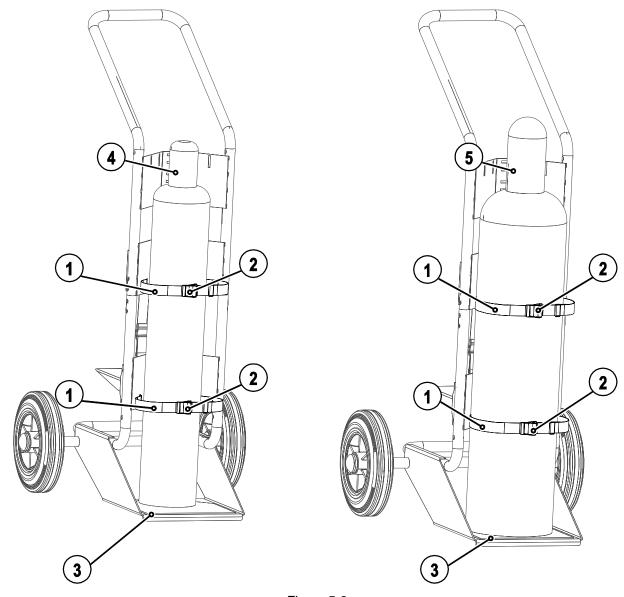


Figure 5-8

Item	Symbol	Description
1		Straps
2		Tension closure
3		Shielding gas cylinder holder Carrier plate for the shielding gas cylinder
4		Shielding gas cylinder capacity 10l
5		Shielding gas cylinder capacity 20l

- Open the closure of the straps.
- Place shielding gas cylinder on the retainer.
- Secure shielding gas cylinder using straps.
- Fasten straps using the closure.
- Make sure the straps on the cylinder are securely fastened!



# 5.3 Using the transport system

# **MARNING**



Risk of accident due to improper transport of machines that may not be lifted! Do not lift or suspend the machine! The machine can fall down and cause injuries! The handles and brackets are suitable for transport by hand only!

The machine may not be lifted by crane or suspended!

# **CAUTION**



Improperly secured equipment!

Equipment, equipment combinations and accessories incorrectly fastened onto transport systems can tip over during transport and cause injuries!

- Only used the original parts supplied to fasten the equipment.
- Use the systems only for transporting the machines given in the "Intended use" chapter.
- Check the fixing points before each transport and at regular intervals.

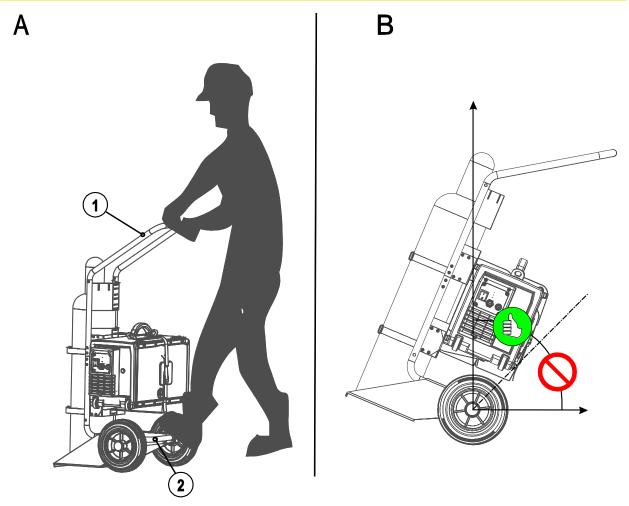


Figure 5-9

Item	Symbol	Description
1		Carrying handle
2		Foot bar

- · Hold the trolley by the transport handle.
- · Secure the trolley at the axle with your foot.
- Tilt the trolley at an angle of 40° to move it.



# 6 Maintenance, care and disposal

### 6.1 General

When used in the specified environmental conditions and under normal operating conditions, this machine is largely maintenance-free and requires a minimum of care.

There are some points which should be observed to guarantee fault-free operation of your welding machine. These include regular cleaning and inspection as described below, depending on the degree of soiling in the surroundings and how long the transport vehicle is in use.

### 6.2 Maintenance work, intervals

# 6.2.1 Daily maintenance tasks

- · Gas cylinder securing elements
- · Other, general condition
- · Keep moving parts clean.
- · Wheels and their securing elements
- Transport elements (strap, lifting lugs, handle)

# 6.2.2 Monthly maintenance tasks

- Tighten the screw connections.
- · Check bearings for damage.
- · Service at regular intervals and check for errors.
- Clean surfaces and glass with a damp cloth (do not use aggressive cleaning agents)!

#### 6.3 Maintenance work

# **M** DANGER



Do not carry out any unauthorised repairs or modifications!

To avoid injury and equipment damage, the unit must only be repaired or modified by specialist, skilled persons!

The warranty becomes null and void in the event of unauthorised interference.

• Appoint only skilled persons for repair work (trained service personnel)!

Repair and maintenance work may only be performed by qualified authorised personnel; otherwise the right to claim under warranty is void. In all service matters, always consult the dealer who supplied the machine. Return deliveries of defective equipment subject to warranty may only be made through your dealer. When replacing parts, use only original spare parts. When ordering spare parts, please quote the machine type, serial number and item number of the machine, as well as the type designation and item number of the spare part.

# 6.4 Disposing of equipment

### **NOTE**



Proper disposal!

The machine contains valuable raw materials, which should be recycled, and electronic components, which must be disposed of.



- Do not dispose of in household waste!
- · Observe the local regulations regarding disposal!

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#### 6.4.1 Manufacturer's declaration to the end user

- According to European provisions (guideline 2002/96/EG of the European Parliament and the Council
  of January, 27th 2003), used electric and electronic equipment may no longer be placed in unsorted
  municipal waste. It must be collected separately. The symbol depicting a waste container on wheels
  indicates that the equipment must be collected separately.
  - This machine is to be placed for disposal or recycling in the waste separation systems provided for this purpose.
- According to German law (law governing the distribution, taking back and environmentally correct disposal of electric and electronic equipment (ElektroG) from 16.03.2005), used machines are to be placed in a collection system separate from unsorted municipal waste. The public waste management utilities (communities) have created collection points at which used equipment from private households can be disposed of free of charge.
- Information about giving back used equipment or about collections can be obtained from the respective municipal administration office.
- EWM participates in an approved waste disposal and recycling system and is registered in the Used Electrical Equipment Register (EAR) under number WEEE DE 57686922.
- In addition to this, returns are also possible throughout Europe via EWM sales partners.

# 6.5 Meeting the requirements of RoHS

We, EWM HIGHTEC Welding GmbH Mündersbach, hereby confirm that all products supplied by us which are affected by the RoHS Directive, meet the requirements of the RoHS (Directive 2002/95/EC).

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# **Technical data**

Meeting the requirements of RoHS



# 7 Technical data

Dimensions (LxWxH) in mm	515 x 585 x 1160
Weight without accessories	approx. 18,5 kg
Manufactured according to standard	IEC 60974-1



# Appendix A

# **Overview of EWM branches**

#### **Headquarters**

#### **EWM HIGHTEC WELDING GmbH**

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