



Transport systems

Trolley Rob XX2

Palette Rob XX2

ON Kranen Palette Rob XX2

Observe additional system documents!

099-008275-EW501

18.11.2010

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ewm-warranty*
24 hours / 7 days

* Details for ewm-warranty
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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

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.

2.1 Explanation of icons

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

2.2 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



- 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)!



- 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!

CAUTION



- Obligations of the operator!**
The respective national directives and laws must be observed for operation of the machine!
- 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.

2.3 Transport

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!

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!

There is a risk of the machine tipping over and injuring persons or being damaged itself during movement and set up. Tilt resistance is guaranteed up to an angle of 10° (according to EN 60974-A2).

- Set up and transport the machine on level, solid ground!
- Secure add-on parts using suitable equipment!
- Replace damaged transport rollers and their fixing elements!
- Fix external wire feed units during transport (avoid uncontrolled rotation)!

2.3.1 Lifting by crane

DANGER



Risk of injury during lifting by crane!

When lifting the equipment by crane, serious injuries can be inflicted by falling equipment or add-on units.

- Transport on all lifting lugs at the same time (see Fig. Lifting principle)!
- Ensure that there is an even load distribution! Only use ring chains or suspension ropes of the same length!
- Observe the lifting principle (see Fig.)!
- Remove all accessory components before lifting (e.g. shielding gas cylinders, tool boxes, wire feed units, etc.)!
- Avoid jerky movements when raising or lowering!
- Use shackles and load hooks of the appropriate size!

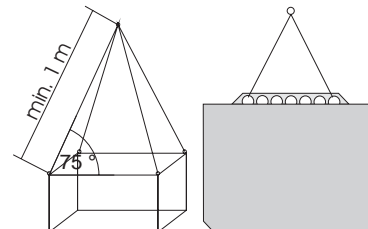


Fig. Lifting principle



Risk of injury due to unsuitable ring screws!

In case of improper use of ring screws or the use of unsuitable ring screws, persons can be seriously damaged by falling equipment or add-on components!

- The ring screw must be completely screwed in!
- The ring screw must be positioned flat onto and in full contact with the supporting surfaces!
- Check that the ring screws are securely fastened before use and check for any damage (corrosion, deformation)!
- Do not use or screw in damaged ring screws!
- Avoid lateral loading of the ring screws!

**DANGER****Risk of injury when lifting by crane!**

When lifting using the ON Kranen Palette Rob XX2 option, persons can be seriously damaged by falling equipment or add-on components!

- Transport on all 4 lifting lugs simultaneously!
- Ensure that there is an even load distribution! Only use ring chains or suspension ropes of the same length!
- Only lift using a lifting beam!
- Remove all accessory components!
(e.g. shielding gas cylinders, tool boxes, wire feed units, etc.)!
- Avoid jerky movements when raising or lowering!

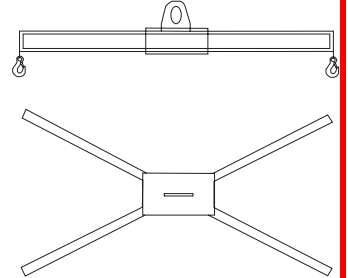


Fig. Lifting beam

2.3.2 Forklift trucks

**WARNING****Incorrect use of forklift trucks!**

Falling equipment or add-on components can cause serious damage to persons!

- Transport only by trained or instructed personnel!
- Position the unit with the largest possible fork distance at the side!
- Do not transport any loads at the same time
(e.g. shielding gas cylinders, persons, tool boxes, wire spools, etc.)!
- Avoid jerky movements when raising or lowering!

3 Intended use

WARNING



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!

3.1 Applications

3.1.1 Trolley Rob XX2

Trolley Rob XX2 is used to transport:

- correctly secured machines
- without add-on components or devices
- on short and level routes

Machine series:

- Phoenix 352,
- Phoenix 452,
- Phoenix 552,
- alpha Q 352,
- alpha Q 552,
- Tetrax 352,
- Tetrax 452,
- Tetrax 552

with a maximum of one add-on module,

- Phoenix 1002,
- Tetrax 1002

without any add-on modules.

3.1.2 Palette Rob XX2

With the help of a pallet truck, Palette Rob XX2 is used to transport:

- correctly secured machines
- without add-on components or devices

Machine series:

- Phoenix 352,
- Phoenix 452,
- Phoenix 552,
- alpha Q 352,
- alpha Q 552,
- Tetrax 352,
- Tetrax 452,
- Tetrax 552

with a maximum of one add-on module,

- Phoenix 1002,
- Tetrax 1002

without any add-on modules.

3.1.3 Strain relief for intermediate tube packages

The strain relief devices are used solely for strain relief on the connections for accidentally occurring tensile forces on tube and cable packages.

They are not suitable:

- for moving equipment fastened to transport systems using tubes or cables, or
- as a ladder.

3.1.4 ON Kranen Palette Rob XX2

The ON Kranen Palette Rob XX2 option is used to:

- lift a "Palette Rob XX2" with
- a power source fastened to the pallet and
- an optional cooling module.

Machines from the 1002 series cannot be lifted even with this option!

	Trolley		Palette	
	70-2 Rob	Rob XX2	Rob	Rob XX2
ON Kranen Palette Rob XX2 092-002455-00000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2 Documents which also apply

3.2.1 Warranty

NOTE



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

3.2.2 Declaration of Conformity



The designated machine conforms to EC Directives and standards in terms of its design and construction:

- EC Low Voltage Directive (2006/95/EC),
- EC EMC Directive (2004/108/EC),

This declaration shall become null and void in the event of unauthorised modifications, improperly conducted repairs, non-observance of the deadlines for the repetition test and / or non-permitted conversion work not specifically authorised by the manufacturer.

The original copy of the declaration of conformity is enclosed with the unit.

3.2.3 Welding in environments with increased electrical hazards



In compliance with IEC / DIN EN 60974, VDE 0544 the machines can be used in environments with an increased electrical hazard.

3.2.4 Service documents (spare parts)



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.

4 Machine description – quick overview

4.1 Trolley Rob XX2

Trolley Rob XX2 is equipped to move equipment using fixed and guide castors.

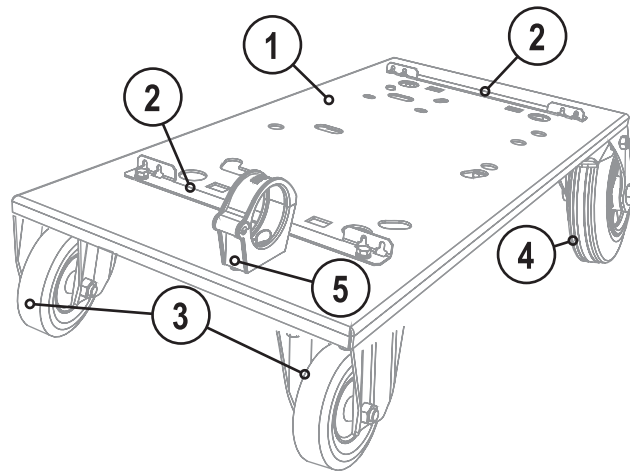


Figure 4-1

Item	Quantity	Description	Item number
1	1	Base plate	094-012215-00003
2	2	Equipment holder	094-012411-00002
3	1	Fixed castor	094-003067-00000
4	2	Guide castor, with lock	094-009087-00000
5	1	Strain relief Third party intermediate tube packages	094-010338-00000

4.2 Palette Rob XX2

For transport using a pallet truck.

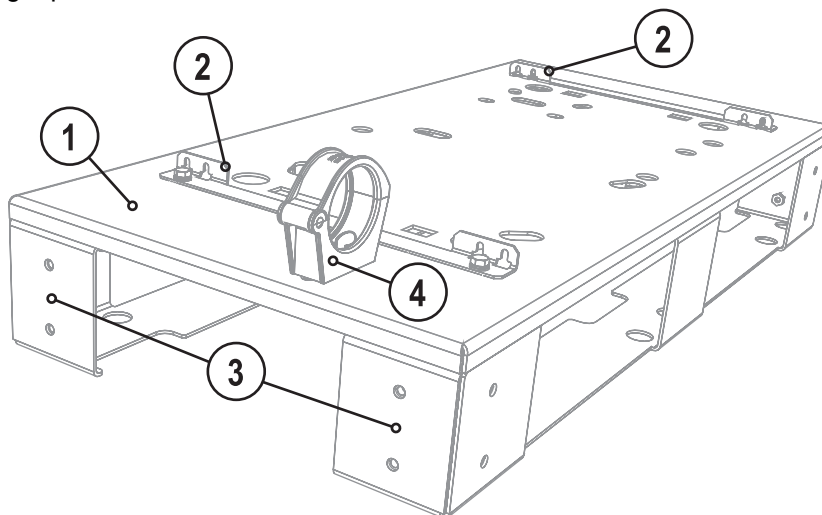


Figure 4-2

Item	Quantity	Description	Item number
1	1	Base plate	094-012215-00003
2	2	Equipment holder	094-012411-00002
3	2	Pallet foot	094-012265-00003
4	1	Strain relief Third party intermediate tube packages	094-010338-00000

4.3 Strain relief

NOTE

 The scope of delivery includes the EWM strain relief (094-007319-00003) and the strain relief for corrugated tube intermediate hose packages (094-010338-00000)!

4.3.1 Strain relief for intermediate tube packages

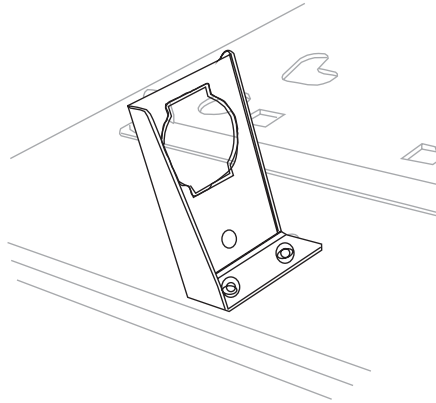


Figure 4-3

4.3.2 Strain relief for corrugated tube intermediate tube packages

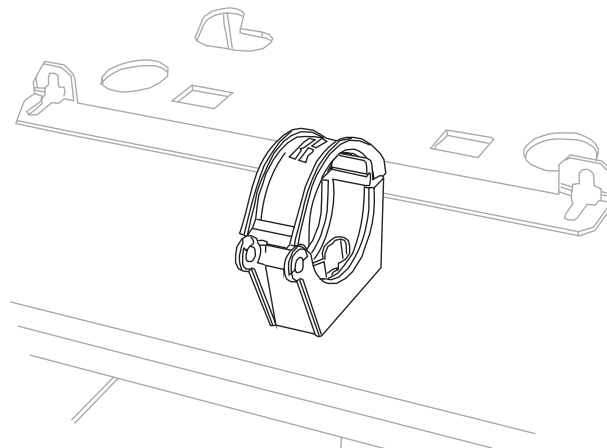


Figure 4-4

4.4 Options

4.4.1 ON Kranen Palette Rob XX2

Lifting eyes set for Palette Rob XX2.

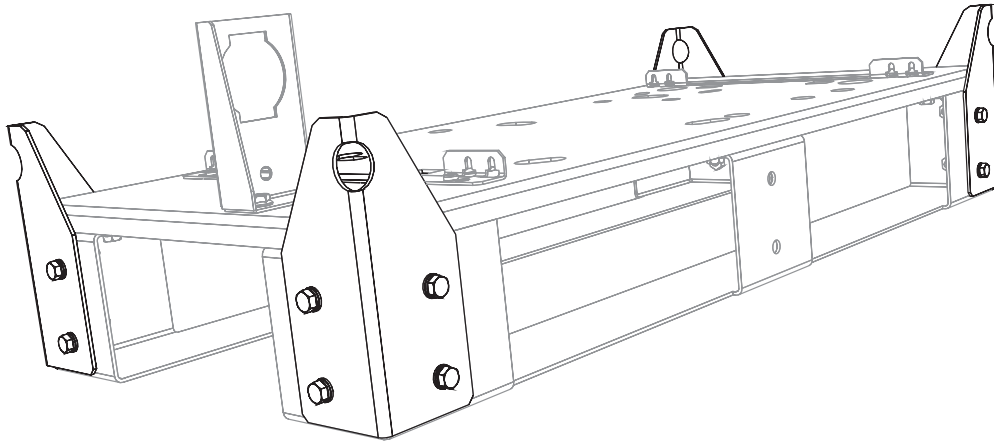


Figure 4-5

5 Design and function

5.1 Installation

⚠ CAUTION



Risk of accident due to unsecured transport vehicle!

If the transport vehicle hasn't been secured, it can be set in motion and topple, causing injuries and damage. The guide castors of the transport vehicle are equipped with parking brakes to ensure a secure parking position!

- Make sure all parking brakes are activated!

The Trolley is equipped to lock the selected position with latches on the guide castors.

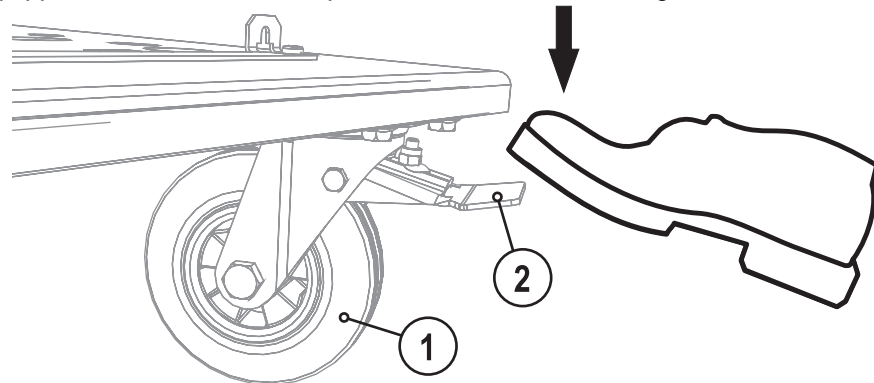


Figure 5-1

Item	Symbol	Description
1		Guide castor
2		Locking brake

- Follow the steps in the reverse order to release the fixing brake.

5.1.1 Securing the equipment

CAUTION

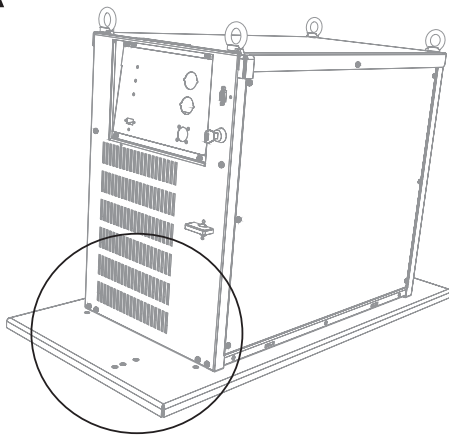


Improperly secured equipment!

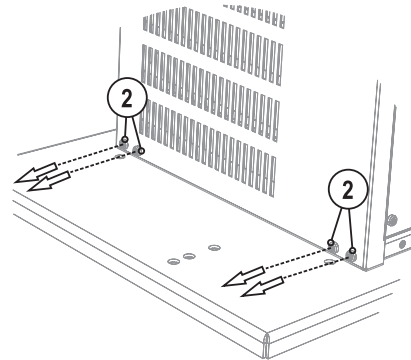
Equipment, equipment combinations and accessories incorrectly fastened onto transport systems can tip over during transport and cause injuries!

- Only use 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.

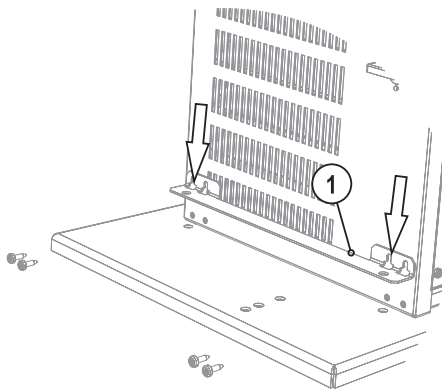
A



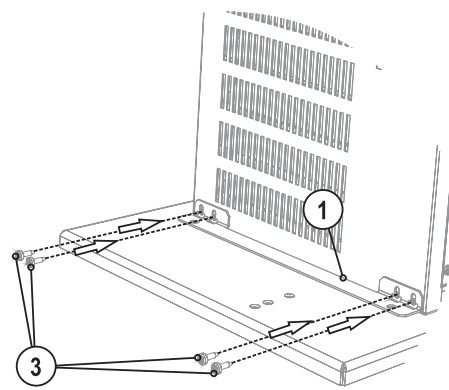
B (2x)



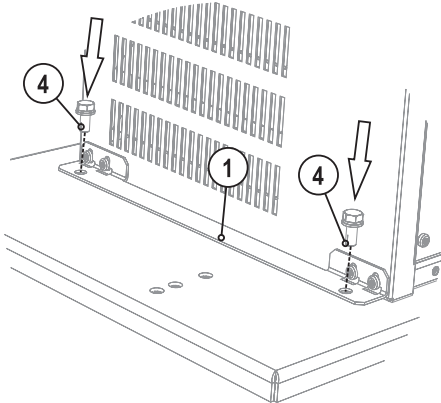
C (2x)



D (2x)



E (2x)



F (2x)

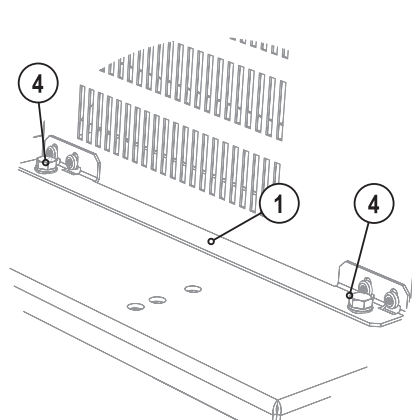


Figure 5-2

NOTE



The M5 x 16 mm threaded grooved pins used for fixing are included with the power source.

Item	Quantity	Description	Item number
1	2	Equipment holder	094-012411-00002
2	8	M5 x 16 mm threaded grooved pin	094-007915-00000
3	8	M5 x 10 mm threaded grooved pin	094-007027-00000
4	4	M8 x 20 mm hexagon screw	064-000511-00000

NOTE



Repeat the fastening process described in the graphic on the opposite page.

5.1.2 Strain relief for intermediate tube packages

5.1.2.1 Third party intermediate tube packages strain relief assembly

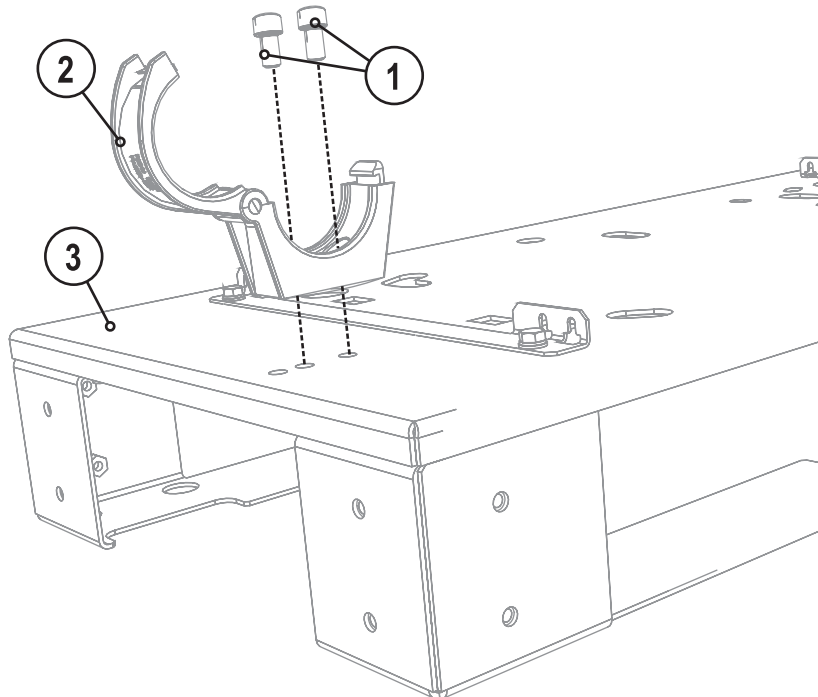


Figure 5-3

Item	Quantity	Description	Item number
1	2	M8 x 16 hexagonal socket screw	094-000459-00000
2	1	Clamping clip	094-010338-00000
3	1	Base plate	094-012215-00003

5.1.2.2 EWM intermediate tube packages strain relief assembly

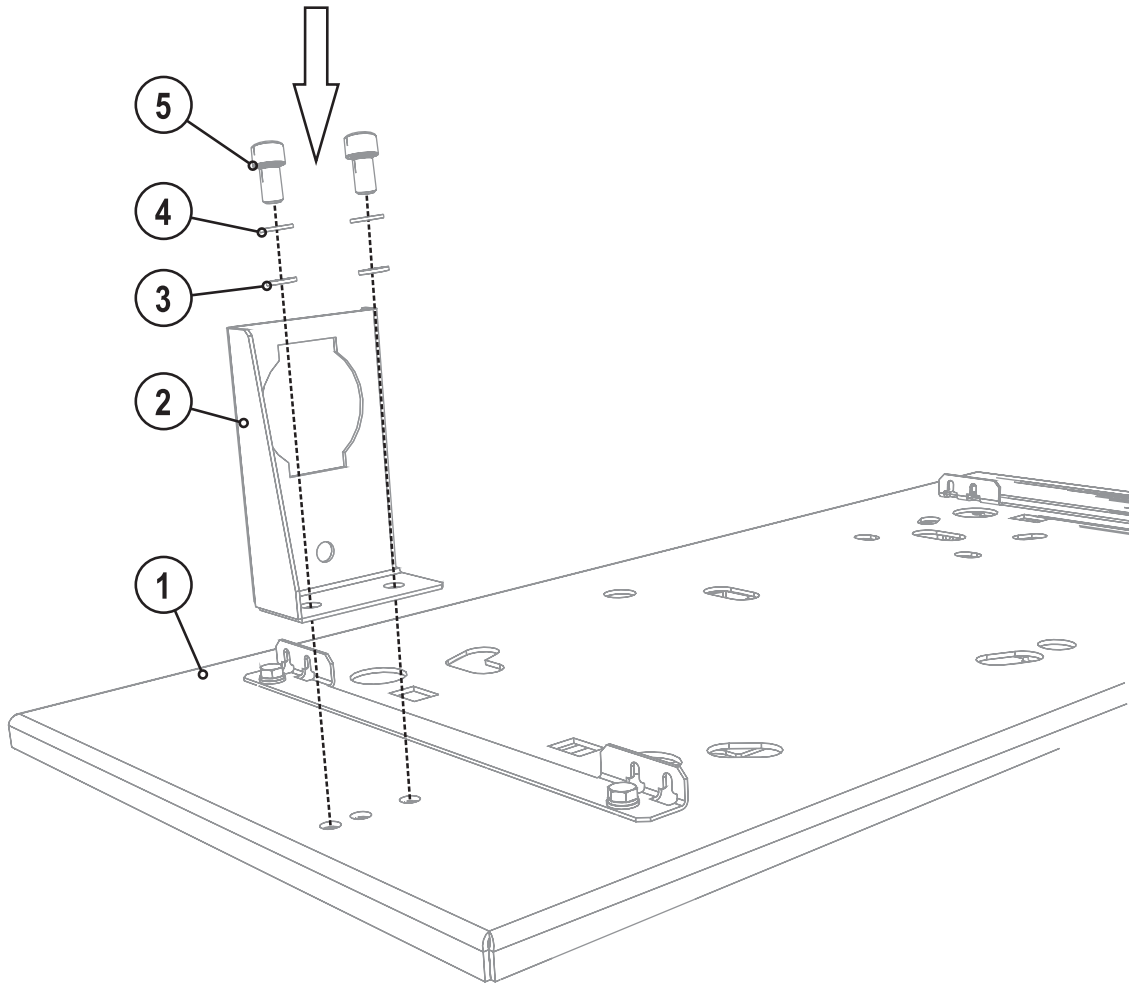


Figure 5-4

Item	Quantity	Description	Item number
1	1	Base plate	094-012215-00003
2	1	Panel, strain relief	094-007319-00003
3	2	M8 plain washer	064-000586-00000
4	2	Spring washer, M8	064-000596-00000
5	2	M8 x 16 hexagonal socket screw	094-000459-00000

5.1.3 Option

Alternatively, you can equip a Palette Rob XX2 with lifting eyes. To do so, fasten the ON Kranen Palette Rob XX2 option to the pallet feet.

DANGER



Risk of injury when lifting by crane!

When lifting using the ON Kranen Palette Rob XX2 option, persons can be seriously damaged by falling equipment or add-on components!

- Transport on all 4 lifting lugs simultaneously!
- Ensure that there is an even load distribution! Only use ring chains or suspension ropes of the same length!
- Only lift using a lifting beam!
- Remove all accessory components!
(e.g. shielding gas cylinders, tool boxes, wire feed units, etc.)!
- Avoid jerky movements when raising or lowering!

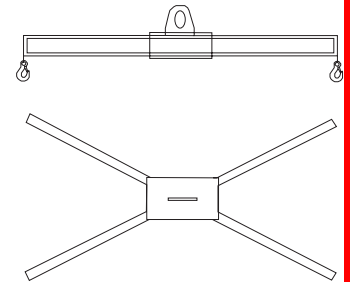


Fig. Lifting beam

5.1.3.1 ON Kranen Palette Rob XX2 assembly

CAUTION



Risk of accident due to improper use!

The ON Kranen Palette Rob XX2 option is intended for use with Palette Rob XX2 only. Use with other transport systems can cause injury and physical harm!

- Make sure the machines are properly secured on the pallet before lifting!
- Make sure the ON Kranen Palette Rob XX2 option is properly fastened to the pallet before lifting!

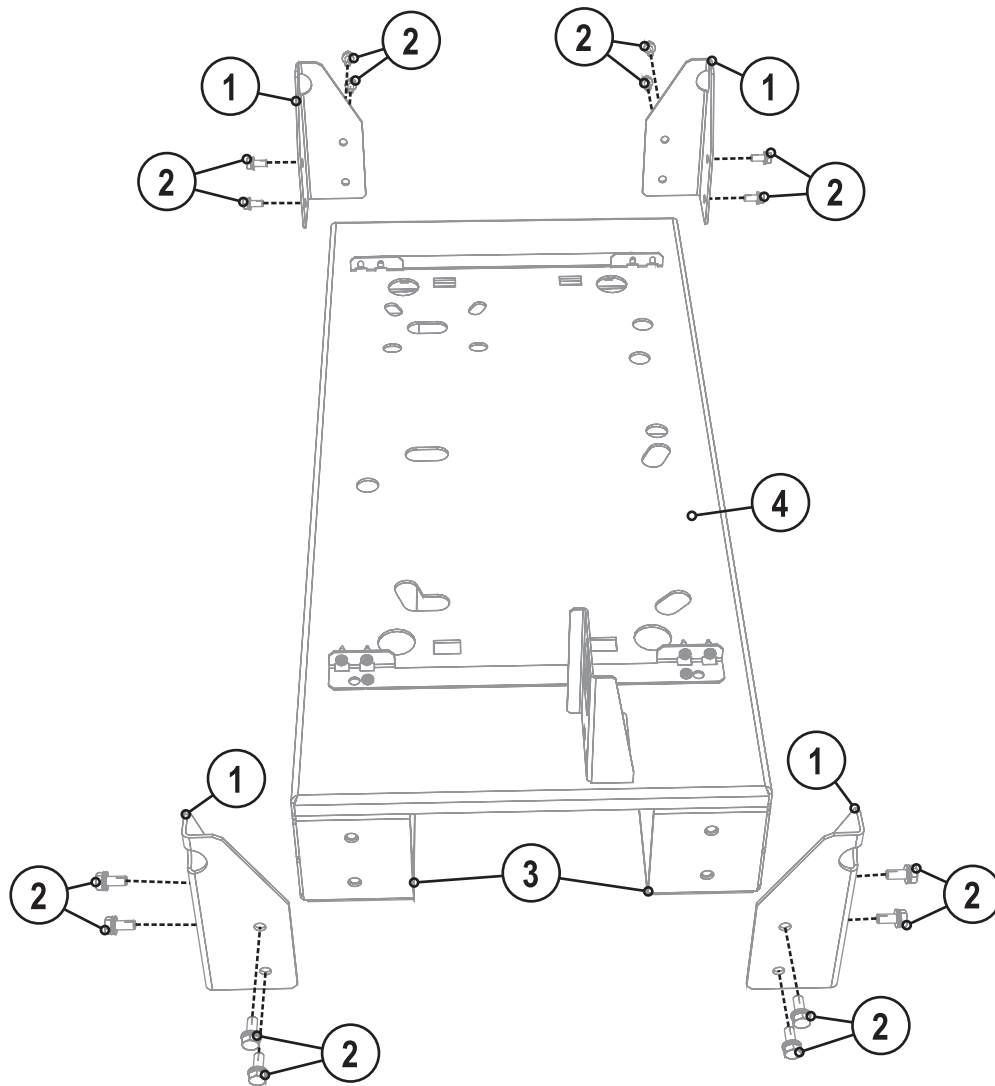


Figure 5-5

Item	Quantity	Description	Item number
1	4	Lifting lug panel	094-014429-00000
2	4	M8 x 20 mm hexagon screw	064-000511-00000
3	2	Pallet foot	094-012265-00003
4	1	Pallet baseplate	094-012215-00002

5.1.4 Transport with forklift trucks

⚠ WARNING**Incorrect use of forklift trucks!****Falling equipment or add-on components can cause serious damage to persons!**

- Transport only by trained or instructed personnel!
- Position the unit with the largest possible fork distance at the side!
- Do not transport any loads at the same time (e.g. shielding gas cylinders, persons, tool boxes, wire spools, etc.)!
- Avoid jerky movements when raising or lowering!

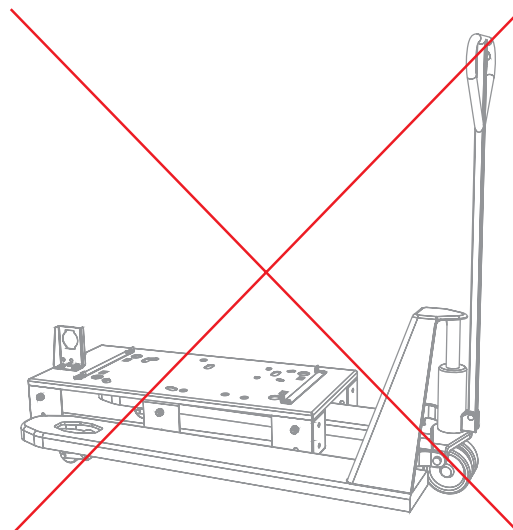
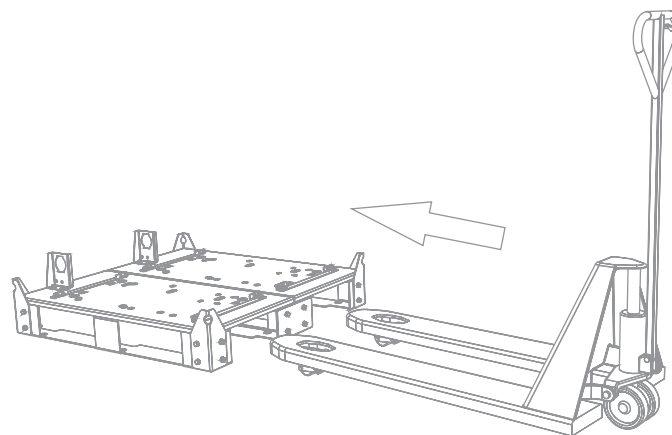
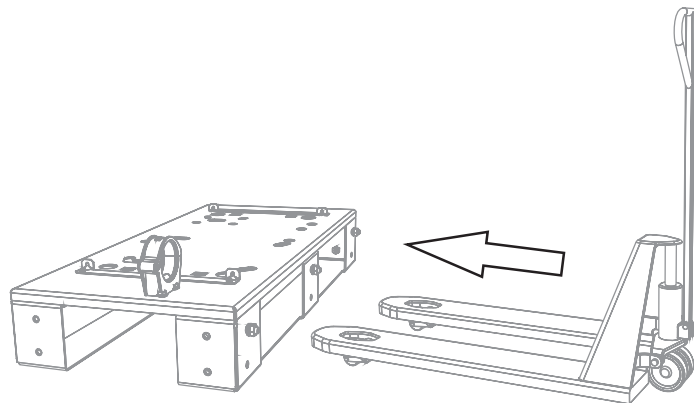


Figure 5-6

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.
- Transport rollers 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.

6.3 Repair Work



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!



6.4.1 Manufacturer's declaration to the end user

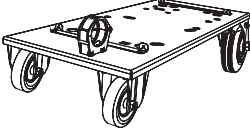
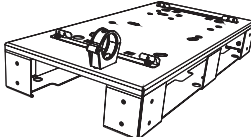
- According to European provisions (guideline 2002/96/EG of the European Parliament and the Council of January, 27th 2003), used electric and electronic equipment may no longer be placed in unsorted municipal waste. It must be collected separately. The symbol depicting a waste container on wheels indicates 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).

7 Technical data

7.1 Transportsysteme

	Trolley Rob XX2 	Palette Rob XX2 
Dimensions (LxWxH) [mm]	785 x 495 x 200	785 x 495 x 200
Weight without accessories	approx. 20.5 kg	approx. 25 kg
Constructed to standards	VDE 0544/EN 50199/VDE 0544 Part 206/C €	

8 Appendix

8.1 Overview of EWM branches

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