

Installation manual

EN

monteq Load up to 230kg

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1 General

1.1 Information about this manual

This manual enables safe and efficient handling of the product.

The manual is a component of the product and must be kept in the immediate vicinity of the product where it is accessible for personnel at all times. Personnel must have carefully read and understood this manual prior to starting all tasks. The basic prerequisite for safe work is compliance with all the safety instructions and handling instructions in this manual.

Illustrations in this manual are provided for a basic understanding and may deviate from the actual model of the clamping device.

It is assumed that the reader is familiar with standard procedures, such as cleaning the mounting surfaces.

1.2 Explanation of symbols

Safety instructions

Safety instructions are indicated by symbols in this operating manual. The safety instructions are introduced by signal words that express the scope of the hazard.

The safety instructions must be strictly adhered to, you must act prudently to prevent accidents, personal injury, and material damage.



WARNING!

... indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.



CAUTION!

... indicates a possible dangerous situation that can result in minor or light injury if it es not avoided.



NOTE!

... indicates a possible dangerous situation that can result in material damage if it is not avoided.

Tips and recommendations



... indicates useful tips and recommendations, as well as information for efficient and trouble-free operation.

1.3 Limitations of liability

All information and instructions in this operating manual have been provided under due consideration of applicable standards and regulations, the current state of technology, as well as our many years of experience.

The manufacturer assumes no liability for damage due to:

- Failure to follow the instructions in the manual
- Non-intended use
- Deployment of untrained personnel
- Unauthorized conversions
- Technical changes
- Use of non-approved spare parts

The actual scope of delivery can vary from the explanations and graphic representations provided in this manual in the case of special versions, if supplemental order options are desired, or on the basis of the latest technical changes.

The agreed obligations in the delivery contract, the general terms and conditions, as well as delivery conditions of the manufacturer, and the statutory regulations valid at the time the contract was concluded, apply.

1.4 Copyright

This manual is protected by copyright and is provided exclusively for internal purposes.

Delivery of the operating manual to third parties, duplication in any form – including excerpts – as well as exploitation and/or communication of the content, are not permitted [except for internal use] without written approval from the manufacturer.

Actions to the contrary make damage compensation mandatory. We reserve the right to enforce additional claims.

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1.5 Spare parts



WARNING!

Safety risk if the wrong spare parts are used!

Incorrect or defective spare parts can cause damage, malfunction, or total failure; they can also impair safety.

Only use manufacturer's original spare parts.

Only purchase spare parts from authorized dealers or direct from the manufacturer. Addresses are in the appendix.

1.6 Warranty terms

The warranty terms are included in the manufacturer's terms and conditions.

monteq. Safety english

2 Safety

This section provides an overview o fall the important safety aspects for optimal protection of personnel, as well as for safe and trouble-free operation.

2.1 Responsibility of the customer

The device is used in industrial applications. Consequently the owner of the device is subject to legal industrial safety obligations.

In addition to the safety instruction in this manual, generally valid safety and accident protection guidelines, and environmental protection guidelines as well as the machines' manual must be adhered to and complied with for the area of implementation of the device.

Note in particular that the status scans of the machine must be adjusted to the respective clamping device.



DANGER!

Risk of injury due to thrown out parts!

Incorrect machine settings may lead to the throwing out of parts.

- The status scans the machine must be set to the respective clamping device.
- Regularly check the status scans of the machine, see chapter »Maintenance Schedule«. If the end position can not be reached the jaw module may no longer be used.
- Observe the operating instructions of the machine.

2.2 Personnel requirements



WARNING!

Danger of injury due to insufficient qualification!

Improper handling of the clamping device can cause serious injury or material damage.

Only have activities performed by personnel who are qualified to perform these activities. The following qualifications are cited in the operating manual for the various activity areas.

Specialized personnel

are personnel who due to their specialized training, skills, and experience, as well as knowledge of the applicable regulations, are capable of executing the tasks assigned to them and of recognizing and avoiding possible hazards on their own.

Only persons from whom it can be expected that they reliably execute their work are considered as personnel. Persons whose capability to react is impaired, for instance through drugs, alcohol, or medication, are not approved.

■ Comply with age-specific and job-specific regulations that are applicable at the installation site when selecting personnel.

2.3 Intended use

The assembling tool monteq is designed for installation of clamping devices to a machine. It is not designed for using in a machine and may not be used in a machine but must be removed before machining.

The monteq should only be mounted, operated, maintained, and cleaned by instructed, specialized personnel.

Intended use also includes compliance with all the instructions in this manual.

Any use that extends beyond the intended use, or any other use of the clamping device is considered to be misuse and can cause dangerous situations.



WARNING!

Danger due to misuse!

Misuse of the monteq can cause dangerous situations.

Particularly refrain from the following uses of the monteq:

- Use in machines [e.g. machine tools].
- Use of the monteq with clamping devices that ar not compatible.

monteq. **Safety** english

Claims of any type due to damage arising from nonintended use are excluded.

Use restriction



WARNING!

Danger due to misuse!

Misuse of the monteq can cause dangerous situations.

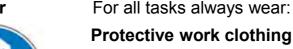
 The monteq is authorized exclusively for compatible clamping devices of HAINBUCH

2.4 Personal protective equipment

Wearing of personal protective equipment is required to minimize health hazards when working with the device.

- Always wear the protective equipment necessary for the respective task when working with the device.
- Follow the instructions that have been posted in the work area.

Always wear





is tight-fitting work clothing with low resistance to tearing, with tight sleeves, and without projecting parts. It is primarily used to protect against entanglement by moving machine parts.

Do not wear rings, chains, or other jewelry.



Safety footwear

for protection against heavy falling parts and slipping on slippery substrates.

For special tasks wear

Special protective equipment is required when executing special tasks. Separate reference is made to this equipment in the specific sections of this manual. This special protective equipment is explained below:



Hard hat

to protect against falling and flying parts and materials.



Protective gloves

to protect hands from friction, abrasion, puncture wounds, or deeper injuries, as well as from contact with hot surfaces.

2.5 Special dangers

Follow the safety instructions listed here and the warnings in the other sections of this manual to reduce health hazards and to avoid dangerous situations.

Suspended loads



WARNING!

Life-threatening danger due to suspended loads!

The monteq must be lifted together with the clamping device with a crane. When lifting the clamping device there is a life-threatening hazard due to falling parts or parts swinging out of control.

- Never step under suspended loads.
- Comply with the instructions concerning the intended attachment points. Ensure that the sling gear is securely seated!
- Do not attach lifting gear in projecting components.
- Only use approved hoists and sling gear with sufficient bearing capacity.
- Do not use rope and belts that are torn or frayed.



WARNING!

Risk of injury!

Falling down of the clamping device or its parts can cause severe bruises and fractures.

The dead weight of the clamping device or its parts can lead to high physical stress.

monteq. Safety english



CAUTION!

Danger of injury!

- Maximum load must not be exceeded!
- A damaged monteg must be used further!
- Before lifting a load check that the eye bolts are fully screwed in and tightened by hand!
- The bracket may be unlocked on the machine adapter only for installation, otherwise the locking pin must fix the bracket.
- The eye bolts may only be released with layed and secured clamping device and/or whend the clamping device is mounted according to the machine adapter according to the instruction manual!
- When pivoting the bracket there is Risk of crushing of the fingers!

2.6 Functionality

NOTICE!

With high contamination of the clamping device the functionality is no longer guaranteed.

■ The cleaning and maintenance intervals must be observed.

3 Technical data

3.1 General information

The monteq is available in different sizes and variants.

- Torsion angle
- Locating diameter
- Maximum load
- Weight

3.2 Operating conditions

Environment	Specification	Value	Unit
	Temperature range	15 - 65	°C

Mechanical actuating

In each possible operating condition the maximum draw force and compressive force may not be exceeded!

3.3 Type designation

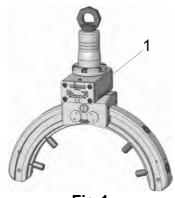


Fig 1

The type designation is on the product nameplate [1] and includes the following information:

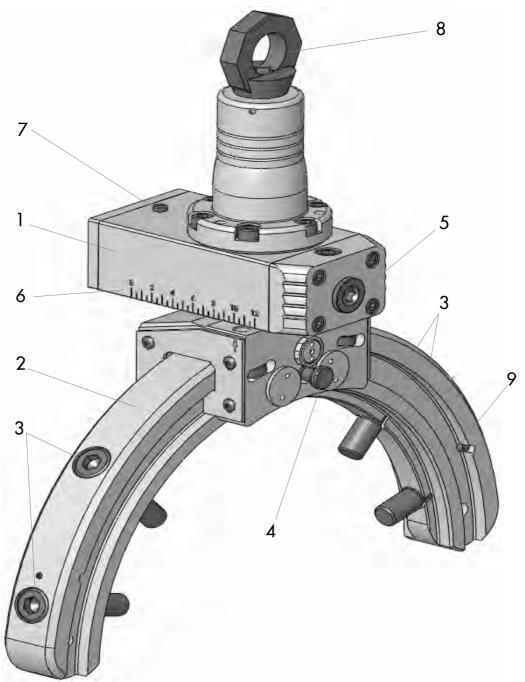
- FA-No.
- Year of manufacture
- Max load [kg]
- Weight [kg]

3.4 Check

Static test Used coefficient: 1.25

4 Structure and function

Structure



- 1. Track carriage
- 2. Bow
- 3. Suspension screws [captive, mounted with bracket]
- 4. Locking pin

Fig. 2

- 5. Adjustable screw weight shift
- 6. Scale weight shift
- 7. Spirit level
- 8. Rotating eye bolt [uncoupled]
- 9. Bracket end position safeguard

Brief description

Now a practical support is available for everyone who must set up heavy clamping devices: The monteg chuck mounting aid for the centroteX quick changeover system.

With the monteq mounting aid alignment and handling are easy. Thanks to the springloaded bearing arrangement the clamping device can even be lifted by hand, the swiveling holder makes it easy to lock the clamping device in the machine-side bayonet, and with an adjustable screw the clamping device can be adjusted onto the spindle.

- Easy and safe handling of heavy clamping devices
- The clamping device is not suspended diagonally
- Adjustment of the clamping device axis flush with the spindle axle
- The spindle bearings are not damaged, force-free mounting and optimal change-over accuracy thanks to spring-suspended loads

5 Transporting, packaging, storing

5.1 Safety instructions for transporting

Unbalanced package



WARNING!

Danger of falling due to an unbalanced package

Packed goods can have an unbalanced package. If attached incorrectly the package can tip and cause life-threatening injuries.

- Note the markings on the packages.
- Attach the crane hook in such a manner that it is located above the center of gravity.
- Carefully lift and see if the load tilts. If necessary change the attachment.

5.2 Symbols on the packaging



Fragile

Identifies packages with fragile or sensitive contents. Handle the packed goods with care; do not allow them to fall, and do not subject them to impact.



Protect from moisture

Keep packed goods dry and protected against moisture.

5.3 Transport inspection

Check delivery immediately upon receipt to ensure that delivery is complete and to identify any transport damage.

Proceed as follows it there is apparent external damage:

■ Do not accept the delivery, or only accept it with reservation.

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- Note the extend of transport damage on the transport documents or on the transport company's delivery ticket.
- Submit a complaint.



Report any defect as soon as it is detected. Claims for damage compensation can only be enforced during the applicable periods for giving notice of lack of conformity.

5.4 Packaging

About the packaging

Individual packages are packed according to the expected transport conditions. Environmentally-friendly materials have been used exclusively for the packaging.

Packaging should protect the specific components from transport damage, corrosion, and other damage until installation. Therefore do not destroy the packaging, remove it just before installation.



The packed goods are sealed in foil airtight and packed in cartons. See the »Technical Data« section for the specific weight of the respective sizes.

Handling packaging materials

Dispose of packaging materials in accordance with the respectively valid statutory regulations and local guidelines.

1

NOTE!

Improper disposal causes environmental damage!

Packaging materials are valuable raw materials and in many cases they can be reused, or they can be effectively treated and recycled.

- Dispose of packaging materials in an environmentally responsible manner.
- Comply with locally applicable disposal guidelines. If necessary commission a specialized company to dispose of packaging.

5.5 Storing



Under certain circumstances instructions for storage and subsequent storage are affixed to the packages that extend beyond the requirements cited here. Comply with these instructions accordingly.

Storage of packages

Only store packages under the following conditions:

- Do not store outdoors.
- Store in a dry and dust-free location
- Do not expose to aggressive media
- Protect from direct sunlight
- Avoid mechanical vibration
- Storage temperature: 15 bis 35 °C
- Relative humidity: max. 60 %
- For storage periods longer than 3 months:
 - Check the general condition of all parts and the packaging at regular intervals.
 - Touch up or re-apply anti-corrosion agents as needed

Subsequent storage of the monteq

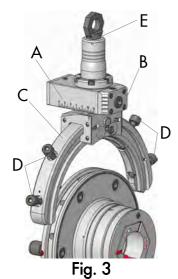
Only re-store the monteg under the following conditions:

- Thoroughly clean the monted prior to subsequent storage [see section »Cleaning«]
- Thoroughly oil and grease the monteq. [see section »Cleaning«]
- The monteq must be stored securely in position. If this is not guaranteed, use a suitable container for the monteg or equip the shelf with a circumferential securing edge.

6 Using the monteq

6.1 Assembly of the clamping device to the machine adapter

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- 1. Lock the carriage [A] by using the locking bolt [B] in the middle of the bracket [C].
 - The lifting screws [D] are fixed mounted to the bracket [C].

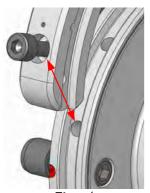


Fig. 4

- 2. Put the monteq in the matching groove of the intended centroteX clamping device.
 - Pay attention to the alignment between the holes for the mounting screws in the bracket of the monteq and the threads in the groove of the clamping device.



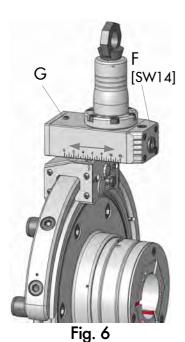
Fig. 5

3. Screw in all lifting screws and tighten them by hand.



CAUTION! Danger of injury!

- Before lifting a load is has to be checked that all lifting screws are screwed in completely and tightened by hand!
- Maximum load must not be exceeded!
- 4. Hook the group monteq with clamping device by the rotatable ring screw [E] to a crane.



5. Align the group monteq with clamping device horizontally by actuating the adjusting screw [F].

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- The dragonfly of the spirit level [G] can help as orientation.
- Note the scale value. When disassembling this clamping device a pre-set monteq improves the handling.
- 6. Move by crane the group to the assembled centroteX machine adapter.



CAUTION! Danger of injury!

Bending into the machine work area can cause severe head injuries!

An unplanned starting of the machine may cause injury.

- Make sure that the system is depressurized and that a starting of the machine can be excluded!
- 7. Unlock the carriage [A] using the locking bolt [B] in close proximity to the machine adapter.

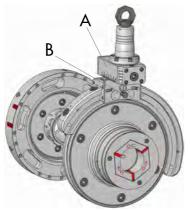


Fig. 7

- **CAUTION!** Danger of injury!
- Depending on the general weight distribution and the horizontal orientation clamping device can automatically put into a rotary motion!
- When pivoting the bracket there is Risk of crushing of the fingers!



Fig. 8

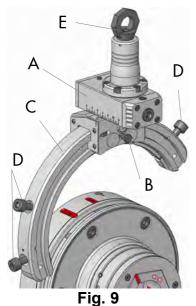
- 8. Assemble the clamping device in accordance with its operating instructions.
- 9. Loosen the monteq from the clamping device by loosening the mounting screws.



CAUTION! Danger of injury!

The release of the lifting screws may only take place as soon as the clamping device is attached to the machine adapter according to the operating instructions!

6.2 Disassembly of the clamping devcie from the machine adapter



- 1. Unlock the carriage [A] using the locking bolt [B].
- 2. Turn the bracket [C] to the appropriate position, depending on the required rotation angle [H] of the clamping device
 - The lifting screws [D] are fixed mounted to the bracket [C].



Fig. 10

- 3. Put the monteq in the matching groove of the intended centroteX clamping device.
 - Pay attention to the alignment between the holes for the mounting screws in the bracket of the monteq and the threads in the groove of the clamping device.



Fig. 11

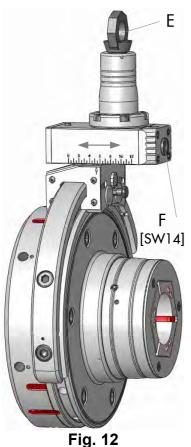
4. Screw in all lifting screws and tighten them by hand.



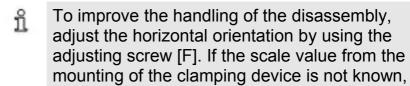
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VORSICHT! CAUTION! Danger of injury!

- Before lifting a load is has to be checked that all lifting screws are screwed in completely and tightened by hand!
- Maximum load must not be exceeded!







the distribution of weight should be estimated.

- 5. Hook the group monteq with clamping device by the rotatable ring screw [E] to a crane.
- 6. Loosen the fastening of the clamping device to the machine adapter in accordance with its operating instructions.



- Depending on the general weight distribution and the horizontal orientation clamping device can automatically put into a rotary mo-
- When pivoting the bracket there is risk of crushing the fingers!

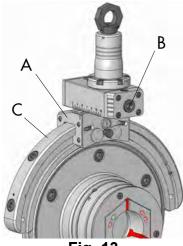


Fig. 13

- 7. Lock the carriage [A] by using the locking bolt [B] in the middle of the bracket [C].
- 8. Move the group to the storage place for the clamping device by using a crane and place it.
- 9. Assemble the clamping device in accordance with its operating instructions. Loosen the monteg from the clamping device by loosening the mounting screws.



CAUTION! Danger of injury!

The release of the mounting screws may only be at the put-away and secured clamping device!

7 Disassembly, subsequent storage, disposal

7.1 Disassembly

Maintenance and disassembly may only be done by the customer!



WARNING

Risk of injury due to stored energy!

The clamping device can be designed with disc springs. These disc springs are under permanent tension! The release of the stored energy can cause injuries!

- By loosening the corresponding screws they have to be operated continuously alternately to reduce the clamping pressure to a minimum!
- Particularly cautious approach is required!
- For cleaning and maintenance disassemble the clamping device from the machine!
- Always wear personal protective equipment!

7.2 Subsequent storage of the clamping device

The monteq must be cleaned and treated with corrosion protection for subsequent storage [see section »Cleaning«].



NOTE!

The storage conditions are specified in the section »Transport, packaging and storage«.

7.3 Disposal

If a return or disposal agreement has not been concluded, then recycle the monteq.



NOTE!

Improper disposal causes environmental damage!

Lubricants and other auxiliary materials are subject to treatment as special waste, and should only be disposed of by approved specialist companies! Local municipal authorities or specialized disposal companies provide information on environmentally-responsible disposal.

8 Maintenance / Service

The clamping force tester TESTit is a measuring device an must be handled carefully.

8.1 Cleaning

NOTE!

Material damage if cleaned with compressed air!

Cleaning the monteq with compressed air can force metal chips into thread and grooves. This can damage or even destroy the monteq.

- Never clean the monteq with compressed air!
- Auxiliary material required:
 - Ester-free, non-polar cleaning agent
 - Soft, lint-free cloth
- Clean all the components with cleaning agent and a cloth; remove all oil and grease residues.
 - Bow
 - Track carriage

8.2 Use of lubricant

The monteq is permanently lubricated and does not need to be lubricated by the customer.

8.3 Inspection

The operator has to ensure that the monteq is checked at regular, predetermined intervals by an expert.

In order to ensure the continued safety of the monteq, this must be subjected to an inspection

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every six months

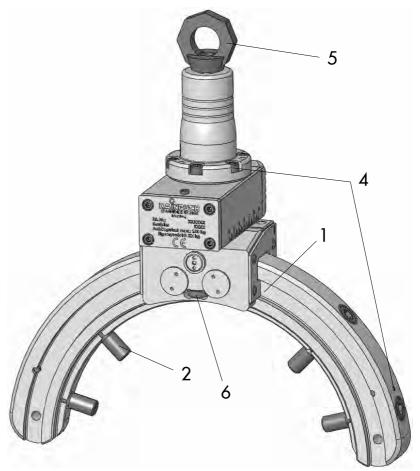


Fig. 14

During this inspection, the following points must be checked and ensured by the operator:

- 1. Running capability / Rolling characteristic the bearings?
- 2. Deformation of the screws?
- 3. Visible damage / cracks of the components?
- 4. Sealing wax present and properly?
- 5. Spring function in balance?
- 6. Interlock of the carriage?

If any of the above points are not fulfilled the »monteq« needs to be serviced by the manufacturer.

9 Trouble shooting

Possible fault causes and the tasks to correct these faults are described in the following section.

If faults occur more frequently, the maintenance intervals must be shortened to correspond to the actual system load.

Contact the manufacturer if there are faults that cannot be corrected by following the instructions below; see the service address on the back of this operating instruction.

9.1 Safety

Trouble shooting

The following always applies:

- Determine the cause of the fault.
- 2. Immediately inform the responsible parties at the installation site of the fault.
- 3. Depending on the type of fault, either have authorized specialized personnel correct the fault, or correct it yourself.
- The trouble shooting table provided below lists personnel who are authorized to correct the fault.

9.2 Trouble shooting table

Malfunctioning	Possible cause	Trouble shooting	Corrected by
The bracket can only be twisted with difficulty.	Contamination of the groove in the bracket [track of the bearing]	Clean the groove in the bracket	Specialist
	Contamination of the bearings in the carriage	Clean the bearings	HAINBUCH
	Spring preload on the brake bracket has adjusted itself.	Adjust the spring preload.	HAINBUCH

10 Appendix

10.1 Service Hotline

Order Hotline

Quickly ordered and delivered. A call is all it takes:

+49 7144. 907-333

Schedule Hotline

Current status of your order? Just call: +49 7144, 907-222

24h emergency call

Has there been a crash or other technical emergency?

Our experts are at your service around the clock: +49 7144. 907-444

10.2 Representatives

The sales partners and service employees listed below are available for further consultation or support.

10.2.1 Europe

Austria

HAINBUCH in Austria GmbH SPANNENDE TECHNIK

Pillweinstr. 16 5020 Salzburg

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