



OPERATING INSTRUCTIONS

(Translation)

Hand - Rope Winch
Type WA 50
WA 100



1. USER GROUPS

	Duties	Qualifications
Operator	Operation, visual inspection	Instruction by means of the operating instructions; Authorised person 1
Specialist personnel	Assembly, disassembly, repair, maintenance	Mechanic
	Tests	Authorised person 2 per TRBS-1203 (Technical expert)

2. SAFETY INSTRUCTIONS

Appropriate use

Operate the equipment in accordance with the information in these operating instructions.

- Only use to lift, lower and pull freely-movable loads.
- Only use when in perfect working order.
- Only allow to be operated by personnel instructed on how to do so.

Safety-conscious work

- First read the operating instructions.
- Always be conscious of safety and hazards when working.
- Observe lifting device and load during all movements.
- Immediately report any damage or defects to the person in charge.
- Repair equipment first before continuing work!
- Do not leave the load suspended without supervision.
- Transport device protected against impacts and shocks, falling over or toppling.

The following are not allowed:

- Overload (→ technical data, type plate, payload plate)
- Mechanical propulsion.
- Impacts, blows.

Use exclusions

- Not suitable for permanent operation and vibration stress.
- Not approved for use as builders' hoist (BGV D7).
- Not approved for use on stages or in studios (BGV C1).
- Not approved for use as a retractable transportation device for personnel (BGR 159).
- Not approved for use in explosive areas/environments.
- Not suitable for aggressive environments.
- Not suitable for lifting hazardous loads.

Organisational measures

- Ensure that these operating instructions are always at hand.
- Ensure that only trained personnel work with the equipment.
- Check at regular intervals whether it is being used in a safety and hazard conscious manner.

Installation, service and repair

- Only by specialist personnel!
- Only use original spare parts for repairs.
- Do not modify or alter safety-relevant parts!
- Additional attachments must not impact safety.

Further regulations to be observed are

- German Industrial Health and Safety Ordinance (BetrSichV).
- Country-specific regulations.
- German Accident prevention regulations (BGV D8).

Load

- Do not leave suspended without supervision.
- Do not allow to swing.
- Do allow to fall in the rope.

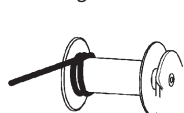
Rope

- Compliant with EN 12385-1 and EN 12385-4 and the technical data
- Maintain rope deviation angle non-rotating rope $\leq 3^\circ$ (standard) rotation-resistant rope $\leq 1.5^\circ$
- Use a rotation-resistant rope for unguided loads. This can reduce the resting period of the rope (drive mechanism group).

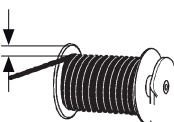


Wind up the wire rope under pretension, e.g. fully wind up the rope and adjust the rope length to the lift.

The length of the rope is correct if:



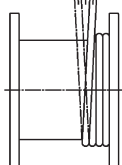
> 2



> 1.5 x rope Ø

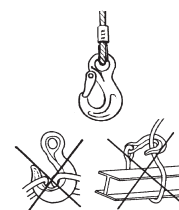


$\leq 3^\circ$
 $\leq 1.5^\circ$



Lifting equipment

- Ensure sufficient load-bearing capacity.
- Only use load hooks with a safety flap.
- Use the approved load hooks with rope thimbles and rope clip.
- Attach the load properly.
- Do not use the winch rope to secure the load.



3. TECHNICAL DATA

Type		WA 50	WA 100
Order N°		209017	209018
Perm. load, first rope layer	kg	50	100
Perm. load, last rope layer	kg	25	43
Max. number of layers		9	7
Crank force	N	80	60
Minimum load	kg	30	50
Lift / crank turn	mm	96	38
Weight	kg	1	2,1
Rope capacity max.	m	12	8
Rope Ø	mm	2	3
Min. rope breaking force	kN	1,5	3

haacon policy is one of continuous development. We reserve the right to amend specifications without notice or obligation.

4. CONSTRUCTION

The rope winches are secured against load induced rebound and work with maintenance free sleeve bearings. The crank is removable

5. INSTALLATION

For safety reasons the winch should be installed with 4 screws, washers and nuts.

Model WA 50 screw size M6 min. 8.8

Model WA 1000 screw size M8 min. 8.8

6. ROPE INSTALLATION

For that, open the housing.

1. Unscrew and remove the 4 housing screws.
 2. Remove the cover.
 3. Introduce the rope through the rope slot.
 4. Fix the rope with the threaded pin to the drum (keep an eye on the winding direction).
 5. Reassemble the cover.
- Rope change:
The housing screws are hidden under the cover label.
Please lift the corners to reach them.



7. OPERATION

Screw the handle to the crank. Plug into the winch body unless the positive stop. Turn crank clockwise to lift the load. To lower the load, turn crank anti-clockwise.

If the crank is not turned the load is suspended safely. When lifting a load, do not wind rope beyond the point where at least 1,5 x rope diameter is left free on drum flanges above outermost layer.

When loaded, at least two turns of the rope must remain on the drum. The capacity of the first layer corresponds to the nominal capacity of the winch. This means that the capacity decreases with every further layer (refer to type-/ capacity number plate for capacity of first and last layer).

8. INSPECTION

The equipment must be inspected in accordance with the conditions of use and the operating conditions at least once per year by an authorised person 2 per TRBS 1203 (Technical expert) (testing per BetrSichV, §10, sect.2 represents implementation of EC Directives 89/391/EEC and 95/63/EC and the annual occupational safety inspection per BGV D8, §23, sect. 2 and BGG956). These inspections must be documented:

- Before commissioning.
- After significant alterations before recommissioning.
- At least once per year.
- In the event of unusual occurrences arising that could have detrimental effects on the safety of the winch (extraordinary tests, e.g. after a long period of inactivity, accidents, natural events).
- After repair works that could have an influence on the safety of the winch.

Technical experts (AP2) are persons, who have sufficient knowledge based on their specialist training and experience, in the areas of winches, lift and pull systems and the relevant official occupational health and safety rules, accident prevention regulations, guidelines and generally accepted engineering rules (e.g. EN standards), to evaluate the operational safety of winches, and lift and pull systems. Technical experts (AP2) are to be nominated by the operator of the equipment. Performance of the annual occupational safety inspection as well as the training required to obtain the aforementioned knowledge and skills can be provided by haacon hebeteknik.

9. MAINTENANCE RECOMMENDATION

- The operator determines the intervals themselves based on frequency of use and the operating conditions.
- Regular cleaning, no steam jets!
 - Carry out visual check on inaccessible brakes / locks every 5 years at the latest, replace brake pads as required.
 - General overhaul by the manufacturer after 10 years at the latest.

CAUTION! Only perform inspection, maintenance and repair work on an unloaded hoist. Only allow work on brakes and locks to be performed by qualified specialist personnel.

Maintenance and inspection work	Intervals
Visual check of the rope hooks (load carrier)	Before every use
Function of the winch	
Condition of the rope and lifting equipment	
Brake function under load	
Grease bearing of drive pinion	Quarterly
Check rope for wear acc. to DIN ISO 4309 and service	
Check fastening bolts for secure seating	Annually
Check all parts of the winch and crank for wear, if applicable, replace defective parts and lubricate.	
Check type plate for legibility	
Have an inspection performed by an expert	

Lubricant recommendations: Multi-purpose grease per DIN 51502 K3K-20

10. SPARE PARTS

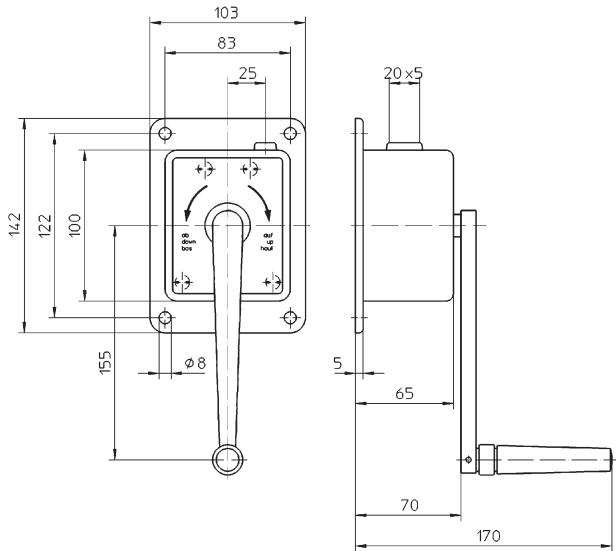
Repairing is not profitable

Complete winch	WA 50	Order N°	209017
	WA 100	Order N°	209018
Crank	WA50+WA100	Order N°	209131

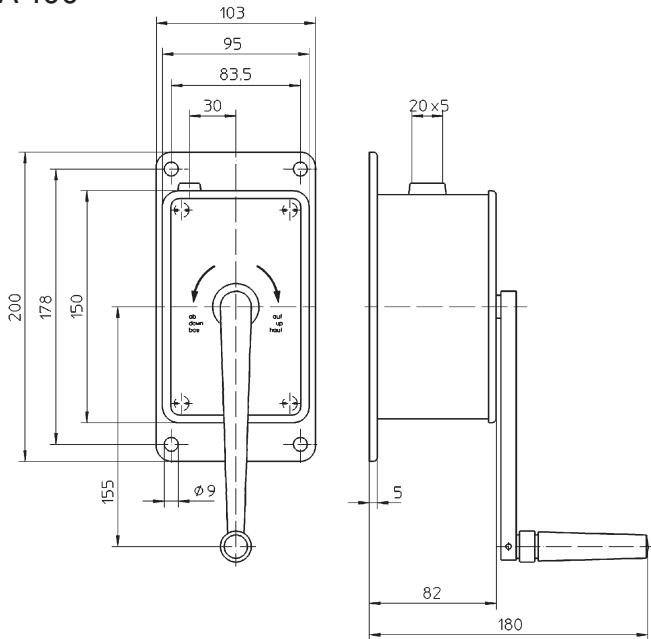
11. DISASSEMBLY, DISPOSAL

- Make sure to observe the safety instructions.
- Dispose of the equipment and the substances within it in an environmentally responsible manner.

WA 50



WA 100



EU Installation Declaration

haacon hebetechnik gmbh
Josef-Haamann-Strasse 6
D-97896 Freudenberg/Main

haacon
group

Manufacturer: haacon hebetechnik gmbh
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D-97896 Freudenberg/Main

Phone +49 (0) 9375 / 84-0
Fax +49 (0) 9375 / 8466

The product

Product name: Hand rope winches

Type:

220	241	421	462	468	4060	4185	4202
4210	4216	4235	4284	4321	4471	4472	4483
4491	4585	4751	4821	4843	4862	209480	KWV
KWE	Tango	WA					

Load capacity range: 0,05 – 3 t

conforms with the basic requirements of the directive **Machines (2006/42/EG)**

Appendix I, article

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|-------|--|
| 1.1.2 | Basic for the integration of safety |
| 1.1.3 | Materials and products |
| 1.1.5 | Construction of the machine regarding its handling |
| 1.3.2 | Risk of breakage during operation |
| 1.3.4 | Risks by surface, edges and corners |
| 1.3.7 | Risks caused by moving parts |
| 1.3.9 | Risk of uncontrolled movements |
| 1.7 | Information |
| 4.1.2 | Protective measures against mechanical hazards |
| 4.3.3 | Machines to lift loads |
| 4.4 | Operating instructions |

The product is an incomplete machine as per machine directive (2006/42/EG). The product must not be taken into operation until it is determined that the machine, in which it is to be installed conforms with the machine directive (2006/42/EG).

If the product is changed significantly, it will lose this conformity declared by the manufacturer.

The manufacturer agrees to submit the specific documentation pertaining to this product to individual state institutions electronically, if so requested.

The specific technical documentation as outlined in Appendix VII Part B were compiled.

Responsible for the documentation: Construction

Signed by:

Freudenberg, 30.07.2013


on behalf of Robert Miltenberger


on behalf of Theo Müller

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