

## Lever hoist - chain hoist

## ECO 1t / 2t / 5t

## PROFI 1t / 2t / 5t / 10t



# Original of the OPERATING INSTRUCTIONS

Store for future use

## **Manufacturer address**

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#### **Dear customer**

This chain hoist is an indispensable product for daily transportation.

When using chain hoists, some safety measures must be taken to avoid injury to persons and damage to the product.

Chain hoists should only be used by trained personnel.

Please read these instructions and keep them in a safe place so that they are always at hand.

We accept no liability for accidents and damage caused by non-observance of these instructions!

Suitable for commercial, industrial or professional applications only.

## **Operating instructions**

Document number:	Chain hoist series ECO / PROFI
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Model:	ECO 1T / 2T / 5T
Wedel.	PROFI 1T / 2T / 5T / 10T
Year of manufacture:	2022

## **Customer entries**

Inventory no:	
Location:	

## **Storage**

The operating instructions must be kept in the responsible specialist department. They must always be at hand.



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# 1 Basic safety instructions

# 1.1 Observe the notes in the operating instructions

The basic prerequisite for safe handling and trouble-free operation of the chain hoist is knowledge of the basic safety instructions and the safety regulations.

These operating instructions contain the most important information on how to operate the chain hoist safely.

These operating instructions, in particular the safety instructions, must be observed by all persons working with the chain hoist.

In addition, the rules and regulations for accident prevention applicable to the respective place of use must be observed.

## 1.2 Obligation of the operator

The operator undertakes to allow only persons to work with the chain hoist who are

- are familiar with the basic regulations on work safety and accident prevention and have been instructed in the handling of the chain hoist,
- have read and understood the safety chapter and the warning notes in these operating instructions and have confirmed this by their signature.

## 1.3 Commitment of the staff

All persons who are assigned to work with the chain hoist undertake to do so before starting work:

- to observe the basic regulations on occupational safety and accident prevention.
- to read the safety chapter and the warning notes in these operating instructions and to confirm by their signature that they have understood them.



## 1.4 Dangers in handling lever hoist

The chain hoist has been built in accordance with the state of the art and recognized safety regulations. Nevertheless, its use may cause danger to life and limb of the user or third parties or damage to the chain hoist or other material assets. The chain hoist may only be used

- for the intended use; see chapter 2.1,
- in perfect condition in terms of safety.



#### Information.

Malfunctions that may affect safety must be eliminated immediately.

## 1.5 Warranty and liability

In principle, our "General Terms and Conditions of Sale and Delivery" apply. These are available to the operator at the latest since the conclusion of the contract.

Warranty and liability claims for personal injury and property damage are excluded if they are due to one or more of the following causes:

- Unintended use of the chain hoist.
- Improper assembly, commissioning, operation and maintenance of the chain hoist.
- Failure to observe the instructions in the operating manual regarding transport, storage, assembly, commissioning, operation and maintenance of the chain hoist.
- Unauthorized structural changes.
- Unauthorized modification of the chain hoist.
- Poor monitoring of parts that are subject to wear.
- · Improperly performed repairs.
- Catastrophic events caused by foreign bodies and force majeure.



## 1.6 Safety regulations

## 1.6.1 Explanation of the symbols and notes



#### Danger!

This symbol in connection with the signal word "Danger" means an imminent danger to the life and health of persons.

⇒ Failure to follow these instructions will result in severe adverse health effects, including life-threatening injuries.



#### Warning.

This symbol, in conjunction with the signal word "Warning", indicates a possible imminent danger to the life and health of persons.

⇒ Failure to follow these instructions can result in serious adverse health effects, including life-threatening injuries.



#### Caution.

This symbol in connection with the signal word "Caution" means a possibly dangerous situation.

⇒ Failure to follow these instructions may result in minor injuries or damage to property.



#### Information.

This icon provides you with application tips and particularly useful information.

⇒ They help you to make the best use of all the functions of your chain hoist.



### Personal protective equipment!

⇒ To protect against injury, wear protective gloves and safety shoes while working with the chain hoist.



#### 1.6.2 Organizational measures

The required personal protective equipment must be provided by the operator.

Persons who are not involved in the operation of the chain hoist must be expelled from the danger area of the chain hoist and must stay at a safe distance.

#### 1.6.3 Informal security measures

The operating instructions must be kept for future use.

In addition to the operating instructions, the generally applicable and local regulations for accident prevention and environmental protection must be provided and observed.

All safety and danger notices on the chain hoist must be kept in legible condition and renewed if necessary.

### 1.6.4 Staff training

Only trained and instructed personnel may work with the chain hoist.

People Activity	instructed operating personnel	Persons with mechanical training
Operation	X	X
Troubleshooting		X
Troubleshooting		X
Maintenance		X

Legend: X ... Allowed -- ... not allowed

#### 1.6.5 Safety measures during normal operation

Do not operate the chain hoist unless you are sure that it is in proper condition. Pay particular attention to the proper condition of the housing, chains and hooks.

Check the chain hoist for externally visible damage and functionality at least once a day.

Never transport persons with the chain hoist.

Be aware of the influence of wind when operating the chain hoist outdoors.

Only operate the chain hoist with sufficient ambient lighting.

#### 1.6.6 Maintenance and troubleshooting

Perform prescribed maintenance and inspection work in due time.

Maintenance and troubleshooting only by trained personnel.

Check loosened screw connections for tightness.

Check chain, hook and housing for damage.



## 1.6.7 Structural changes on the chain hoist

**Do not** make any modifications, additions or conversions to the chain hoist without the manufacturer's approval. Unauthorized modifications to the chain hoist are prohibited.

This also applies to welding on load-bearing parts.

All conversion measures require the written approval of Trading EU GmbH.

Immediately replace parts that are not in perfect condition.

Only use original spare and wear parts. In

the case of externally purchased parts, it cannot be guaranteed that they have been designed and manufactured to

withstand the stresses and to meet safety requirements.

## 1.6.8 Cleaning and disposal of the chain hoist

Properly handle and dispose of used substances and materials in an environmentally friendly manner, in particular

- when working on lubrication systems and equipment,
- · when cleaning with solvents.



# 2 Product description

#### 2.1 Intended use

The chain hoist is designed exclusively for lifting loads on the up to the specified maximum load.

#### **Maximum loads:**

Туре	ECO	PROFI
Capacity (kg)	1000 / 2000 / 5000	1000 / 2000 / 5000 / 10000
Lifting height	2500	5000
(mm)		

Any other use or use beyond this is considered improper and is a misuse of the chain hoist. Trading EU GmbH is not liable for any damage resulting from this.

# 2.2 Nameplate





Figure 2-1: Nameplate of the chain hoist (exemplary representation)



## 2.3 Technical data

## 2.3.1 Loading/Dimensions/Weight

Туре	Unit	ECO 1t	ECO 2t	ECO 5t	PROFI 1t	PROFI 2t	PROFI 5t	PROFI 10t
Load capaci-	kg	1000	2000	5000	1000	2000	5000	10000
Chain links	mm	6	6	10	6	8	9	9
Weight	kg	8,5	9,8	30	15,1	24,7	46,2	88,6
Lifting height	mm	2500	2500	2500	5000	5000	5000	5000
Length ope- rating chain	mm	1950	1950	1950	4300	4300	4300	4300
Test load	Kg	1100	2300	5600	1250	2500	6000	12500

## 2.3.2 Environmental conditions

	Transport and storage	Operation
Temperature	-25 °C to + 55 °C	+ 5 °C to + 40 °C
Humidity	dry, roofed	without condensation
Storage/installation site	Observe the transport instructions on the packaging	• dust free



# 2.4 Structure

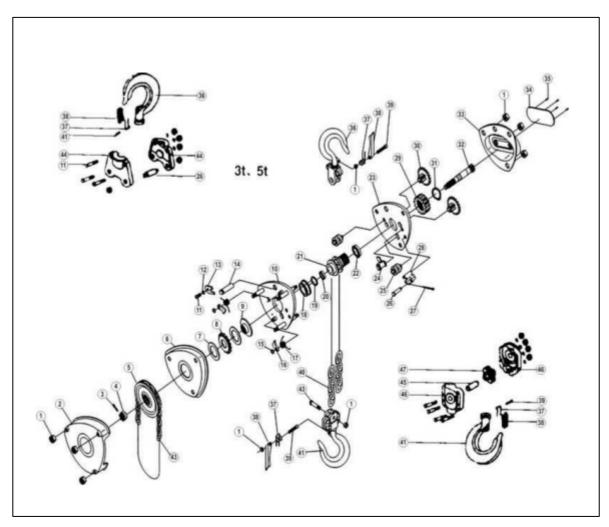


Figure 2-2: Structure

Pos.	Designation	Pos.	Designation
1	Stop hook	4	Load hook
2	Mouth opening with safety lock	5	Transmission chain
3	Housing	6	Load chain

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1	Lock nut	17	Pawl spring	33	Gearbox housing mounting part
2	Handwheel cover	18	Bearing A	34	Nameplate
3	Split pin	19	Circlip	35	Rivet
4	Castle nut	20	Stock	36	Upper belt mounting part
5	Handwheel	21	Sprocket	37	Double spring
6	Brake cover	22	Bearing B	38	Safety interlock
7	Friction plate	23	Side mounting plate A	39	Screw
8	Raster disc	24	Scraper	40	Load chain mounting part
9	Brake seat	25	Idler pulley	41	Hook block
10	Side mounting plate	26	Pin	42	Chain pin
11	Screw	27	Split pin	43	Reel chain
12	Spring washer	28	Suspension plate	44	Top chord frame
13	Stop plate	29	Splined shaft	45	Chain pinion pin
14	Top pin	30	Output shaft mounting part	46	Bottom chord frame
15	Circlip	31	Circlip	47	Traction sheave
16	Pawl	32	Drive shaft		



# 3 Transport and commissioning

# 3.1 Safety during transport of the chain hoist



#### Caution.

Transport of the chain hoist to the place of use.

The chain hoist may fall off the transport vehicle or tip over.

Crushing of limbs is possible.

- ⇒ Only use suitable means of transport with sufficient load-bearing capacity.
- ⇒ Observe the weight specifications in the technical data.
- ⇒ Observe the relevant regulations, e.g. UVV.



# 4 Operation

## 4.1 Safety instructions



#### Danger!

Danger to persons and operating equipment.

- ⇒ Danger of the load falling.
- ⇒ Risk of overturning when lifting or setting down the load, especially due to swinging/swinging load.
- ⇒ Danger of hitting persons and operating equipment due to swinging/swinging load.
- 1. Never overload or overtension the chain hoist!



Fig. 1

2. Never use the chain hoist if parts are worn or deformed due to heavy use!

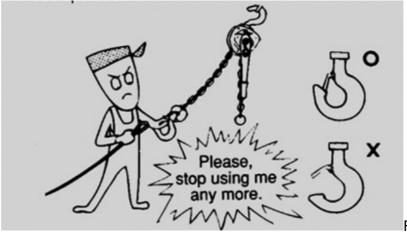


Fig. 2

3. The hooks of the chain hoist must not be loaded at the tip. The chain hoist must be positioned vertically above the center of gravity of the load. Never guide the load chain over edges or obstacles!

The chain must never wrap around the load or be used as a slinging point!



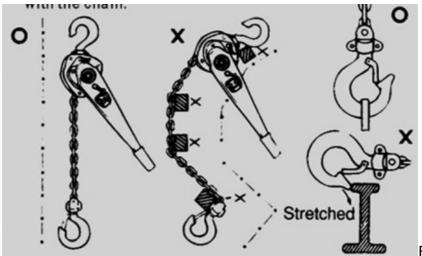


Fig. 3

4. Never make jerky movements on the chain hoist! Never use the chain hoist in a way that can cause tension and jerky discharges!

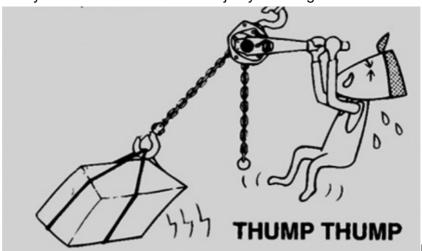


Fig. 4

5. Never use the chain hoist with damaged, deformed or twisted load chain!

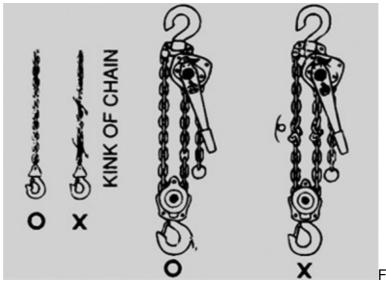


Fig. 5





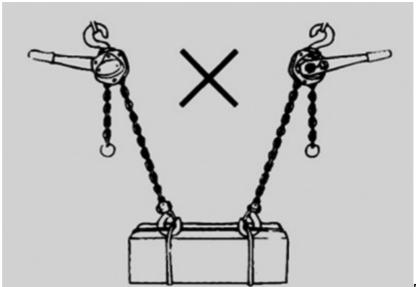


Fig. 6



#### Danger!

Danger to persons and the chain hoist!

- ⇒ Observe all safety and danger notices on the chain hoist and keep them complete and legible.
- ⇒ Do not remove or modify safety devices on the chain hoist.
- ⇒ Observe all general and special safety instructions in these operating instructions. Keep the operating instructions within easy reach at the place of use.
- ⇒ Refrain from any working method that could compromise safety.
- ⇒ Report malfunction to the responsible office/person if safety-relevant changes have been made or if the operating behavior of the lever hoist changes.
- ⇒ Observe the applicable accident prevention regulations of the employers' liability insurance association.
- ⇒ Do not modify the chain hoist without authorization.





Danger to persons!

- ⇒ Ensure that the chain hoist is rust-free. Use only on a sufficiently load-bearing surface.
- ⇒ Prevent the load from swinging/oscillating.
- ⇒ Make sure that there is no person in the danger zone before lifting or lowering loads.





#### Danger!

Danger to life due to suspended load!

- ⇒ Do not stand or work under suspended loads.
- ⇒ Never exceed the max. load capacity of the chain hoist.
- ⇒ Only use undamaged and sufficiently load-bearing lifting gear.
- ⇒ The load properly struck.



#### Warning.

Improper operation!

- ⇒ Familiarize yourself with the chain hoist.
- ⇒ Clearly define responsibilities and work areas.
- ⇒ Lifting people with the chain hoist is prohibited.



#### Warning.

Improper operation!

- ⇒ Only use the chain hoist for its intended purpose.
- ⇒ Check the chain hoist for damage before starting work.
- ⇒ Have damage to the chain hoist professionally repaired.
- ⇒ Only use the chain hoist when it is in a technically perfect, operationally ready and functionally safe condition.



#### Warning.

Improperly performed work!

- ⇒ First familiarize yourself with the individual assembly, maintenance and repair instructions, then carry out work.
- ⇒ Reattach detached components and check detachable connections for tight fit.
- ⇒ Check all screw connections regularly for tightness.



#### Personal protective equipment!

⇒ To protect against injury, wear protective gloves while working with the chain hoist.



## 4.2 Daily check before commissioning

Check all moving parts daily for wear.

Check the chain hoist for loose bolts and nuts and tighten them if necessary.

## 4.3 Operation of the chain hoist

#### Attention: only carry out in unloaded condition!

- 1. Hang the chain hoist with the stop hook (1) on the unit at the intended stop point or trolley.
- 2. Make sure that the load chain hangs freely and is not twisted or kinked. Lift and lower load:
- 3. Bring the load hook (4) into position. This is done by pulling evenly on the gear chain (5).
- 4. The load chain can be moved freely by hand in both directions. Pull the chain slowly and carefully. No fast tearing!
- 5. Now you can hook the object to be moved onto the load hook (4).
- 6. Take up the excess slack in the load chain.
- 7. The load can be moved to the desired position via the gear chain (5). To lower the load, the gear chain must be moved in the opposite direction.

Note: The load brake engages as soon as the chain is loaded.



# 5 Maintenance

# 5.1 Safety instructions



#### Danger!

Observe the safety instructions!

⇒ Observe the safety instructions in chapter 4 "Operation

## 5.2 Maintenance plan

The maintenance schedule lists the work to be performed on a regular basis.

Maintenance point	Clean	Fat	Inspect	Additional work	Frequency	Reference see chapter/page
Testing and cleaning	Χ	ļ	Χ	Χ	daily	5.3/5-10
Moving parts	1	X	X	1	At least every 3 months	5.4/5-10
Chain	1	X	X	1	According to de- mand	0.4/0-10

Legend: X ... Something to do here-- ... not applicable

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## 5.3 Testing and cleaning

Check the following parts daily for wear:

- Chains,
- Housing,
- Hook,
- · Safety latches

and clean these parts. Also check whether the parts are blocked by foreign bodies.

If the chain hoist is used in a dusty environment, impregnate it regularly with a greased cloth.

Check the chain hoist for loose bolts and nuts and tighten them if necessary.

Check the presence and legibility of all labels on the chain hoist, e.g. warning labels.

## 5.4 Fat

#### Moving parts:

Grease all moving parts of the chain hoist **every 3 months**. Depending on the duration and frequency of use, a shorter interval may also be necessary.

## 5.5 Repair

To keep the chain hoist running smoothly and in accordance with its intended use, maintenance or repair work is necessary or unavoidable.

In order to ensure the operational safety of the chain hoist, as well as to protect the personnel and the environment from unforeseen hazards, it is recommended to use original wear or spare parts and authorized accessories. Contact Trading EU GmbH to order spare parts.

Doc. no. VA Series Maintenancee 5-10



# 6 Troubleshooting



## Danger!

Observe the safety instructions!

 $\Rightarrow$  Observe the safety instructions in chapter 4 "Operation".

Error	Cause	Remedy
Load is not lifted	Chain jammed	Chain try to solve
	Overload	Max. Note load capacity
Chain hoist cannot be lowered	Changeover lever blo- cked	Grease lever joint
	Changeover lever defective	Replace changeover lever



# 7 Decommissioning, storage, disposal

Decommissioning, storage and disposal is one of the extremely rare operations to be performed.

## 7.1 Storage conditions

If you put the chain hoist out of operation for a longer period of time, keep the environmental conditions as described in chapter 2.3.2described.

## 7.2 Decommissioning

Clean the chain hoist and cover it with a tarpaulin to protect it from dust.

# 7.3 Disposal

Pay attention to environmental compatibility, health risks, disposal regulations and their local options for disposal in accordance with regulations. For more information, contact your county waste management office.

Separate metals, non-metals, composites and auxiliary materials by type and dispose of them in an environmentally sound manner.



## EG Konformitätserklärung / EC Declaration of conformity

EC Déclaration de conformité / EC Declaración de Conformidad / EC Dichiarazione di conformità

Hersteller:	
Producer:	Trading EU GmbH
Fabricant:	Gruckinger Str. 4
Produttore:	D – 85461 Bockhorn
Fabricante:	

Hiermit erklärt der Hersteller, dass das Produkt

The producer hereby declares, that the following product

Le fabricant déclare par la présente que le produit

Il produttore dichiara che il prodotto

El fabricante declara que el producto

Bezeichnung und Modelltyp:	
Designation and type:	Kettenzug ECO 1t / 2t / 5t
Description et type:	Kettenzug PROFI 1t / 2t / 5t / 10t
Designazione e tipo:	
Designación y tipo:	

folgenden einschlägigen Bestimmungen entspricht:

is in accordance with the following guidelines:

est conforme aux dispositions pertinentes suivantes:

è conforme alle seguenti disposizioni pertinenti:

cumple con las siguientes disposiciones pertinentes:

EG Maschinenrichtlinie 2006/42/EG, Amtsblatt L157/24	
EC machinery directive 2006/42/EC	
Directive de machine CE 2006/42/CE	
Direttiva macchine CE 2006/42/CE	
Directiva de máquinas CE 2006/42/CE	

Angewandte harmonisierte Normen:	
Applied harmonized norms:	<ul> <li>EN ISO 12100-1:2003/A1:2009 Teil 1</li> </ul>
Normes harmonisées appliquées:	<ul> <li>EN ISO 12100-2:2003/A1:2009 Teil 2</li> <li>EN 13157:2004+A1:2009</li> </ul>
Norme armonizzate applicate:	
normas armonizadas aplicadas:	

Bockhorn, 11.05.2018

Ort, Datum

Bevollmächtigter Michael Seibold