



# **OPERATING MANUAL**

## **WOOD GRAB**



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## 1. Preface

We would like to warmly welcome you to the large community of PENZ crane owners and wish you much enjoyment with your PENZ grab.



Your PENZ grab may only be used for transporting short and long logs and wood waste.

This instruction book informs you about the operation and maintenance of your PENZ grab. Safety instructions are also given to protect your health and the health of people in the vicinity. In order to avoid errors when using your product as well as conflicts with the law, please observe the following information.

- Read the following instructions carefully.
- Observe the maintenance instructions below.
- Observe the following test specifications and the requirements of the Work Equipment Ordinance.
- Comply with the legal requirements of the Employee Protection Act and the Work Equipment Ordinance.

Finally, we would like to point out that failure to observe the maintenance instructions, as well as unauthorised repairs, alterations of the grab by extensions or modifications will void the warranty. For further warranty exclusions, see point 2.3.

Furthermore, we are not liable for accidents caused by negligent use or misuse of the grab.

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*The original crane from Austria*

## 2. Meaning of symbols used



Comments with this symbol serve as advice.  
Heeding this advice is strongly recommended.



Comments with this symbol must be strictly observed.  
Non-observance leads to serious consequences.



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### 3. General information

#### 3.1. Current version of the operating manual



The latest version of this document is available for download on the home page!

**Menu -> Products -> Downloads -> General Information**

#### 3.2. EC conformity



Your crane is CE-marked and thus complies with the requirements of Machinery Directive 98/37 of the European Community. In the case of crane assembly on a truck, the company involved in the assembly is responsible for the EC conformity of the complete unit (truck, crane and load handling attachment). The load handling equipment, as well as the crane may only be operated in the European Economic Area with a valid CE mark.

#### 3.3. Inspection after assembly and periodic inspection

Your grab must be checked by a competent person before it is put into operation for the first time and also after it has been mounted on another crane.

According to to the Work Equipment Ordinance (AM-VO), an annual inspection of your grab is compulsory. This may be exceeded by a maximum of 3 months.

#### 3.4. Prohibited uses

- No load may be suspended in the load handling equipment when the truck is in driving mode.
- A load that has been attached to the crane must not be pulled behind the moving truck under any circumstances.
- Do not make any "pressing" movements, such as driving stakes into the ground or similar applications.
- An open grab parked on a base may not be closed without first starting up the arm system and thus raising the load handling equipment from the base.

- Under no circumstances may the grab load be pulled over the ground in combination with a lifting movement to reach a position in which the load can be raised.
- Restrictions regarding transport goods, see point 1 "Preface", paragraph 2.

### **3.5. Product liability / information obligation**

Property damage within the meaning of the Product Liability Act is damage caused by a machine, but not to it. Corporate property damage according to the Product Liability Act is excluded from the liability.

With the handing over of this operating manual you will be instructed in the operation, safety and maintenance instructions of your grab.



Even if the customer passes on the grab at a later date, this operating manual must be handed over and the new owner must be demonstrably instructed in the points mentioned above!

## 4. Safety advice

### 4.1. General

Observe the danger information and prohibitions of the following symbols!



Always make sure that no one remains within a radius of 20 m during crane operation!



It is forbidden to remain under suspended loads.



Load hook operation is forbidden.



Access and start-up of the crane is forbidden for unauthorised personnel.

### 4.2. Safety guidelines during use of the grab

- Check hose connections and also hoses for damage and impermeability (contamination due to escaping hydraulic oil is an indication).
- Check your load handling equipment for correct fastening.
- Visual check for material damage.

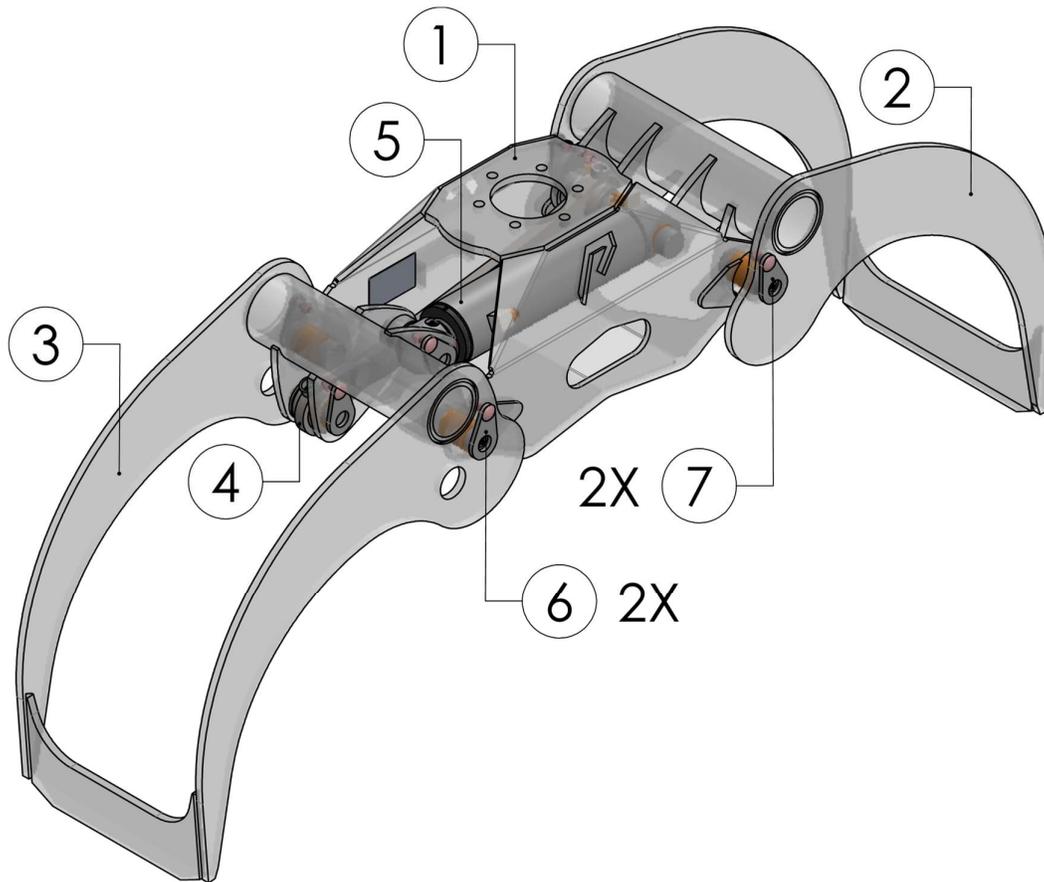
### 4.3. Safety guidelines during use of the grab

- Observe the max. permissible load of your grab (information on the type plate).

### 4.4. Safety guidelines after completion of the grab operation

- Put the grab in the rest position to avoid endangering the environment during transport by uncontrolled movements and to protect your machine from damage.

## 5. Grab structure

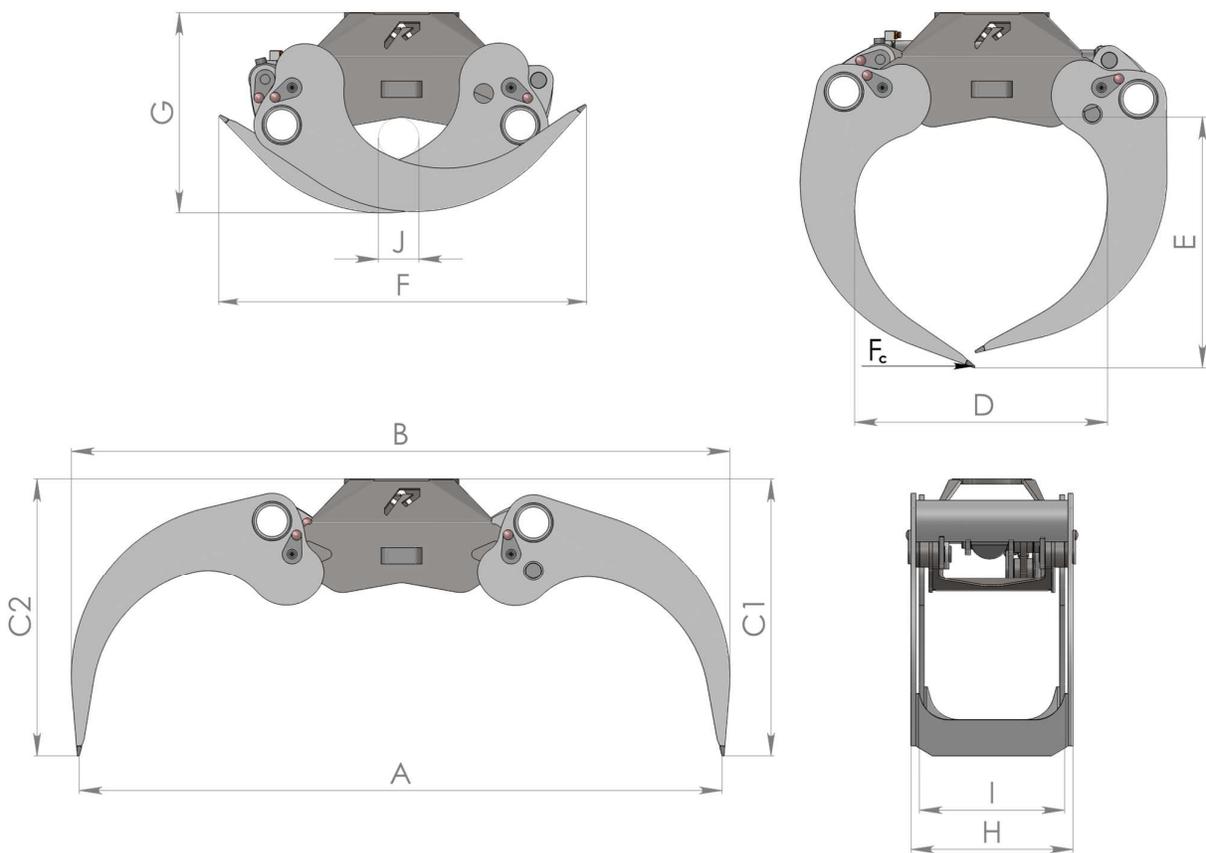


- 1 ... Grab box
- 2 ... Wide grab fork
- 3 ... Narrow grab fork
- 4 ... Grab bar

- 5 ... Grab cylinder
- 6 ... Grab fork bolts, narrow
- 7 ... Grab fork bolts, wide

## 6. Technical data

Type	Load capacity [kg]	Weight [kg]	max. operating pressure [bar]	Grab surface [m <sup>2</sup> ]	Closing force F <sub>c</sub> [kN]
<b>G30</b>	4000	165	230 bar	0,30	13
<b>G43</b>	5000	248	230 bar	0,43	22
<b>G54</b>	6000	255	230 bar	0,55	22
<b>G40S</b>	5000	270	230 bar	0,40	23
<b>G60S</b>	6000	300	230 bar	0,50	23



Type	A [mm]	B [mm]	C1 [mm]	C2 [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]
<b>G30</b>	1446	1598	734	702	705	518	797	566	397	347	162
<b>G43</b>	1800	1914	816	847	721	684	968	607	495	445	133
<b>G54</b>	1962	2068	779	806	827	720	1047	647	495	445	176
<b>G40S</b>	1884	1953	832	835	786	723	1034	627	515	455	178
<b>G60S</b>	2015	2171	881	901	930	774	1105	664	515	455	195

## 7. Installation

The assembly is to be carried out in the following order.

- Connect the grab to the rotator with hexagon screws (M16x1,5 L=70–M16x1,5 L=80 / 10.9)



The tightening torque is 315 Nm!

- Connect the rotator to the cross suspension with original bolts
- Depressurise the hydraulic lines (operate the function lever several times) and carefully loosen the screw connections
- Connecting the hydraulic lines
- Carry out a functional and leak test

## **8. Dismantling**

- When dismantling your grab, follow the sequence below.
- Depressurise the hydraulic lines (operate the function lever several times) and carefully loosen the screw connections
- Dismantling the hoses
- Disconnect rotator by loosening the bolts from the cross hanger
- Separate the screw connection between rotator and grab by loosening the hexagon screws (M16x70 / 8.8)

## 9. Maintenance

### 9.1. Decisive factors for a long service life of your grab

- Correct hydraulic - pressure settings
- Avoiding jerky movements
- Do not operate in overload range
- Observance of the prohibited uses (see point 2.3)

### 9.2. Before starting maintenance work

- Before carrying out maintenance or repairs, you must note a few points.
- Always use adequate tools.
- Always remember that safety is always first priority when carrying out work.
- Cleanliness should be a matter of course.

### 9.3. Maintenance after mounting on crane

Over an initial period of approx. 4-6 weeks, the screw connections between the grab box and the rotator must be tightened once a week.

### 9.4. Lubricating

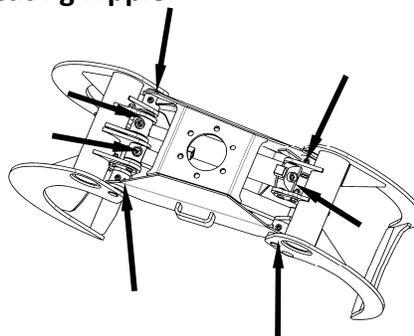
Lubricate the grab at the seven lubricating nipples (6.3.1) until fresh grease comes out of the bearings. Before doing so, you should remove existing dirt on the lubricating nipple and excess bearing grease.



The interval for a lubrication should not be longer than 24 hours.

Lubrication is absolutely necessary before a longer standstill and after every washing of the grab with a high-pressure cleaner.

#### 9.4.1. Position of the lubricating nipple



## 9.5. Lubricant specification and recommendation



We recommend **OMV signum M283**, or comparable grease from other manufacturers.

## 10. Warranty conditions

Unless otherwise agreed, the statutory warranty provisions valid at the time of conclusion of the contract shall apply.



Please note that without exception, warranty claims can only be made if maintenance work has been carried out in accordance with our regulations.



Warranty claims can only be made for Penz original spare parts.



Repairs may only be carried out by authorised workshops.

## **11. Repairs**

Always use appropriate tools for repairs and remember that safety always takes priority.

Cleanliness is essential, especially when repairing hydraulic parts.

Please note that repairs, as already mentioned in the warranty conditions, may only be carried out by authorised workshops.

## 12. Contact information



<b>Contact</b>	
<b>General</b>	
Opening times:	Mon - Thu: 6:00 am – 4:00 pm
Opening times:	Fri: 6:00 am – 1:00 pm
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The contact details of the field staff and authorised workshops can be found on the home page!

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