



Operating Instructions

Translation of original operating instructions

Kerb Stone Handles

VZ I

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2 Declaration of Conformity

Declaration of conformity

Description: Versetzzange
Type: VZ I
Order-Nr.: 5310.0140

Manufacturer: Probst Greiftechnik•Verlegesysteme GmbH
Gottlieb-Daimler-Strasse 6
D-71729 Erdmannhausen
info@probst.eu www.probst.eu

Complies with the following provisions applying to it

EC-machinery directive 2006/42/EG

Applied harmonized standards in particular

EN ISO 12100-1 (ISO 12100-1)

Safety of machinery; Basic concepts, general principles for design,
Part 1: Basic terminology, methodology

EN ISO 12100-2 (ISO 12100-2)

Safety of machinery; basic concepts, general principles for design;
Part 2: principles and specifications

DIN EN ISO 13852

Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)

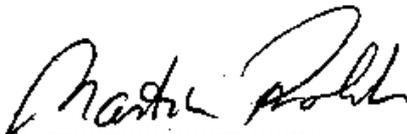
DIN EN 349 (ISO 13854)

Minimum distance to avoid squeezing any parts of the body

Authorized person for EC-dokumentation:

Name: J. Holderied
Address: Probst Greiftechnik•Verlegesysteme GmbH; Gottlieb-Daimler-Str. 6; D-71729 Erdmannhausen

Signature, informations to the subscriber:

Erdmannhausen, 18.02.2010.....

(M. Probst, Managing director)

1 Safety

1.1 Safety symbols



Danger to life!

Identifies imminent hazard. If you do not avoid the hazard, death or severe injury will result.



Hazardous situation!

Identifies a potentially hazardous situation. If you do not avoid the situation, injury or damage to property can result.



Prohibition!

Identifies imminent a prohibition. If you do not avoid the prohibition, death and severe injury, or damage to property will result.

1.2 Explanation of basic concepts

Gripping range:

- specify the minimum and maximum product measurements of the gripping good, which can be gripped with this device.

Gripping good (s):

- is the product, which will be gripped or transported.

Opening width:

- consists of the gripping range and the measure to drive over the gripping good.
 $gripping\ range + measure\ to\ drive\ over\ the\ gripping\ good = opening\ width$

Immersion depth:

- is the maximum gripping height of gripping goods, conditional of the height of the gripping arms of the device.

Device:

- is the description for the gripping device.

Product dimensions:

- Are the dimensions of the gripping good (e.g. length, breadth, height of the product).

Dead weight:

- is the own weight (without gripping good) of the device.

Load capacity:

- specify the maximum possible load of the device (lifting of gripping goods).

1.3 Definition skilled worker / specialist

Only skilled workers or specialists is it allowed to carry out the installation,- maintenance, - and repair work on these device!

Skilled workers or specialists must have for the following points (if it applies for these device), the necessary professional knowledge.

- for mechanic
- for hydraulics
- for pneumatics
- for electrics

1.4 Safety Marking

PROHIBITION SIGN			
Symbol	Meaning	Order-No.:	Size:
	The transportation of non rectangular goods is not allowed!	2904.0213 2904.0212 2904.0211	30 mm 50 mm 80 mm
	It is not allowed to be under hanging loads. Danger to life!	2904.0210 2904.0209 2904.0204	30 mm 50 mm 80 mm
	Do not lift any components off-centre.	2904.0216 2904.0215 2904.0214	30 mm 50 mm 80 mm
WARNING SIGN			
Symbol	Meaning	Order-No.:	Size:
	Danger of squeezing the hands.	2904.0221 2904.0220 2904.0107	30 mm 50 mm 80 mm
REGULATORY SIGN			
Symbol	Meaning	Order-No.:	Size:
	Manual guiding is only allowed for machines with handles.	2904.0227 2904.0226 2904.0225	30 mm 50 mm 80 mm
	Read operating instructions before operating.	2904.0366 2904.0365	30x57 mm 50x95 mm

1.5 Personal safety requirements



- Each operator must have read and understood the operating instructions.
- Only qualified, authorized certificated personal is allowed to operate the device and all devices which are connected (lifting equipment).



- The manual guiding is only allowed for machines with handles.

1.6 Protective equipment

The protective equipment must consist, according to the safety regulations of the following parts:

- Protective clothing
- Safety gloves
- Safety shoes

1.7 Accident prevention



- The operating range have to be covered for unauthorized persons, especially children.
- Take care in case of thunderstorm!



- The workplace have to be sufficiently illuminated.
- Take care handling wet, dirty and not solidified components.



- The working with the device in case of atmospheric editions under 3° C (37,5° F) is forbidden! Because the goods could be fall down caused by dampness or freezing.

1.8 Function Control

1.8.1 General



- Before using the device check the functions and the working condition.
- Maintenance and lubrication are only permitted when device is shut down!



- Do not use the device, until all faults which can cause safety hazards are removed.
- If there are any cracks, splits or damaged parts on any parts of the device, **immediately** stop using it.



- The operating instructions must be available at the workplace every time.
- Do not remove the data-plates of the machine.
- Unrecognisable information signs must be replaced.

1.9 Safety procedures

1.9.1 General



- The use of the device is only permitted in proximity to the ground. Do not swing it over peoples heads.
- The manual guiding of is only allowed for devices with handles.
- The operator is not allowed to leave the control unit as long as the device loaded with load. The load must always be in the range of vision of the operator.



- While using the device is the stay of persons in the working area forbidden. Except it is indispensable. Caused of the way of using the device, e.g. if the device must be leaded by hand.
- While using the device be sure that there are no persons in the working area. ***Danger to Life!***
- The device must never be subjected to a force acting in a lateral direction due to diagonal pulling.
- Do not use the device to jerk seized products.
- Do not lift any components off-centre, because that ***could fall down.***
- The device should not be opened if the opening path of the gripping arm is blocked by a resistance (e.g. other concrete blocks or the like)!
- The carrying capacity and the nominal width of the device are not allowed to cross over.
- The jerky lifting and lowering of the device with and without load. e.g. caused through driving fast with the support frame/lifting device over uneven grounds is **forbidden**. Because the gripping good could ***fall down.*** Unchecked movements of the device.

1.9.2 Hydraulic excavator and other lifting equipment



- Hydraulic excavator and other lifting equipment has to be in good, safe working condition.
- Only authorized, certificated and qualified personnel is allowed to operate the lifting equipment / fork lift.
- The operator staff must have all the necessary qualifications.



- **Take care that the maximum capacity of the hydraulic excavator and other lifting equipment is not exceeded.**

2 General

2.1 Authorized use

The device (VZ I) is specially designed for gripping and transportation of kerb stones with the corresponding dimensions and is usable with a lifting device or as a TWO-MEN-DEVICE.

Do not exceed the carrying capacity and the gripping range of the device (see "Technical Data").

The transportation of non rectangular gripping goods, is not allowed, because they could fall down!



ATTENTION: The use of this device is only permitted in proximity to the ground.



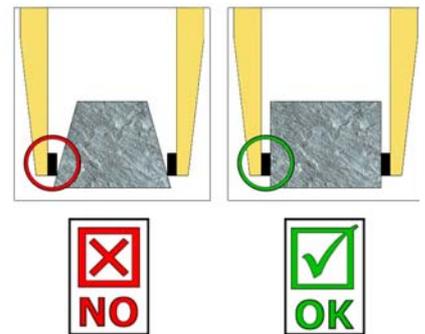
NOT ALLOWED AKTIVITIES:

Unauthorized alterations of the device and the use of any self-made additional equipment could cause danger and are therefore **forbidden!!**

The **carrying capacity** and the **nominal width** of the device are not allowed to cross over.

All unauthorized transportations with the device are not allowed:

- Transportation of people and animals.
- Transportation of other loads and materials than described in this manual.
- Never suspend any goods with ropes, chains or similar at the device.
- Transportation of **non rectangular** and **round** gripping goods, because they could fall down. (see figure to the right)
- Gripping of gripping goods with **packaging foil**, because they could fall down.
- Transportation of material with "feet", "bellies" and "blind spacers".



- The device is only designed for the use specified in this documentation.
- Every other use is not authorized and is forbidden!
- All relevant safety regulations, corresponding legal regulations, especially regulations of the declaration of conformity, and additional local health and safety regulations have to be observed.



Prior to every operation the user must ensure that:

- the equipment is suited to the intended operation, the functioning and the working condition of the equipment is examined, and the loads are suitable to be handled.

Any doubts about instructions should be raised with the manufacturer prior to use.

2.2 Survey and construction

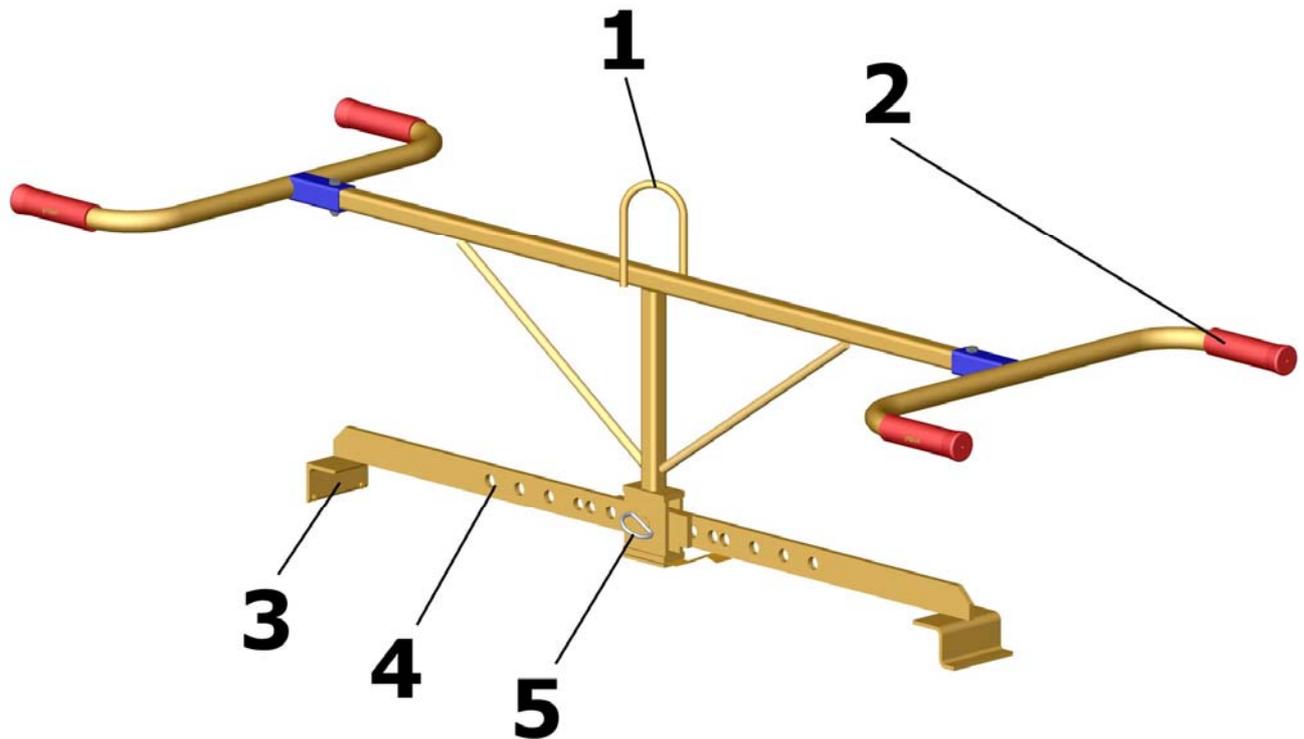


Fig.1

1	Suspension lug for crane hook	4	Gripping arms with gripping range adjustment
2	Handle	5	Socket pin
3	Grippers		

2.3 Technical data

Type	Gripping range W	Inside Height E	Gripper Length L	Carrying capacity	Deadweight
VZ I	500 - 1.045 mm (19¾ - 41¼ ")	40 mm (1½")	100 mm (4")	100 kg (220 lbs)	12 kg (26 lbs)

3 Installation

3.1 Mechanical connection

3.1.1 Suspension lug

- The device is equipped with a suspension lug and can be mounted on various support frames/lifting devices.



- Take careful that the suspension lug is safety joined with the crane hook and can not slip down.



- **The maximum carrying capacity of the support frame/lifting device is not allowed to cross over by the dead weight of the device and the maximum load.**

4 Operation

4.1 Adjustment of the gripping range

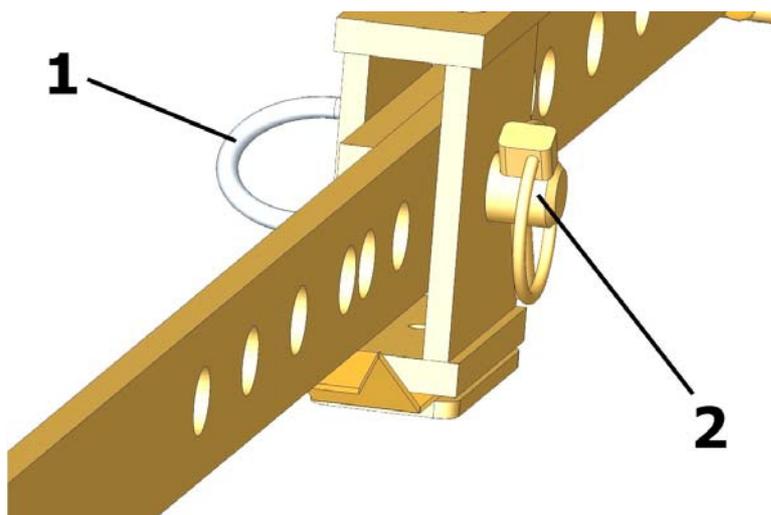
- The indicated gripping range of the device is adjustable by changing the socket pins.
- Remove split pin (1) and pull socket pins (2) out.
- Move gripping arms against each other, until the desired gripping is adjusted.
- Insert socket pin (2) again and secure it with split pin (1).



- The adjustment of the gripping range has to follow general **symmetrical**. That means, it must be used in each case the same adjustable hole with both rectangular tubes. Otherwise the device hangs diagonal.



- Caution while adjusting of the gripping range. **Danger of injuring the hands!**



1	Split pin
2	Socket pin

Fig.2

4.2 Device operation

- Connect the device with the suspension lug to the lifting device and move it to the required position,
- or use the device as a TWO-MEN-DEVICE
- Lower and position the device slowly on the gripping good (kerb stone).
- When lifting the device the grippers cant with side surface of the gripping good and it can be lifted and transported.
- Avoid quick or jerky movements with the device, as the gripping good could fall down.
- Move the device careful to the destination place and deposit device together with the gripping good on the ground.
- Release the device from the gripping good with the help of the two handles, when lifting the device.

5 Maintenance and care

5.1 Maintenance



To ensure the correct function, safety and service life of the device the following points must be executed in the maintenance interval.

Used **only original spare parts**, otherwise the warranty expires.



For all maintenance services the device must be completely shut down!!!



**For all operations you have to make sure, that the device will not close unintended.
Danger of injury!!!**

MECHANICAL

SERVICE INTERVAL	Maintenance work
First inspection after 25 operating hours	<ul style="list-style-type: none"> Control and tighten all screws and connections. (The implementation is only allowed by an expert).
After 50 operating hours	<ul style="list-style-type: none"> Tighten all screws and connections (take care that the tightening torques according to the property class of the screws are observed). Check all joints, bolts, guidance's and gears for correct function, if necessary adjust or replace it. Check all Grippers (if available) for signs of wear. Grease all slidings (if available) when the device is in opened position with a spatula.
Minimum 1x per year (at rough conditions shorten the interval)	<ul style="list-style-type: none"> Check of all the suspension parts, bolts and straps. Check for corrosion and safety by an expert.

5.2 Trouble shooting

ERROR	CAUSE	REPAIR
The clamping-power is not big enough, the load is slipping out (optional)		
(optional)	<ul style="list-style-type: none"> The grippers are worn 	<ul style="list-style-type: none"> Replace the grippers
(Adjustment of the gripping range) (optional)	<ul style="list-style-type: none"> The maximum load is exceed 	<ul style="list-style-type: none"> Reduce the weight of. the load
(Property of material)	<ul style="list-style-type: none"> The actual opening width is not correct 	<ul style="list-style-type: none"> Adjust the gripping range according to the load you want to transport
Unbalanced load		
	<ul style="list-style-type: none"> The surface of the material is dirty or the material is not suitable / allowed for this device. 	<ul style="list-style-type: none"> Check the surface of the material or ask the manufacturer, if you the material is allowed for this device.
	<ul style="list-style-type: none"> The device is not loaded symmetrically 	<ul style="list-style-type: none"> Adjust the position of the load
(Adjustment of the gripping range) (optional)	<ul style="list-style-type: none"> The adjustment of the gripping range is not symmetrical. 	<ul style="list-style-type: none"> Correct the adjustment of the gripping range
Automatic release does not work		
mechanical (optional)	<ul style="list-style-type: none"> Automatic release does not work 	<ul style="list-style-type: none"> Clean automatic release with high pressure-cleaner Oil the automatic release (never with grease) Change the inset of the automatic release

5.3 Repairs

- Only persons with the appropriate knowledge and ability are allowed to repair the device.
- Before the device is used again, it has to be checked by an expert.

5.4 Safety procedures

- It is the contractors responsibility to ensure that the device is checked by an expert in periods of max. 1 year and all recognized errors are removed (→ see BGR 500).
- The corresponding legal regulations and the regulations of the declaration of conformity have to be observed!
- We recommend, that after checking the device the badge „Safety checked“ is put on the device. (Order-No.: 2904.0056+inspection sticker with date).
- You can receive these badges from us.





The check by an expert must be proved!

Device	Year	Date	Expert	Company

5.5 Hints to the identification plate



Type, serial-number and production year are very important for the identification of your device. If you need information to spare-parts, warranty or other specific details please refer to this information.

The maximum carrying capacity is the maximum load which can be handled with the device. Do not exceed this carrying capacity.

If you use the device in combination with other lifting equipment (Crane, chain hoist, forklift truck, excavator) consider the deadweight of the device.

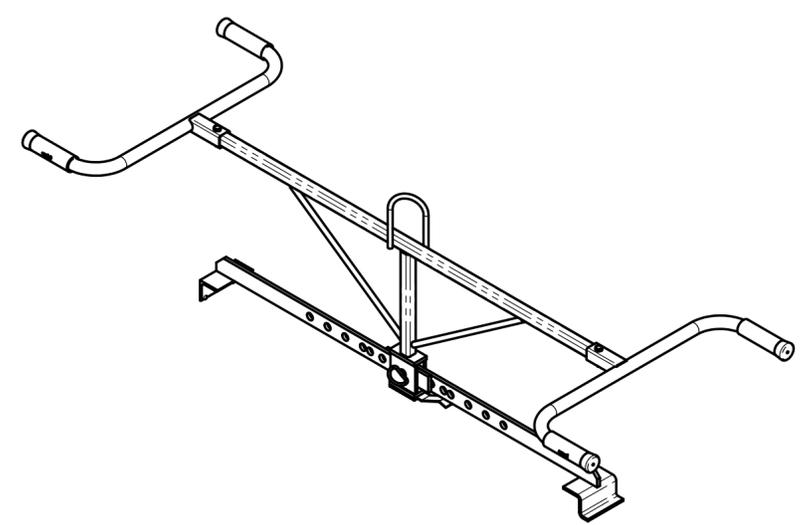
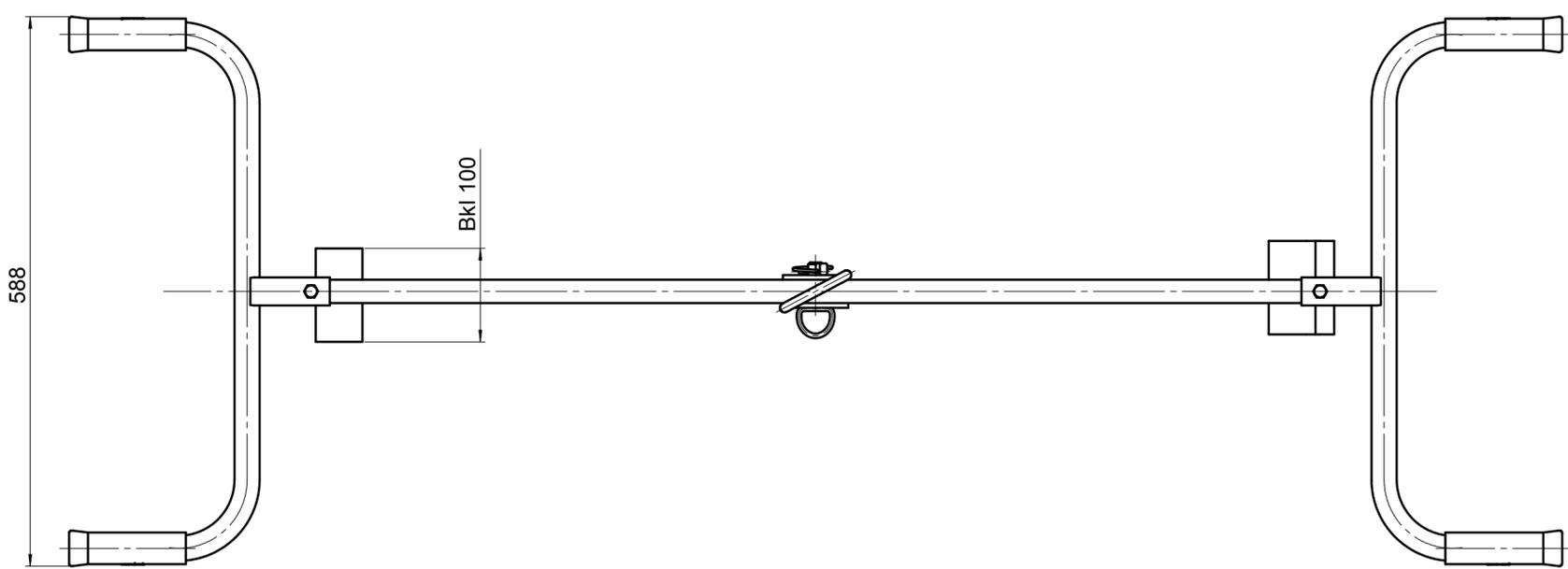
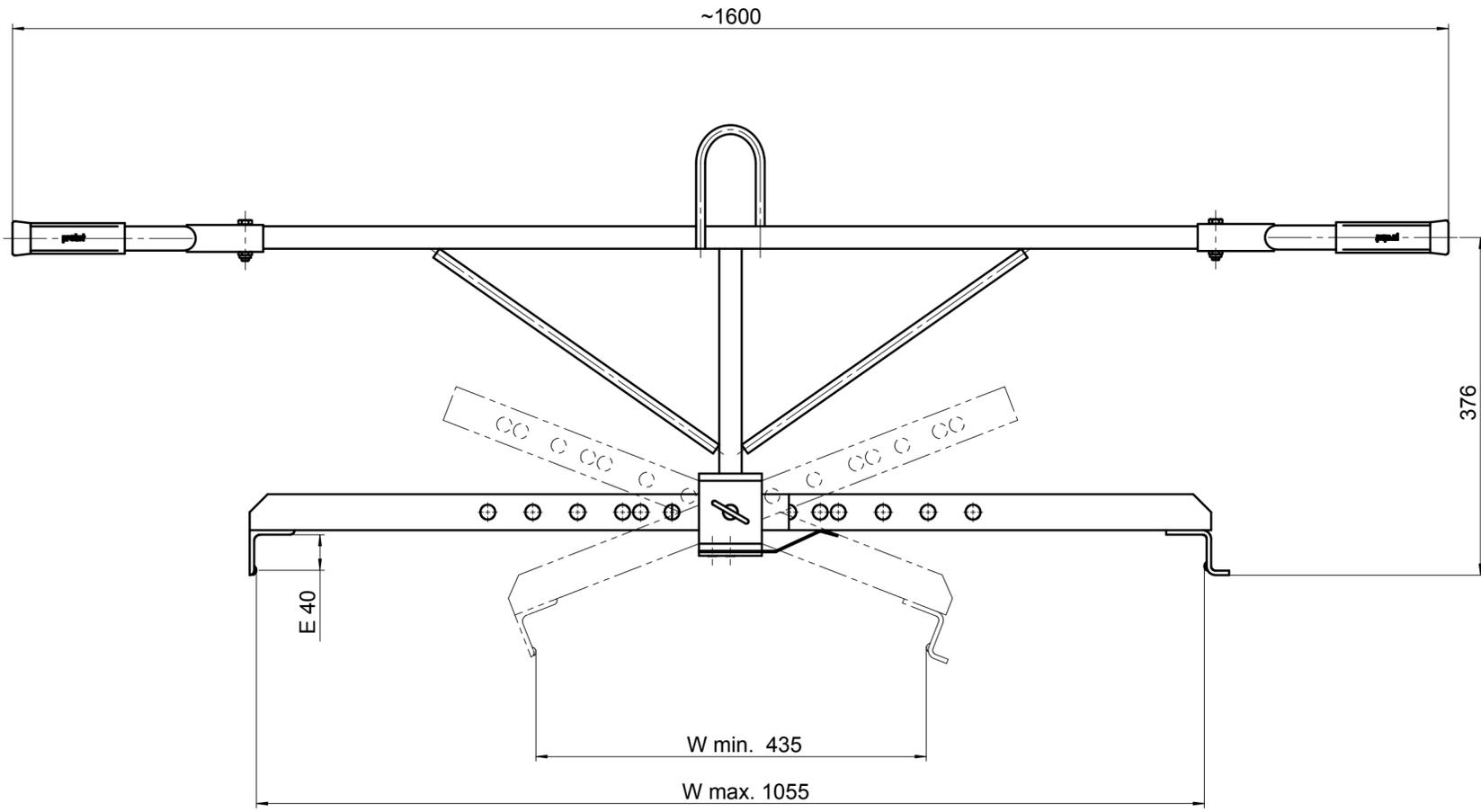


Example:

5.6 Hints to the renting/leasing of PROBST devices



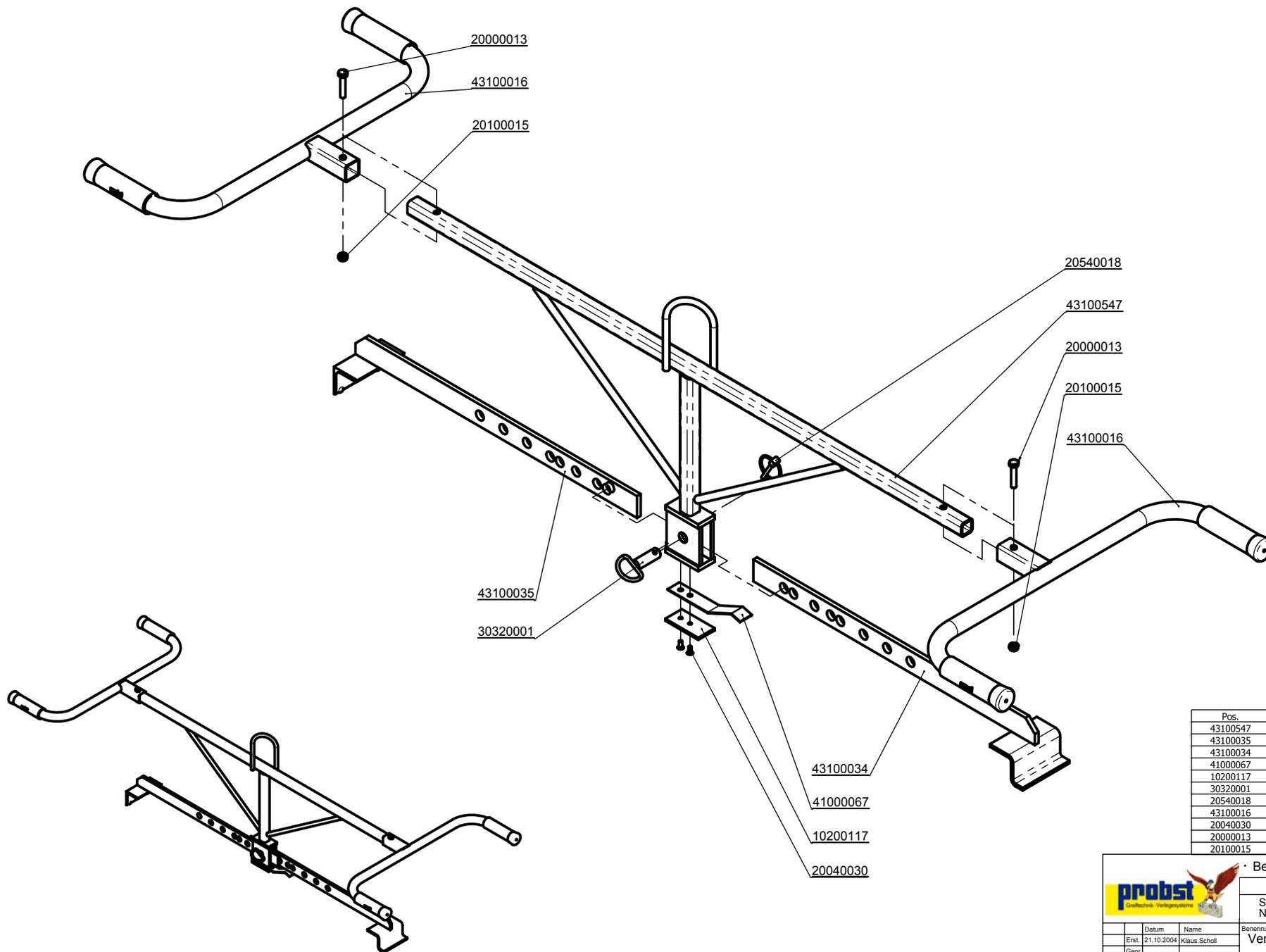
With every renting/leasing of PROBST devices the original operating instructions must be included unconditionally (in deviation of the users country's language, the respective translations of the original operating instructions must be delivered additionally)!



Tragfähigkeit 100 kg

		Bei Änderungen Rücksprache TB !	
		Gewicht: 10,7 kg	
Schutzvermerk nach DIN 34 beachten! Nachdruck nur mit unserer Genehmigung!		Benennung	
Versetzzange VZ I		Artikelnummer/Zeichnungsnummer	
D53100140		Blatt 1 von 1	
Zust. Urspr. H020-10001		Ers. f. Ers. d.	

Datum	Name
Erst. 21.10.2004	Klaus.Scholl
Gepr.	
WA:	
Kunde:	



20000013

43100016

20100015

20540018

43100547

20000013

20100015

43100016

43100035

30320001

43100034

41000067

10200117

20040030

Pos.	Beschreibung
43100547	Oberteil zu Versetzzange VZ I
43100035	Greifarm zu VZ I o. Auflage
43100034	Greifarm zu VZ I m. Auflage
41000067	Flachfeder für TAS-M
10200117	Fl 35x4
30320001	BH16047
20540018	Klappsplint 5mm
43100016	Handgriff
20040030	Senkschraube-8.8 DIN 7991 - M5 x 12
20000013	Skt-Schraube-8.8 ISO 4017 - M8 x 40
20100015	Skt-Mutter DIN 10511 M8

Bei Änderungen Rücksprache TB !

probst  **Technische Vorlagentechnik**

Gewicht: 10,7 kg

Schutzvermerk nach DIN 34 beachten!
Nachdruck nur mit unserer Genehmigung!

Benennung: **Versetzzange VZ I**

WA:	Artikelnummer/Zeichnungsnummer	Blatt
Kunde:	E53100140	1
Zust.	Urspr. H020-10001	Ers. d.
		von 1

Proof of maintenance

The claim under guarantee for this device only exists and is subject to the proper execution of the mandatory maintenance works. (In case of warranty request please always attach a copy of the proof of maintenance)

Operator: _____

Device type: _____

Device-No.: _____

Article -No.: _____

Year of make: _____

First inspection after 25 operating hours

Date:	Maintenance work:	Inspection by company:
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	
_____	_____	

After 50 operating hours

Date:	Maintenance work:	Inspection by company:
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	

Minimum 1x per year

Date:	Maintenance work:	Inspection by company:
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	
_____	_____	_____ <i>Company stamp</i> _____ <i>Name Signature</i>
_____	_____	