



Grab for Prefabricated Concrete Products

FTZ-I

V1

Order-Nr.:
5310.0120

Serial-Nr.:

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2 Declaration of Conformity

Konformitätserklärung; Declaration of conformity ; Déclaration de Conformité;
Certificato di conformità norme CE; Declaración de conformidad

DESCRIPTION: Grab for Prefabricated Concrete Products
FTZ-I

Hersteller: **PROBST GREIFTECHNIK VERLEGESYSTEME**

Manufacturer: Gottlieb-Daimlerstraße 6

Producteur: 71729 Erdmannhausen

Costruttore: Probst Greiftechnik Verlegesysteme GmbH

Fabricante: info@probst-gmbh.de www.probst-gmbh.de

**Einschlägige Bestimmungen,
denen die Maschine entspricht:**

Complies with the following provisions applying to it:

Spécifications respective qui sont conformes à la machine:

Definizione che sono conformi alla macchina:

Cumple con las siguientes provisiones aplicables a:

2006/42/EG (Maschinenrichtlinie)

EC-machinery directive 2006/42/EG

Idée directrice EC 2006/42/EG

EG-linea di Guida CE 2006/42/EG

Directrices de la CE 2006/42/EG

Fundstellen der harmonisierten Normen:

Applied harmonized standards in particular:

Lieux de découverte des normes harmonisées:

Luogo di accertamento delle norme armonizzate

Aplicados en particular los siguientes estándares

**EN ISO 12100-1 2003
(ISO 12100-1)**

**Sicherheit von Maschinen, Grundbegriffe, allgemeine
Gestaltungsleitsätze, Teil 1: Grundsätzliche Terminologie,
Methodik.**

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

Sécurité des machines; notions fondamentales, principes
généraux de conception, Partie 1: terminologie de base,
méthodologie.

Sicurezza della macchina, nozioni fondamentali, verifica della
struttura generale, Parte 1: terminologia di base, metodologia.

Seguridad de la maquinaria; conceptos básicos, principios
generales de diseño, parte 1: terminología básica, metodología.

EN ISO 12100-2 2003
(ISO 12100-2)

**Sicherheit von Maschinen, Grundbegriffe, allgemeine
Gestaltungsleitsätze, Teil 2: Technische Leitsätze und
Spezifikationen.**

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

Sécurité des machines; notions fondamentales, principes
généraux de conception; Partie 2: Principes et spécifications
techniques.

Sicurezza della macchina, nozioni fondamentali, verifica della
struttura generale; Parte 2: principi e specifiche tecniche.

Seguridad de la maquinaria; conceptos básicos, principios
generales de diseño, parte 2: principios y especificaciones.

DIN EN ISO 13852 2008

**Sicherheit von Maschinen - Sicherheitsabstände gegen das
Erreichen von Gefährdungsbereichen mit den oberen u.
unteren Gliedmaßen.**

Safety of machinery — Safety distances to prevent hazard zones
being reached by upper and lower limbs

Sécurité des machines — Distances de sécurité empêchant les
membres supérieurs et inférieurs d'atteindre les zones dangereuses.

Sicurezza della macchina — Distanza di sicurezza al fine di evitare
pericolo di passaggio sotto e basso carichi sospesi.

Seguridad de la maquinaria — Distancia de seguridad con el fin de
evitar que las extremidades superiores y inferior del cuerpo alcancen
las zonas de peligro.

DIN EN 349 1993
(ISO 13854) 1996

**Mindestabstände zur Vermeidung des Quetschens von
Körperteilen.**

Minimum distance to avoid squeezing any parts of the body.

Distances minimum afin d'éviter une contusion des parties du corps.

Distanza minima al fine di evitare contusioni di parti del corpo.

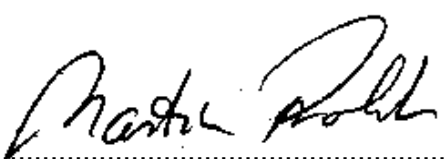
Distancia mínima con el fin de evitar contusiones en cualquier parte
del cuerpo.

Authorized person for EC-dokumentation:

Name: J. Holderied

Adress: Probst Greiftechnik • Verlegesysteme GmbH; Gottlieb-Daimler-Str. 6; D-71729 Erdmannhausen

Signature:

Erdmannhausen, 12.01.2010.....

(M. Probst, Managing director)

3 General

3.1 Authorized inset



Prohibition

- 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, especially regulations of the declaration of conformity, and additional local health and safety regulations have to be observed.

The FTZ-I is universal usable for gripping and moving customary prefabricated concrete products, with clean gripping surface; like steps, kerbs (also natural kerbs), as well as "Kassler Bord" (Bus- and Train-profil-stones) and so on. Connected with lifting equipment e.g. a excavator or a crane.

The FTZ-I is universal usable because of the great opening width and a high carrying capacity. Look at the technical data list for details.

This device is series-produced equipped with the following elements:

- universal adjustable opening range
 - eyelet for the crane-hook
 - automatic release
 - exchangeable grip-elements (rubber metal-rail).
- The opening range of the FTZ-I can be regulated universal over the spring bolt.
 - The FTZ-I is equipped with a automatic release to switching full automatically from "full onto empty" (grip and to loosen of the gripping goods). That means the opening and closing of the gripper be caused through the set down and the heave of the device.



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



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,
- the loads are suitable to be handled.

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



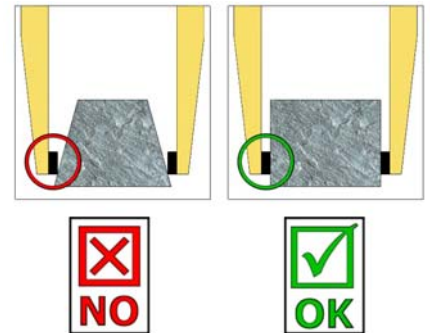
UNAUTHORIZED TRANSPORTIONS:

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

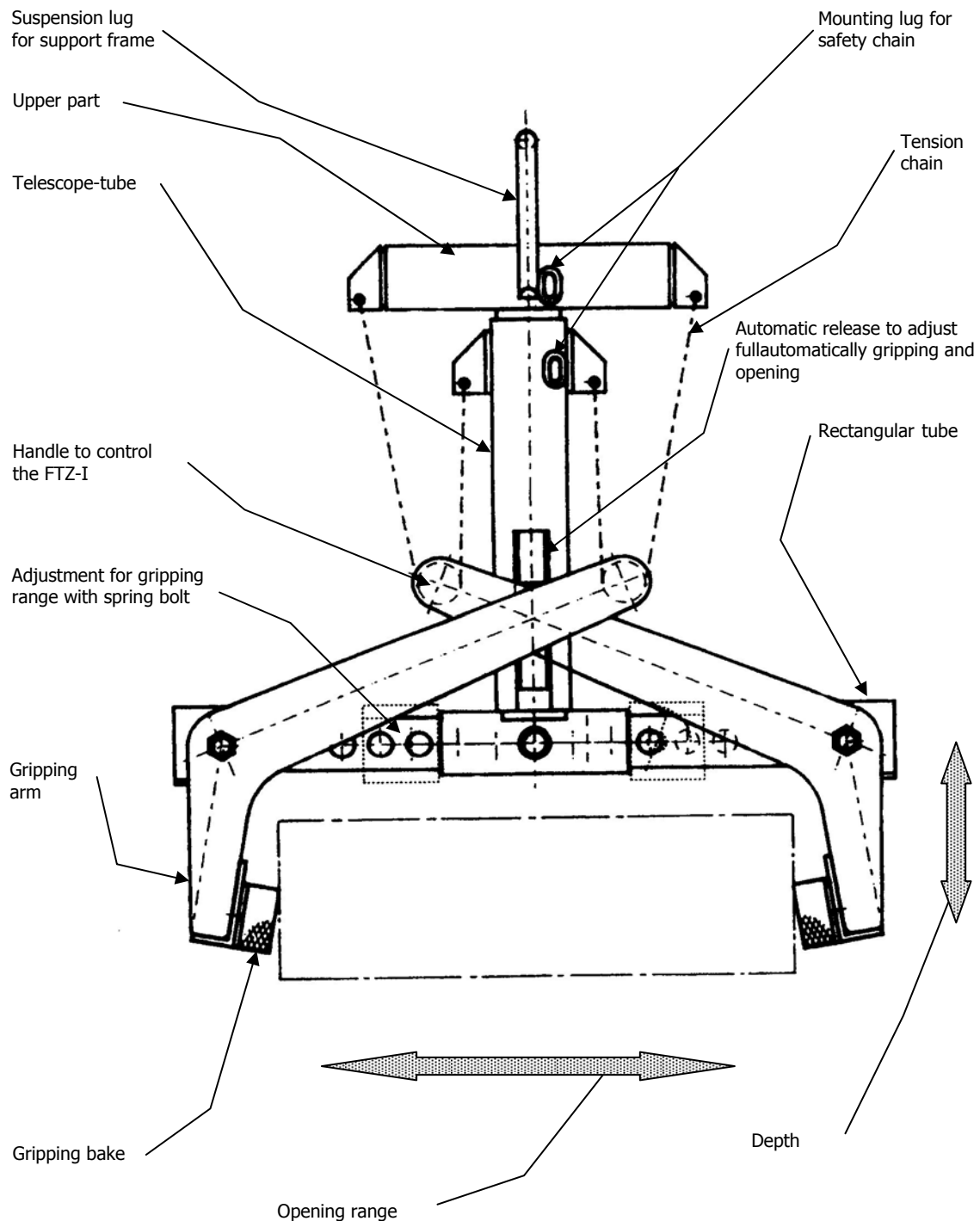
The **carrying capacity** and the **nominal width** the device are not allowed to cross over.

All unauthorized transportations with the device are not allowed!

- Transportation of people and animals.
- Transportation of other loads and material than described in this manual.
- Gripping of gripping goods with **packaging foil**, because they could fall down.
- Transportation of **non rectangular** and **round** gripping goods, because they could fall down. → → →
- (Transportation of material with "feet", "bellies" and "blind spacers".)



3.2 Survey and construction



3.3 Technical data

Type:	Gripping range	Inside Height	Gripper Length	Carrying Capacity	Dead Weight
FTZ I	50 – 520 mm (2 – 20 ½")	170 mm (6 ¾")	420 mm (16 ½")	900 kg (2,000 lbs)	55 kg (120 lbs)

3.4 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 range/
Opening width:** consists of the gripping range and the measure to drive over the gripping good.
 $\text{gripping range} + \text{measure to drive over the gripping good} = \text{gripping range}$
- **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).

3.5 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

3.6 Safety symbols

 Danger	<u>Danger to life!</u> Identifies imminent hazard. If you do not avoid the hazard, death or severe injury will result.
 Attention	<u>Hazardous situation!</u> Identifies a potentially hazardous situation. If you do not avoid the situation, injury or damage to property can result.
 Prohibition	<u>Prohibition!</u> Identifies imminent a prohibition. If you do not avoid the prohibition, death and severe injury, or damage to property will result.

3.1 Safety Marking

WARNING SIGN			
Symbol	Meaning	Order-No.:	Size:
	The transportation of non rectangular goods is not allowed!	2904.0219 2904.0218 2904.0217	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 pinching 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

4 Safety

4.1 Personal safety requirements

- Only qualified, authorized certificated personal is allowed to operate the device and all devices which are connected (lifting equipment).



- Each operator must have read and understood the operating instructions.
- The manual guiding is only allowed for machines with handles.



4.2 Protective equipment

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

- Protective clothing
- Safety gloves
- Safety shoes

4.3 Accident prevention



Danger

- The operating range have to be covered for unauthorized persons, especially children.
- The workplace have to be sufficiently illuminated.



Prohibition

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



Attention



Danger

- Take care handling wet, dirty and not solidified components.
- Take care in case of thunderstorm!

4.4 Function Control

4.4.1 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 data-plates must be replaced.

4.5 Safety procedures

4.5.1 General



- The use of the device is only permitted in proximity to the ground. Do not swing it over peoples heads.



- 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 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.
- The manual guiding of is only allowed for devices with handles.



- Do not use the device to jerk seized set down load.
- 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 load 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.

4.5.2 Hydraulic excavator and other lifting equipment

- Hydraulic excavator and other lifting equipment has to be in good, safe working condition.
- **Take care that the maximum capacity of the hydraulic excavator and other lifting equipment is not exceeded.**
- Only authorized, certificated and qualified personnel is allowed to operate the lifting equipment / fork lift.
- The operator staff must have all the necessary qualifications.

5 Installation

5.1 Mechanical connection

5.1.1 SUSPENSION LUG

- The device is equipped with a suspension lug and can be mounted on various support frames.
- Be careful that the suspension lug is safety joined with the crane hook and can not slip down.
- **The maximum load of the support frame is not allowed to cross over the dead weight of the device and the maximum load.**

6 Adjustments

6.1 Adjustment of the opening range

Before the product can be lifted and transported, the gripping range has to be adjusted to the dimensions of the product.



Attention

- The adjustment of the gripping range may **never** take place on both sides at the same time. **Always adjust the gripping range first to the one and then on the other side.**
- Pull the spring bolt upwards, rotate around 180° and lock in position (in nick).
- Move the rectangular tube, until the gripping range is approx. 5 cm larger than the product.
- Pull the spring bolt back up again and rotate around 180°.



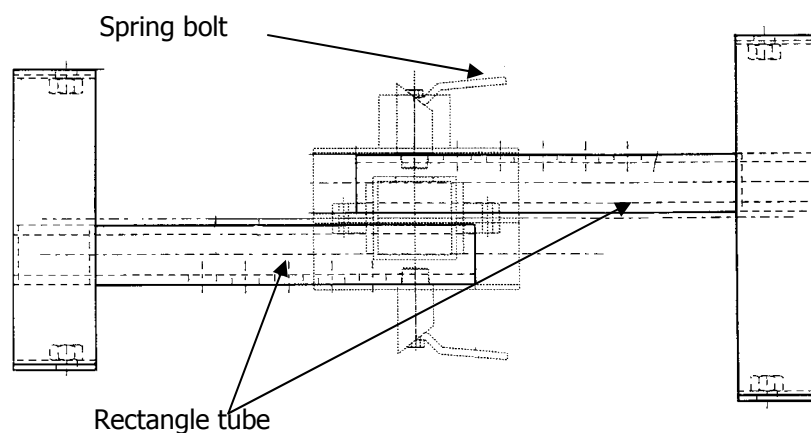
Attention

- Move the rectangular tube so long until the spring bolt engages in one of the holes.
- 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.



Danger

- **Caution** while adjusting of the gripping range.
There is a danger of injuring the hands!



Top view from down

7 Operating

7.1 Operating for devices with automatic release

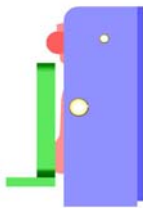
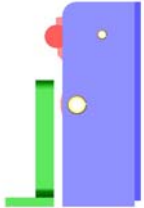
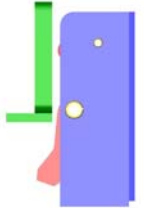
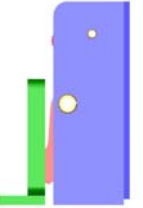
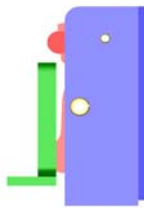
- The device is connected to the lifting equipment.
- Before lifting the device, the opening width have to be adjusted.
- The device is placed over the product, set down, the device closes round the product and it can be lifted.
- Set down on the ground again, the device opens automatically, the automatic release locks it into position so that the device can be lifted without closing up.
- Placed over the next product, the automatic release disengages itself and the product can be lifted.
- The device therefore is a ONE-MAN-MACHINE.



Shut-down the device without lifting equipment/support frame only on even ground. The gripping arms must be opened enough, to ensure a secure standing of the device. Otherwise exists danger of overturning!

The device is mounted with a automatic release, that means the opening and closing of the gripping arms results through the set down and lifting of the device.

Pictures the positions of the automatic release

①  ▪ Device is lifted through the support frame. ▪ Gripping arms are opened.	②  ▪ Device is set up on the gripping good. ▪ Gripping arms are opened.	③  ▪ Device is lifted through the support frame. ▪ Gripping good is clamped and can be transported to the destination.
④  ▪ Device is set down with the gripping good (on the ground). ▪ Gripping arms are opened.	⑤/①  ▪ Device is lifted through the support frame. ▪ Gripping arms are opened. (laydown position of the device on the ground)	

8 Maintenance and care

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



All operations may only be made in closed state of the device!

MECHANICAL

Service interval

First inspection after
25 operating hours

After 50 operating hours

Minimum 1x per year
(at rough conditions
shorten the interval)

Maintenance work

- Control and tighten all screws and connection.
(The implementation is only allowed by an expert).
- Tighten all screws and connection (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.
- Check of all the suspension parts, bolts and straps. Check for corrosion and safety by an expert.

AUTOMATIC-RELEASE

Never grease the automatic-release, if necessary use oil!

8.2 Removing errors

ERROR	CAUSE	REPAIR
The clamping-power is not big enough, the load is slipping out (optional) (optional) (Adjustment of the opening width) (optional)	• The grippers are worn • The maximum load is exceed • The actual opening width is not correct	• Replace the grippers • Reduce the weight of. the load • Adjust the opening width according to the load you want to transport
Unbalanced load (Adjustment of the opening width) (optional)	• The device is not loaded symmetrically • The adjustment of the opening width is not symmetrical.	• Adjust the position of the load • Correct the adjustment of the opening width
Automatic release does not work mechanical (optional)	• Automatic release does not work	• Clean automatic release with high pressure-cleaner • Oil the automatic release (never with grease) • Change the inset of the automatic release

8.3 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.

[illegible]

8.5 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 these information.

The max. 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

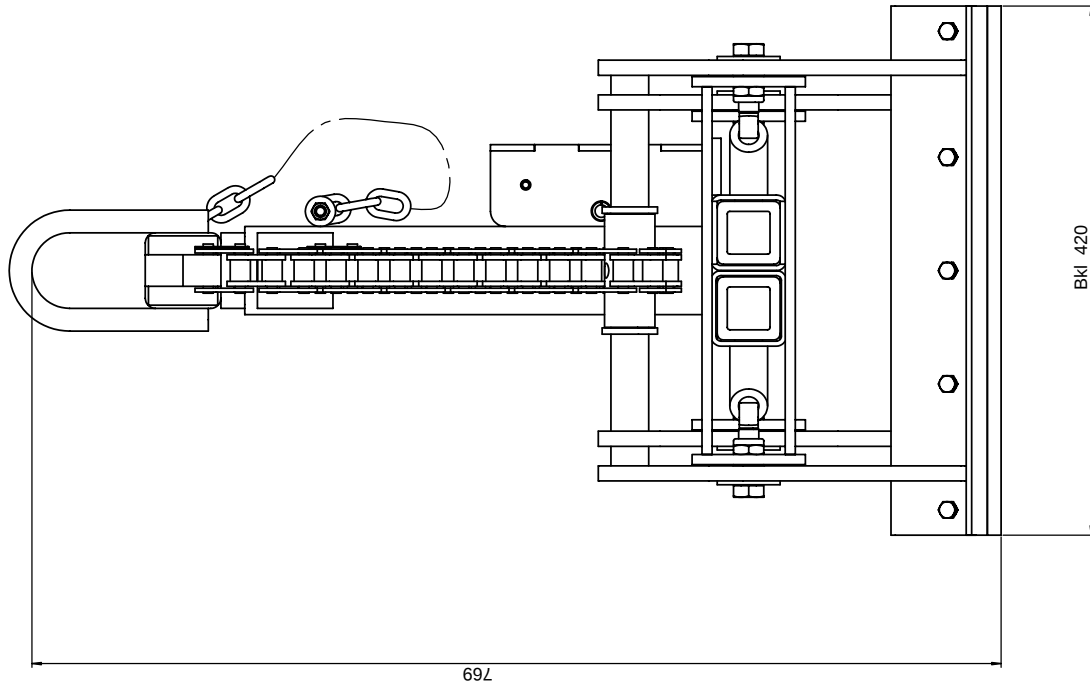
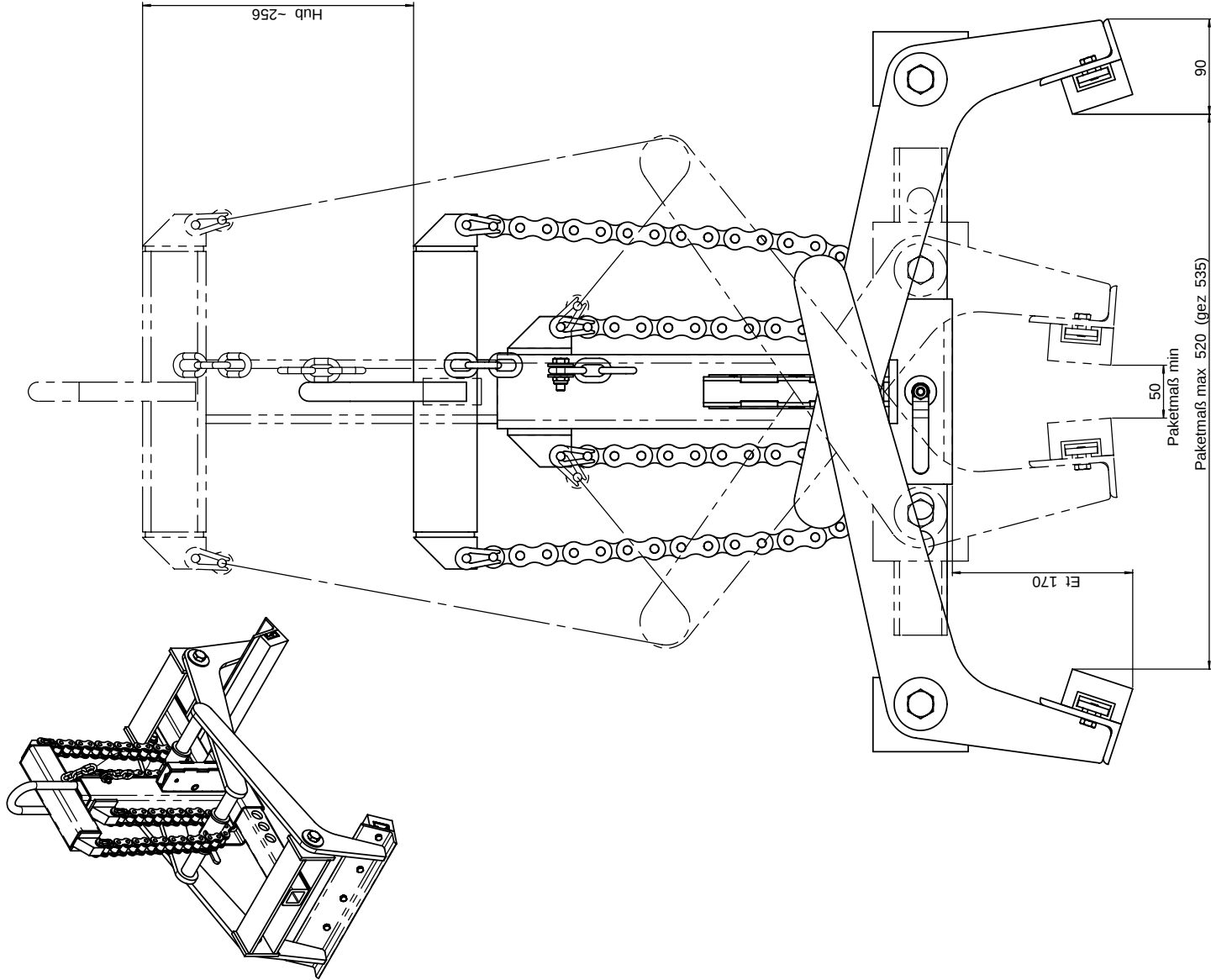


Example:

8.6 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)!



• Bei Änderungen Rücksprache TB !

Gewicht: 57,5 kg

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

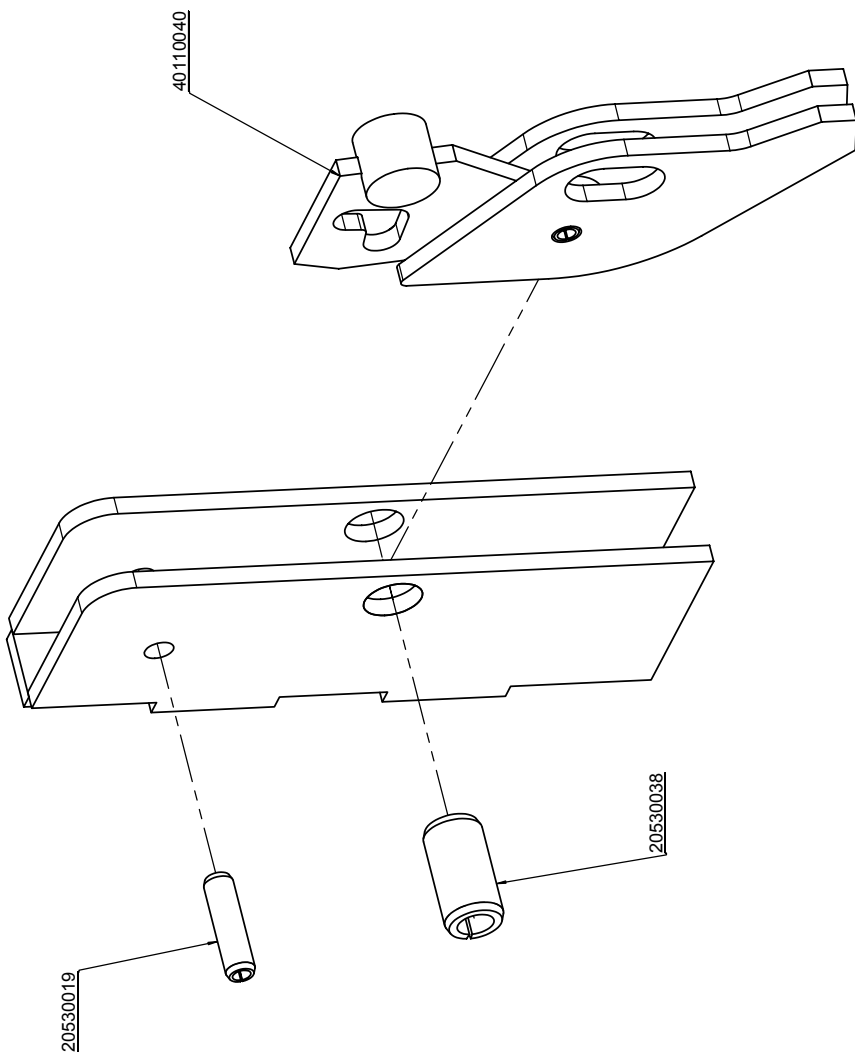
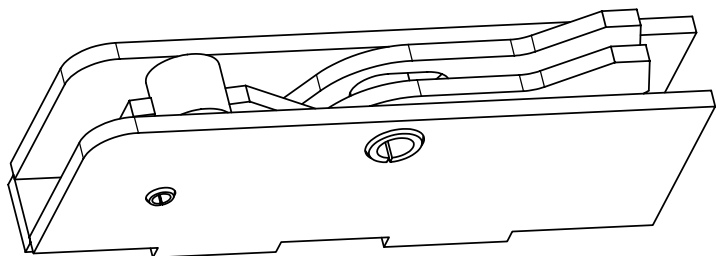
Bewerbung Fertigteilezange FTZ 1

Tragf. 900 kg

Anlagennummer/Zusatznummer
D53100120

Blatt
1
von 1

Zust. Urspr. Ers. d.



		Bei Änderungen Rücksprache TB !	
Gewicht: 1,5 kg		Schutzvermerk nach DIN 34 beachten! Nachdruck nur mit unserer Genehmigung!	
Bezeichnung		Wechselautomatik WA-L	
Datum		Name	
Erstellt 10.11.2003		Pinner	
Gepr.			
WA:			
Kunde:		Arbeitsnummer/Zeichnungsnummer	
1		E40110033	
Zust. Urspr. N235-1		Ers. d.	
1		Blatt 1	
1		von 1	

Operator: _____

Device type: _____

Article -No.: _____

Device-No.: _____

Year of make: _ _ _ _

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

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature

Date:	Maintenance work:	Inspection by company:
		Company stamp
		Name Signature
		Company stamp
		Name Signature

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: _____

Article -No.: _____

Device-No.: _____

Year of make: _____

First inspection after 25 operating hours

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature

After 50 operating hours

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature

Minimum 1x per year

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature

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)

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Article -No.: _____

Device-No.: _____

Year of make: _____

First inspection after 25 operating hours

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature

After 50 operating hours

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature

Minimum 1x per year

Date:	Maintenance work:	Inspection by company:
		Company stamp
		
		Name Signature
		Company stamp
		
		Name Signature