

Operating instructions

CondorGrip Sheet Metal Lifting Clamp Type CGUK



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1. Introduction

The CondorGrip sheet metal lifting clamp type CGUK is a load lifting attachment for vertical lifting, lowering, and turning (90°) of non-guided steel sheets, steel structures, and standard profiles.

Before you use the CondorGrip sheet metal lifting clamp type CGUK for the first time, read the operating instructions in their entirety. The operating instructions explain how to safely use, maintain, inspect, and dispose of the CondorGrip sheet metal lifting clamp type CGUK. These operating instructions are a component of the product and must be available to all users. Keep the operating instructions in a safe place for re-use. The CondorGrip sheet metal lifting clamp type CGUK is called the sheet metal lifting clamp below.

1.1 Manufacturer/Service

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**INFO**

We will be happy to answer any questions you may have about your product.

1.2 EU declaration of conformity

Content of the document:

For the product designated below

Name:	CondorGrip sheet metal lifting clamp
Type:	CGUK

we hereby declare that it corresponds to the **basic requirements** specified in the harmonization legislation named below:

DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of May 17, 2006 about machines and the change of Directive 95/16/EC (new version) – in short: **Machinery Directive**

Specification of the applicable harmonized standards that apply or details of the specifications for which conformity is declared:

Reference	Date of issue	Title
Harmonized standards for the Machinery Directive:		
EN ISO 12100 + Correction 1	2010-11 2013-08	Safety of machines – General principles for design – Risk assessment and risk reduction
EN 13155	2022-03	Cranes – Safety – Non-fixed load lifting attachments
Additional applicable technical specifications (not published in the EU official gazette):		
DIN ISO/TR 14121-2 DIN SPEC 33885	2013-02	Safety of machinery - Risk assessment - Part 2: Practical guidance and examples of methods

Authorized within the meaning of Annex II No. 1. A. No. 2, 2006/42/EC for the compilation of the technical documents:

Company	Carl Stahl Hebeteknik GmbH
Address	Tobelstr. 2 D-73079 Suessen

Sole responsibility for issuing this declaration of conformity with regard to meeting the basic requirements and the preparation of the technical documents is borne by the manufacturer (or installation company):

Company	Carl Stahl Hebeteknik GmbH
Address	Tobelstr. 2 D-73079 Suessen

Declared by:

Last name, first name	Schwenger, Wolfgang
Title	Managing director

This declaration certifies conformity with the named harmonization legislation, however it does not promise properties.

Additional details:

This declaration applies to all copies that are manufactured according to the corresponding production drawings, which are a component of the technical documents. The attached accompanying documentation that supports the declaration of conformity contains additional details about adherence to above references.

The complete declaration of conformity is attached as a separate document.

2. Preparation of information

These operating instructions contain symbols, designations, instructions, and lists as depicted in Chapters 2.1 to 2.2.

2.1 Symbols and designations

Warnings

The warnings are classified and depicted as follows:



DANGER

A warning with the signal word “DANGER” indicates a hazard that can immediately and certainly cause death or severe, lasting injuries.



WARNING

A warning with the signal word “WARNING” indicates a hazard that may cause severe injuries or death.



CAUTION

A warning with the signal word “CAUTION” indicates a hazard that may cause minor to moderate injuries.

ATTENTION

A warning with the signal word “ATTENTION” indicates a hazard that may cause property damage.

In a **warning**, steps are marked with ► and structured chronologically.

Pictographs for specific hazards



Meaning:

Warning about suspended load.



Meaning:

Warning about danger of crushing.



Meaning:

Warning about hand injuries.

The pictographs are used in connection with the associated classification and the appropriate signal word.

Useful information and tips



INFO

This symbol identifies useful information and tips.

Disposal



NOTICE ABOUT DISPOSAL

of packaging materials and load lifting devices.

2.2 Instructions and lists

All instructions are structured in chronological order and numbered sequentially, e.g.:

1. Step 1
2. Step 2

The result of an action is marked with an arrow:

➤ Result or device reaction

Instructions that do not have to be carried out in a particular sequence are marked as follows:

- Step
- Step

The result of an action is marked with an arrow:

➤ Result or device reaction

Lists are marked with dashes:

- List

3. Safety

Before you use the sheet metal lifting clamp, carefully read the following safety instructions.

Chapters 3.1 to 3.3 list basic behavior rules that you must observe when handling the sheet metal lifting clamp. You must absolutely follow the instructions that are marked with a  symbol to prevent danger to people. Warnings that belong to the individual instructions are always listed before the step in question.

3.1 Basic safety instructions

The sheet metal lifting clamp has been constructed, tested, and left the company in a perfectly safe condition. In order to maintain this state, you must follow the instructions in these operating instructions.

- Read these operating instructions in their entirety;
- Heed the warnings and safety instructions;
- Make sure that these operating instructions are always available where the sheet metal lifting clamp will be used;
- Make sure that only qualified staff performs work with and on the sheet metal lifting clamp (see Tab. 1);
- During use, comply with the locally-applicable requirements for occupational safety and the work instructions of the operator;
- Consider the circumstances on-site;
- Observe the specified minimum load (see Technical data in Chapter 4);
- Observe the permissible angle of inclination (see Technical data in Chapter 4);
- Observe the maximum carrying capacity;
- Consider the additional tare weight of the sheet metal lifting clamp:
- Tare weight sheet metal lifting clamp + load weight = total weight ► Consider the weight of all components with regard to the maximum load capacity!
- Observe the permissible gripping range (see Technical data in Chapter 4);
- Use the sheet metal lifting clamp only in connection with swivels on the crane hook;
- Damage that compromises safety must be repaired by an expert company;
- Perform all work with great care;
- Wear your personal protective equipment;
- Never open a sheet metal lifting clamp when it is under load;
- Only use the sheet metal lifting clamp if the typeplate is clearly legible;

- When using the sheet metal lifting clamp in combination with a sling, heed the operating instructions for the sling;
- Use only suitable slings, take special care that the load capacity of the sling fulfills the requirements;
- Make sure that your load chain is not twisted; use only slings with swivels;
- Consider the additional tare weight of the sling:
- Tare weight sheet metal lifting clamp + tare weight sling + load weight = total weight ► Consider the total weight of all components with regard to the maximum load capacity!

Classification of the qualification areas for load lifting devices

Area of activity	Qualification	Professional knowledge
Delivery and transport	Dealer, mover	– Proof of training in load securing – Safe handling of load lifting devices
Storage	Storage specialist	– Safe handling of load lifting devices
Start-up, maintenance, and service	Specialized personnel	– Expert: professional training and experience, sufficient knowledge in the area of load lifting devices – Safe handling of load lifting devices – Product-specific knowledge
Use, simple visual inspection	Specialized personnel	– Safe handling of load lifting devices, professional training and experience
Disposal	Specialized personnel	– Knowledge of the regulations for proper disposal and re-use

Tab. 1: Overview

3.2 Proper use

The following points comprise proper use:

- Vertical lifting, lowering, and turning (90°) of non-guided loads;
- Steel plates, steel structures, and standard profiles of steel are approved for use;
- Observe the permissible load capacity: Tare weight of the individual components + load weight;
- Temperature range from -20 °C to + 80 °C;
- Per lifting procedure, only one component may be moved;
- Use and storage only indoors;
- Even and symmetrical load distribution during vertical lifting and lowering of the load;
- Angle of inclination (clamping front and clamping side level) up to 90° in pulling direction;
- Minimum load depending on the sheet metal lifting clamp type (see table, Chapter 4);
- Designed for a maximum of 16,000 load changes, depending on external conditions, the number of load change may decrease.

In addition to the points listed here, additional details must be taken from the technical data and observed (Chapter 4).

3.3 Improper use

The following points comprise improper use:

- Exceeding the maximum load capacity;
- More than one component per lifting or turning process;
- The maximum permissible surface hardness of 32 HRC of the load is exceeded (see Chapter 4);
- Use when the chain is twisted;
- Conveying people and animals;
- Conveying pipes and components with diameters;
- Transporting fluids and hazardous materials;
- Asymmetrical loading;
- Tearing away stuck loads, diagonal pulling, and pulling of loads on the floor;
- Changes to the construction;
- In environments that are subject to explosion, or where there is exposure to salt, acid, toxic, and/or alkaline substances;
- Diagonal pulling and sliding of loads on the floor/storage system, exception: the turning procedure, see Chapter 7.6;
- Use and storage outdoors.

Chapter 3.3 does not guarantee completeness. Anything that is not expressly permitted falls under improper use.

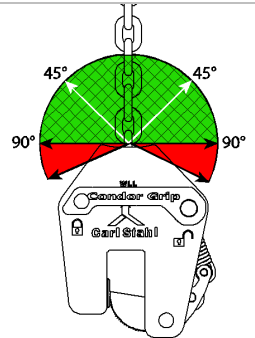
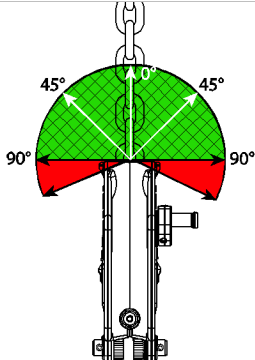
4. Technical data

The following tables provide the specific technical data for the different sheet metal lifting clamp types. Depending on the type, product properties vary substantially.

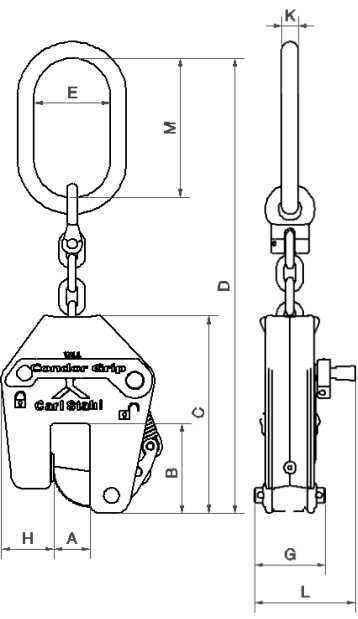
- Note the data that applies to your specific sheet metal lifting clamp type.

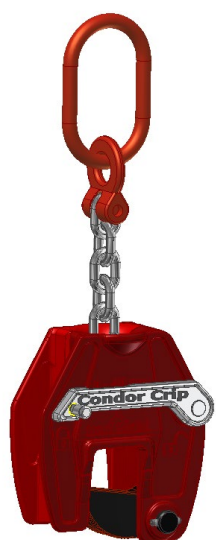
Name:	Sheet metal lifting clamp
Type:	CGUK
Model:	CGUK 1.0 t; CGUK 1.8 t; CGUK 2.0 t; CGUK 3.0 t

General information	CGUK 1.0 t	CGUK 1.8 t	CGUK 2.0 t	CGUK 3.0 t
Load capacity	1,000 kg	1,800 kg	2,000 kg	3,000 kg
Permissible gripping range	0 - 25 mm	0 - 25 mm	0 - 40 mm	0 - 40 mm
Tare weight	2.8 kg	2.9 kg	6.0 kg	6.1 kg
Minimum load	100 kg	180 kg	200 kg	300 kg
Usable height	365 mm	365 mm	392 mm	417 mm
Maximum surface hardness of load	32 HRC	32 HRC	32 HRC	32 HRC
Temperature range for storage and use	-20 °C to 80 °C	-20 °C to 80 °C	-20 °C to 80 °C	-20 °C to 80 °C
Maximum number of load changes	16,000	16,000	16,000	16,000

Information about the pulling direction valid for all models of the CGUK sheet metal lifting clamp	Maximum permissible angle of inclination	Figure: Pulling direction
Permissible pulling directions in the clamping front level	up to 90°	
Permissible pulling directions in the clamping side level	up to 90°	

Tab. 2: Technical data

Dimensions		CGUK 1.0 t	CGUK 1.8 t	CGUK 2.0 t	CGUK 3.0 t
	A	Permissible gripping range 0 - 25 mm	Permissible gripping range 0 - 25 mm	Permissible gripping range 0 - 40 mm	Permissible gripping range 0 - 40 mm
	B	71 mm	71 mm	84 mm	84 mm
	C	156 mm	156 mm	168 mm	168 mm
	D	365 mm	365 mm	392 mm	417 mm
	E	60 mm	60 mm	60 mm	75 mm
	G	56 mm	56 mm	63 mm	63 mm
	H	45 mm	45 mm	85 mm	85 mm
	K	13 mm	13 mm	16 mm	18 mm
	L	80 mm	80 mm	95 mm	95 mm
	M	110 mm	110 mm	110 mm	135 mm

Color scheme	CGUK 1.0 t; CGUK 2.0 t;	Color scheme	CGUK 1.8 t; CGUK 3.0 t;
			

Tab. 3: Technical data (continued)

5. Delivery and transport

5.1 Scope of delivery

Check the delivery to ensure it is complete.

Pieces	Item	Item number depending on model/type
1	Sheet metal lifting clamp	Type CGUK 1.0: 25301010015011 or; Type CGUK 1.8: 25301010015012 or; Type CGUK 2.0: 25301010035064 or; Type CGUK 3.0: 25301010035065.
1	Original operating instructions	-
1	Declaration of conformity	-
1	Inspection document	-

Tab. 4: Scope of delivery

If parts are missing or damaged, contact the manufacturer/dealer (Chapter 1.1).

5.2 Transport

The sheet metal lifting clamp is tested, checked and packed properly before delivery. Delivery is made using a suitable transport system.

- Always transport the sheet metal lifting clamp using a suitable transport system.

5.3 Storage

ATTENTION

Damage to device due to improper storage!

Improper storage can damage the sheet metal lifting clamp.

- ▶ Store the sheet metal lifting clamp in a suitable location.
- ▶ Store the sheet metal lifting clamp in a clean, dry place indoors.
- ▶ Protect the sheet metal lifting clamp against:
 - The effects of temperatures that fall below or exceed the permissible temperature range (see Chapter 4).
 - Humidity,
 - Soiling,
 - Damage,
 - Corrosion.

6. Layout and function

The sheet metal lifting clamp consists essentially of the following components:

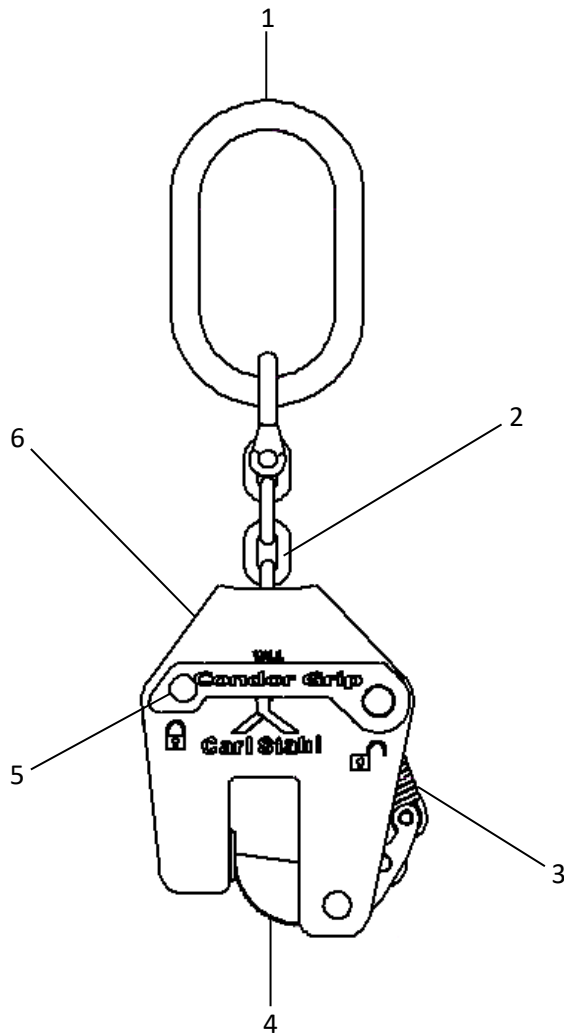


Fig. 1: Sheet metal lifting clamp

Position	Name	Function
1	Oblong master link	Crane attachment
2	Chain	Connecting element
3	Tension spring	Closing mechanism
4	Clamping jaws	Gripping function
5	Hand lever with actuating pin	Opening and closing function
6	Body	Symmetrical load lifting

Tab. 5: Layout and function

7. Use

7.1 Inspection before use

An inspection must be conducted before each use. You must conduct an inspection before first use (initial start-up), before each recurring use or after each servicing. For the precise details of the corresponding inspections, see the maintenance/inspection plan. Read Chapter 8, especially 8.3 - 8.5.

The inspection is intended to ensure that the sheet metal lifting clamp is in perfect condition and ready for operation.

Before using the sheet metal lifting clamp, you must observe the following with regard to the work environment:



DANGER

Danger to life due to falling load!

A falling load can cause severe injuries or death.

- ▶ Never linger under a suspended load.
- ▶ Never pass under a suspended load.
- ▶ Ensure there is sufficient free space to work.
- ▶ Ensure that there are no people in the working area.



WARNING

Danger of crushing due to lack of space!

There is a danger of crushing due to clearances that are too small at the load pick-up point, on the load transport path or at the load drop-off point.

- ▶ Inspect your work environment.
- ▶ Ensure there is sufficient space at the load pick-up point, on the load transport path, and at the load drop-off point.

7.2 Preparation of load and sheet metal lifting clamp

Before you can use the sheet metal lifting clamp, you must prepare the load and the sheet metal lifting clamp as follows:

1. Prepare the load by removing
 - Oil,
 - Grease, and
 - Scale from the load.
2. Make sure that the clamping jaws of the sheet metal lifting clamp are not dirty and there is no oil or grease on them.
3. If necessary, clean the clamping jaws with a clean cloth.

7.3 Attaching the sheet metal lifting clamp to the crane

In order to attach the sheet metal lifting clamp to the crane, proceed as follows:

1. Position the crane hook vertically over the sheet metal lifting clamp.
2. Hook the crane hook into the oblong master link.
 - Crane hook safety latch snaps in.
3. Check the crane hook safety latch.
4. Lift the sheet metal lifting clamp slowly and carefully.

7.4 Using a sling

If the sheet metal lifting clamp is used in combination with a sling, the following points must be observed:

- Use slings only on the crane.
- Only use suitable slings with swivels.
- Heed the operating instructions for the slings.

7.5 Lifting, transporting, and lowering loads



DANGER

Danger to life due to reduced clamping power!

If the minimum load and/or a dirty load or dirty clamping jaws are ignored, the clamping power is reduced, which may cause a load to fall.

- ▶ Check the weight of the load (see Tab. 2 Chapter 4 Technical data).
- ▶ Check the load and the clamping jaws for:
 - Soiling,
 - Scale,
 - Oil residues, and
 - Grease residues.
- ▶ Clean the load and/or the clamping jaws if necessary (see Chapter 7.2).

1. Position the sheet metal lifting clamp vertically over the load.
2. Open the clamping jaws using the hand lever.
3. Position the load in the clamping jaw.
4. Close the clamping jaws using the hand lever.
5. Check the clamping function and load distribution by lifting the load slightly and observing:
 - Visible chain tensioning,
 - Complete and flat resting of the load in the clamping jaw,
 - Symmetrical and even load distribution.
6. Lift the load slowly and carefully.
7. Transport the load to the desired load drop-off point.

8. Lower the load slowly and carefully until the load stands or lies so that it will not tip.
9. Open the sheet metal lifting clamp using the hand lever.

7.6 Load turning (90°)

To turn loads, e.g. steel plates, steel structures, and standard profiles, you must observe the following in addition to Chapter 7.5:

1. Position the sheet metal lifting clamp over the load.



WARNING

Risk of injury due to improper support!

Due to improper, unstable support, the load can tip when it is attached and during the turning process, and the load can slip.

- ▶ Ensure that the load rests on a tip-proof, support.
- ▶ If necessary, ensure stability.

2. Open the clamping jaws using the hand lever.



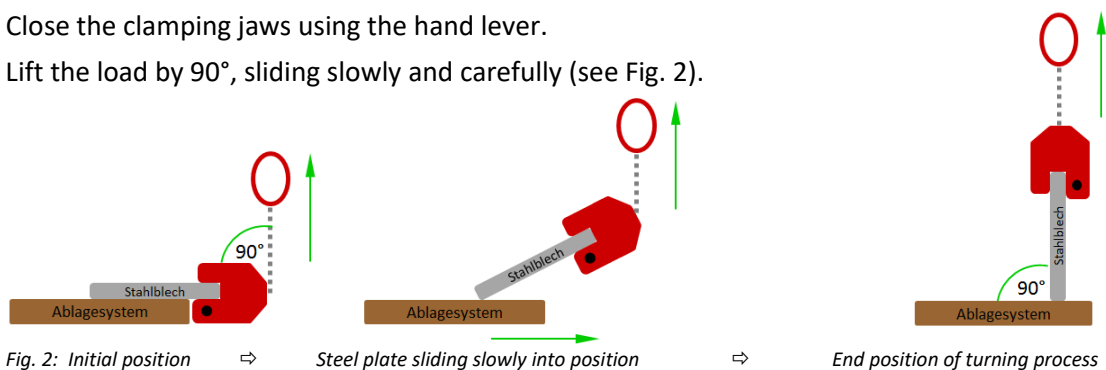
DANGER

Danger to life due to swinging load!

If the permissible angle of inclination is not observed and the load is pulled upright in a jerky motion, the load may swing.

- ▶ Position the load centered, symmetrically balanced in the clamping jaw.
- ▶ Observe the permissible angle of inclination of 90° (see Fig. 2).
- ▶ Make sure that the load does not lose contact with the support during the turning process and that it slides slowly into the end position (see Fig. 2).

3. Position the load in the clamping jaw.
4. Close the clamping jaws using the hand lever.
5. Lift the load by 90°, sliding slowly and carefully (see Fig. 2).



6. Lift the load slowly and carefully.
7. Transport the load to the desired load drop-off point.
8. Lower the load by 90° slowly and carefully onto a suitable support until the load no longer slips and lies so that it cannot tip.

8. Servicing

The sheet metal lifting clamp must be cleaned, maintained, and inspected regularly. For the maintenance/inspection intervals, see the maintenance/inspection plan.

8.1 Cleaning

INFO



Regular cleaning and careful handling mean that the sheet metal lifting clamp will be in good condition throughout its life cycle.

Component	Cleaning criteria	Actions
Oblong master link	The oblong master link must be movable, free of dust and dirt.	Clean
Body	The body must be free of dust and dirt.	Clean
Hand lever with actuating pin	The hand lever must move easily, be free of dust and dirt.	Clean
Chain	The chain must be movable, free of dust and dirt.	Clean and lubricate with oil
Tension spring	The tension spring must be free of dust and dirt.	Clean
Clamping jaws	The clamping jaws must be free of oil/grease, dust and dirt.	Clean and remove oil/grease
Typeplate	The typeplate must be free of dirt and legible.	Clean

Tab. 6: Cleaning

8.2 Inspection document

The inspection document serves as proof of the inspections conducted. Furthermore, all noted defects must be repaired and the proof thereof that is kept presented to the authorities if necessary. The original inspection document is attached as a separate document.

8.3 Maintenance/inspection plan

Maintenance/inspection interval	Activity
Before first use (initial start-up)	– Visual inspection and function check
Before each recurring use of the sheet metal lifting clamp without extraordinary events	– Visual inspection
Annually	– Visual inspection, function check
Extraordinary inspection	– Depending on external conditions, the annual inspection cycle may be shortened. This includes the following points: – After damage events, servicing or special incidents, – Permanent use in shift operation, – Increased wear, – Corrosion, effects of heat due to environmental influences, – etc.

Tab. 7: Maintenance/inspection plan

8.4 Inspection criteria

The discard criteria for the sheet metal lifting clamp are determined using the inspection criteria in the following table. For the basic value, specified in mm, see Technical data (see Chapter 4).

Component	Inspection criteria	Actions
Oblong master link	Any type of deformation and wear	Take out of service and contact manufacturer/service
Body	Any type of deformation and wear	Take out of service and contact manufacturer/service
Hand lever with actuating pin	Any type of deformation and wear	Take out of service and contact manufacturer/service
Chain	Any type of deformation and wear	Take out of service and contact manufacturer/service
Tension spring	Any type of deformation and wear	Take out of service and contact manufacturer/service
Clamping jaws	Any type of deformation and wear	Take out of service and contact manufacturer/service
Typeplate	Legibility	Take out of service and contact manufacturer/service

Tab. 8: Inspection criteria

8.5 Visual inspection and function check

Before each use, the sheet metal lifting clamp must be checked and inspected. The tables in Chapter 8.4 list criteria which may indicate that you must take the sheet metal lifting clamp out of service.



DANGER

Danger to life due to falling load!

Due to deformation and wear of the individual components, the load capacity may be reduced and the load can fall.

- ▶ Check the sheet metal lifting clamp for defects.
- ▶ Check to what extent the individual components are functional.
- ▶ Take the sheet metal lifting clamp out of service by marking it appropriately, if it is no longer functional and is beyond repair damaged (see Chapter 9.1).
- ▶ If necessary, contact the manufacturer/service (see Chapter 1.1).
- ▶ If necessary, dispose of the sheet metal lifting clamp (see Chapter 9.2).

Visual inspection

1. Check the sheet metal lifting clamp for visual defects such as:
 - Cracks,
 - Deformation,
 - Wear,
 - Burr formation in the clamping jaw area,
 - Expansion and lengthening of the chain links,
 - Incompleteness.
2. Take the sheet metal lifting clamp out of service, if the sheet metal lifting clamp has a defect (see Chapter 9.1).

Function check

1. Check all moving parts to ensure they move easily.
2. Check the functionality of the sheet metal lifting clamp.
3. Take the sheet metal lifting clamp out of service, if its function is compromised (see Chapter 9.1).

9. Taking out of service and disposal

9.1 Taking out of service

1. Take the sheet metal lifting clamp out of service by marking it.
2. Contact the manufacturer/service (see Chapter 1.1).
3. Dispose of the sheet metal lifting clamp if necessary.

9.2 Disposal

Disposal of sheet metal lifting clamp



NOTICE ABOUT DISPOSAL

If the sheet metal lifting clamp can no longer be repaired or if it is no longer functional, it must be disposed of in accordance with the applicable legal provisions.

Disposal of packaging material



NOTICE ABOUT DISPOSAL

According to the Packaging Ordinance, the dealer must take back for re-use and/or ensure disposal of the packaging for its products that do not bear the symbol of a system for complete disposal.

