User Manual

Chain Hooks



GBK | BKG | BKGC | GKC | EGKN | EGK



BKH | BKG | BKGC | EGKN

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Part number: KCG-UM-006
Version 2025 August

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1 Introduction and EC declaration

This manual is an original instruction in accordance with:

Directive 2006/42/EC on machinery, section 1.7.4 Instructions and Annex II Declarations.

It also meets the requirements in:

Standard EN 1677-1/2/3:2000+A1:2008, Components for slings - Safety - Part 1: Forged steel components.

This manual is valid for the Chain Hooks GBK, BKG, BKGC, GKC, EGKN, EGK, and BKH. See General Description for an overview of the included variants depending on chain size and chain grade.

This manual is valid together with Gunnebo Industries' instruction for slings and lifting guide.

All manuals are continuously updated and are only valid in their latest version, which can be downloaded from www.kitocrosby.com.

1.1 EC declaration of conformity

The Engineering Manager is the authorized person to compile the technical file.

We declare that the lifting component described in this user manual fulfils all the relevant provisions of the Directive 2006/42/EC as a partly completed machine.

The main use of the product is to be incorporated as part of a CE-marked lifting assembly but must not be put into service until the final lifting assembly has been declared to be in conformity with the provisions of the Directive 2006/42/EC.

Our quality management system complies with ISO 9001:2015 and is certified by LRQA Sverige AB for and on behalf of Lloyd's Register Quality Assurance Limited (certificate identity number: 10140613).

Information about harmonized and national standards/technical specifications that apply, and the valid version of this user instruction are available at www.kitocrosby.com.

If the products are modified without approval from Gunnebo Industries, this declaration becomes invalid.

Växjö, August 2025

Fredrik Sandberg

Engineering Manager

1.2 Abbreviations

EC	European Commission
LRQA	Lloyd's Register Quality Assurance
WLL	Working Load Limit

Table 1: Abbreviations

2 Safety precautions

2.1 Warnings, cautions and notes

Carefully read the instructions before using the lifting equipment.

The following signs are used in the instructions, to alert about potential dangers and safety related issues.

Warning!

A warning alerts about a situation which, if not avoided, could result in injury, or death.

Caution!

A caution alerts about a situation which, if not avoided, could result in minor or moderate injury, or damage to the equipment or other property.

Note!

Notes are added to give more information.

2.2 General safety precautions

The rigger is responsible for the lifting operation, and for following all related safety regulations.

The rigger is a competent person, with the knowledge to select correctly dimensioned lifting equipment, and to ensure its safe condition.

2.3 Lifting precautions

Warning!

Visual function check:

Before each operation check that the latch is closed. If the Chain Hook bumps into an obstacle during operation, check again that the latch is fully closed.



Warning!
Make sure that the Chain Hook aligns with the pull direction. Check that the lifting chain is not twisted or rotated.

Warning!
Never point load the Chain Hook. Point loading can cause the Chain Hook to fail, or the load to drop.



Warning!
Adapt the Chain Hook variant in terms of size to the lifting object. The lifting object must rest comfortably inside the Chain Hook without being pinched.



Warning!
Never force an object into the Chain Hook opening. Use instead a Chain Hook with a larger opening.



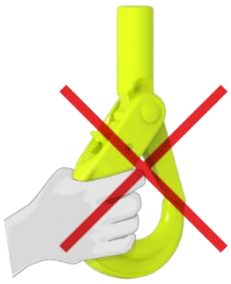
Warning!
Make sure the opening of the Chain Hook points outwards from the lifting object for a 2, 3, or 4-leg lifting sling.



Warning!
When using multiple objects in one hook an internal angle of 90° must not be exceeded. If exceeded, it may cause damage to the hook or unhooking of the load.

Warning!
Grip the Chain Hook by its sides with your fingertips only. Gripping with the entire hand can cause crushing damage to the hand.



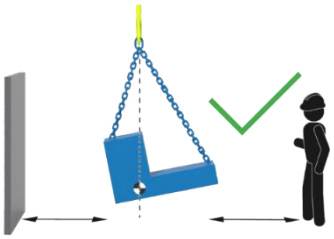


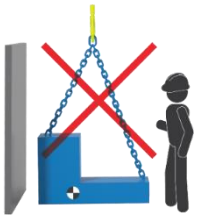
Warning!
Side loading is not allowed on any lifting components. Side loading can cause the load to swing or cause the equipment to fail.



! **Note!**

When lifting asymmetric loads be aware of sudden movement of the load. Keep distance.





3 General description

The main measurements and technical data are available at www.kitocrosby.com.



Figure 1: BKG-20-10

Chain size		GBK	BKG	BKGC	GKC	EGKN	EGK	BKH	BKG	BKGC	EGKN
Grade		10	10	10	10	10	10	8	8	8	8
Metric (mm)	**Imperial (inch)**										
6		x	x			x	x	x			
7	**9/32**	x	x			x	x				
7/8								x	x		x
8	**5/16**	x	x			x	x				
10	**3/8**	x	x			x	x		x		x
13	**1/2**	x	x	x	x	x	x		x		x
16	**5/8**	x	x			x	x		x	x	x
20	**3/4**		x			x	x				

Table 2: Chain sizes

Each Chain Hook is marked as follows:

- Manufacturer identification (GUNNEBO SWEDEN)
- Chain Hook, chain size, material grade
- Batch/traceability code
  The traceability code consists of letters and numbers that identify which plant the product was made in, the year and the batch. This enables tracing the product back through the manufacturing process, all the way back to the specific raw material.
- German professional worker association (BG H32)

Gunnebo Industries issue:

- manufacturer´s certificate according to EN 1677-1 and
- 3.1 material certificate acc. to EN 10204

The following standards apply:

- EN 1677-3 (WLL+25%)
  WLL refers to the maximum working load a lifting accessory or lifting assembly can be subjected to.
- ASTM A952/A952M-02
- AS 3776:2015

Authorized resellers may provide their own documentation and will be able to provide the original certificates upon request.

4 Intended use and restrictions

4.1 Intended use

The Chain Hooks are intended to be the end component of a chain lifting sling or part of a lashing set.

Chain Hooks are available:

- with spring latch, EGKN, GKC
- open/close self-locking latch, GBK, BKG, BKGC, BKH
- without latch EGK.

The self-locking latch is opened and closed with the release trigger. When in open position, it locks either when the hook is aligned with the load or when the operator locks the hook manually.

The BKGC and GKC are intended to be the end component of a container handling lifting sling for skip loading.

The BKH is intended to be used when the hook is rotated in position before the lift.

The Chain Hooks can only be used for lifting when in possession of a valid certificate.

Authorized resellers may provide their own documentation and will be able to provide the original certificates upon request.

4.2 Chain Hook BKG – Example of use



Figure 2: Lifting sling



Figure 3: Lashing

4.3 Chain Hook BKH – Example of use

The Chain Hook BKH allows swivel/rotation but is not intended for regular use in rotating, lifting operations. Instead, it is designed to permit positioning of the hook before the load is lifted.

4.4 General limitations of use

- Recommended to use a latch. Make a risk assessment before using the EGK.
- Attach a Gunnebo short link chain of corresponding size and grade to the Chain Hook.
- Never modify, repair, or reshape the product by welding, heating or bending as this will affect the nominal WLL.
- Never heat-treat the product as this may affect the WLL.
- Do not galvanize or subject the product to any plating or coating process without approval of the manufacturer.
- Do not use the product in alkaline or acidic conditions.
- Do not expose the product to aggressive chemicals, such as acids, alkalines and their vapors.

4.5 Use in exceptionally hazardous conditions

The rating of lifting accessories in European Standards assumes the absence of exceptionally hazardous conditions.

Exceptionally hazardous conditions include offshore activities, the lifting of persons, and lifting of potentially dangerous loads such as molten metals, corrosive materials, or fissile materials.

In such cases a competent person should assess the degree of hazard and adjust the working load limit accordingly.

4.6 WLL reduction at elevated temperatures

The general service temperature is -40 °C/-40 °F to +200 °C/392 °F.

For temperatures higher than +200° C/392 °F, the following apply:

Service temperature	New load capacity in % of original WLL
200-300 °C 392-572 °F	90%
300-400 °C 572-752 °F	75%
> 400 °C > 752 °F	Not allowed

Table 3: WLL reduction at elevated temperatures

4.7 Fatigue

It is important to understand that fatigue failure can occur even if the prescribed WLL is not exceeded.

Scenarios in which the Chain Hook is subjected to variable load over a prolonged period of time, will carry the risk of fatigue. Consider this when dimensioning and deciding service intervals.

4.8 Additional marking

If markings such as project code, and serial number are added, it must be done in a way that does not reduce the strength, corrosion resistance, or the legibility of the manufacturer's own marking.

The following methods are recommended for marking:

- marking tape
- engraving tool
- low stress punches



Figure 4: Recommended areas for punched or engraved marking

5 Instructions prior to use

Read and understand this manual before using the Chain Hooks. Read the Safety precautions.

For further recommendations regarding safe use of the Chain Hooks in sling applications, refer to the Gunnebo Industries' instruction for safe use of slings and lifting guide. Download the Lifting guide and Instructions for sling at www.kitocrosby.com.

5.1 Verification prior to first use

Before first use ensure that:

- The Chain Hook is as purchased.
- The manufacturer's certificate is in order.

5.2 Inspection prior to each use

Inspect the Chain Hooks for obvious damage or deterioration before each use.

Do the inspection in accordance with local regulations. Check also against the items listed under Inspection. If there is any doubt regarding meeting these criteria, do not use the Chain Hook for lifting operation.

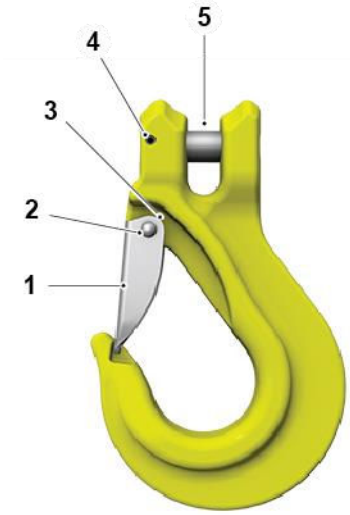
5.3 Before loading

- Determine the weight of the load and the center of gravity.
- Check the conformity of the load with the WLL of the lifting equipment for the specific working configuration.
- Ensure that the Chain Hook has been correctly assembled in accordance with the Assembly instructions.
- Ensure that no obstacles obstruct the lift and prepare the landing site.

6 Assembly

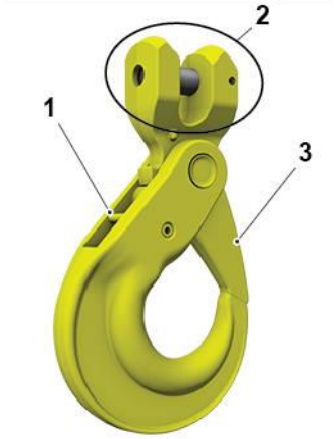
Only a qualified person may assemble the Chain Hook.

When the Chain Hook is incorporated as a part of a lifting sling it must be part of the certification and WLL rating of the complete sling.



1. Latch with spring
2. Rivet
3. Spring
4. Retainer
5. Load Pin

Figure 5: EGKN Chain Hook



1. Open /Close
2. Clevis connector
3. Self Locking Latch

Figure 6: BKG Chain Hook

6.1 Connect chain to clevis connector

1. Put the chain in position.	
2. Insert a load pin.	
3. Secure the load pin with a retainer by using a hammer.	
4. Make sure both the load pin and the retainer pin are secured. 5. Make sure that all markings are readable on the connected parts.	

Verify that the correct size and grade of chain are assembled.

- For Chain Hook size 10 and Grade 10 (BKG-10-10), use Gunnebo chain KLA-10-10.
- For Chain hook of size 13 and grade 8 (BKG-13-8), use KLB-13-8.

6.2 Spare parts

- Load pin with retainer
- Latch with spring and rivet
- Open close trigger with spring and flexible pin

See www.kitocrosby.com for article numbers or the Gunnebo Industries Product Catalogue.

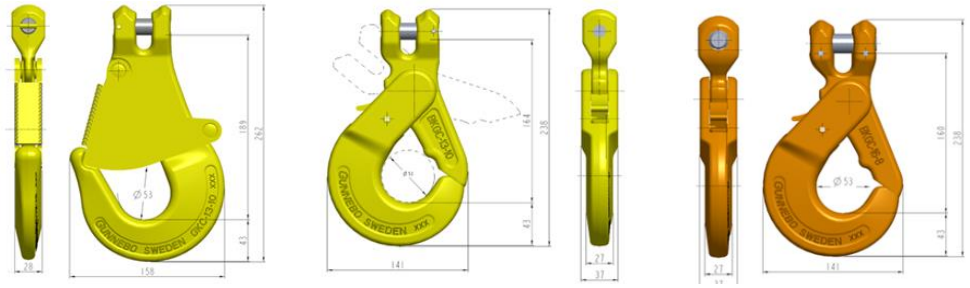
6.3 Limitations

The Chain Hook is designed to be connected in the Clevis connector with the appropriate short link chain and load pin, grade and size. Do not use any other connecting part.

Check that the spring function of the retainer pin is working and that it secures the load pin. If it does not work, do not use the Chain Hook before it has been replaced.

6.3.1 Limitations Container hooks

Check that the container lugs fit the container hooks BKGC and GKC for skip. The main measurements and technical data are available at www.kitocrosby.com.



GKC-13-10 BKGC-13-10 BKGC-13-8

Figure 7: GKC-13-10, BKGC-13-10, BKGC-13-8

The examples below are of two container lugs that fit BKGC-13-10, BKGC-16-10 and GKC-13-10.

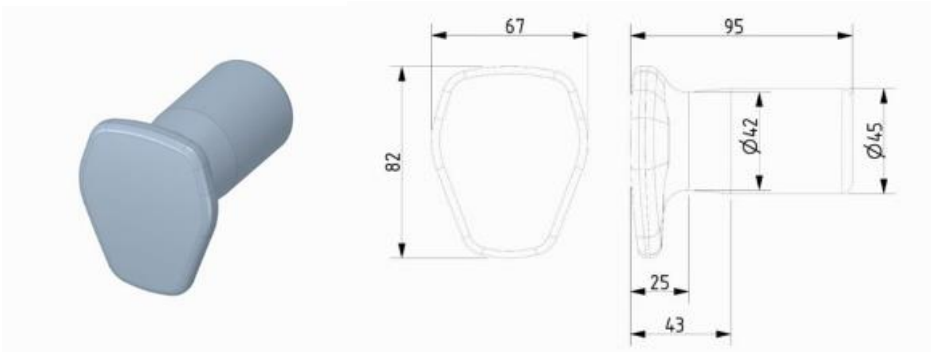


Figure 5: Lug example 1

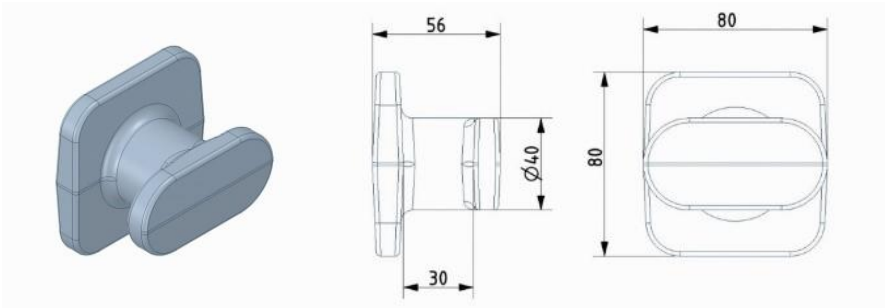


Figure 6: Lug example 2

7 Maintenance

When performing maintenance or inspection, always read and follow the Safety Precautions.

7.1 Inspection

During service, lifting equipment are subjected to conditions which affect their safety. Therefore ensure that the equipment is safe for continued use. See Safety Precautions.

Withdraw the Chain Hooks from service and refer the product to a competent person for thorough examination if any of the following is observed:

- The Chain Hook markings are illegible.
- More than 10% reduction of dimension at any point.
- Cuts, nicks, gouges, cracks, excessive pitting or corrosion, heat discoloration, bends, distortion, or other defects.
- Only use the Chain Hook if the play between the self-locking latch and hook are within limits (see table below).

Size	Max A (mm)	Max B (mm)
6	2.2	3.5
7/8	2.7	4.5
10	3	6
13	3.3	7
16	4	9
18/20	5.5	10
22	6	11
26	6.5	12
32	7	13

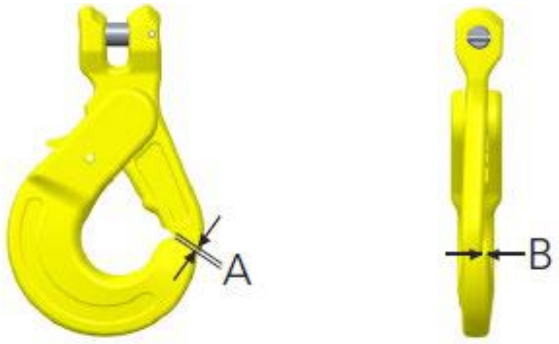


Table 4: Chain hook limits

7.2 Examination

A competent person should thoroughly examine the product at least once every year. The inspection should be carried out more frequently if deemed necessary, taking into consideration the following points.

- Local, national, or branch-specific regulation.
- The service condition of the Chain Hooks.
- Use in demanding environments (such as corrosive or extreme temperature).

- Use where the Chain Hook is subjected to repeated loads that may induce metal fatigue.

Maintain records of examinations. Before examination, clean the Chain Hooks so it is free from oil, dirt, and rust.

Any cleaning method which does not damage the parent metal is acceptable. Methods to avoid are those using acids, overheating, removal of metal or movement of metal which may cover cracks or surface defects.

See also Safety Precautions.

7.3 Repair

A competent person with relevant knowledge and technical skills must do the repairs. The product shall only be returned to service after approval by a designated person.

Maintain records of repairs.

Any replacement component or part of the Chain Hook should be in accordance with the appropriate European Standard for that component or part. Use only original Gunnebo spare parts.

Discard or replace components that are cracked, visibly distorted or twisted, severely corroded or have deposits which cannot be removed.

Remove minor damage such as nicks and gouges by careful grinding or filing. The surface should blend smoothly into the adjacent material without abrupt change in the section. The complete removal of the damage should not reduce the thickness of the section at that point to lesser than the manufacturer's specified minimum dimensions or by more than 10% of nominal thickness of the section.

7.4 End of use/Disposal

Recycle as general steel scrap.