User Manual

Shank Safety Hook BKT



BKT-6-10 | BKT-7/8-10 | BKT-10-10 | BKT-13-10

1.5 WLL t, metric 2.6 WLL t, metric 4.0 WLL t, metric 6.8 WLL t, metric

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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 BKT Shank Safety Hook. See the cover page for an overview of the included variants.

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, June 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.

Before each lifting operation, check that the lifting system parts and connecting parts are correctly attached to each other.

2.3 Lifting precautions



Warning!

Keep a safe distance from overhead loads by staying outside the fall zone. Shattered crates and debris can injure or kill even at some distance from the impact area.



Warning!

Only authorized personnel are allowed inside the exclusion zone during the lifting procedure.

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



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



Warning!
Never force an object into the Shank Safety Hook opening. Use instead a Shank Safety Hook with a larger opening. Inappropriate size of the object hanging in the Shank Safety Hook can cause the load to drop.

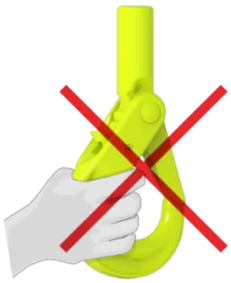


Warning!
Never lift an object without checking that the latch is closed. Lifting without the latch closed can cause the load to drop.



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





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

Warning!
If multiple objects share one Shank Safety Hook while lifting, the vertex angle shall not exceed 90 degrees. This can damage the hook and cause it to unhinge.

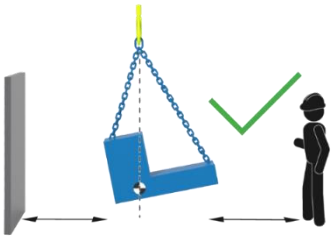
Warning!
Side loading is not allowed on any lifting components. Side loading can cause the load to swing or cause the equipment to fail.

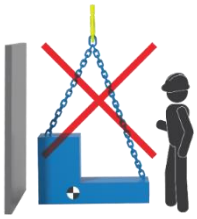


Warning!
Make sure that the Shank Safety Hook aligns with the pull direction. Check that the lifting chain is not twisted or rotated.

Warning!
Risk of crushing injury. When lifting asymmetric loads, be aware of sudden movements and keep a safe distance. Never stand between the lifted object and any obstacle, such as a wall.

Note!
Keep distance.





3. General description

All measurments shown in images, and technical data can be found on the website www.kitocrosby.com.

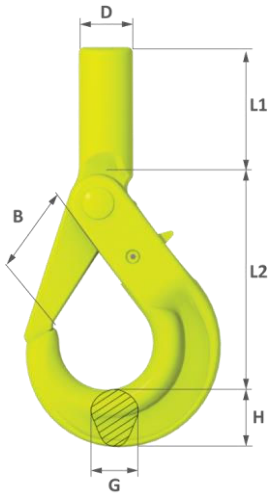


Figure 1: BKT-13-10

Each Shank Safety Hook is marked as follows:

- Manufacturer identification (GUNNEBO SWEDEN)
- Shank Hook BKT, chain size, material grade
- 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

Standards and norms applied to the product

- EN 1677-1 (WLL +25%)
- ASTM A952/A952M-02
- AS 3776:2015

WLL refers to the maximum working load a lifting accessory or lifting assembly can be subjected to.

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

4. Intended use and restrictions

4.1 Intended use

The Shank Hook BKT is intended to be customized by the user. The shank of the hook can for example be machined and fitted with threads.

It is possible to adapt the Shank for integration as a crane hook.

The Shank Hook BKT could also be part of customized lifting equipment.

4.2 General limitations of use

- Always use a latch.
- 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.
- The product must not be galvanized or subjected to any plating or coating process without approval of the manufacturer.
- Do not expose the product to aggressive chemicals, such as acids, alkalines and their vapors.

4.3 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.

4.4 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 2: Service temperatures

4.5 Fatigue

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

Scenarios in which the Shank 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.

4.6 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 2: Recommended areas for punched or engraved marking

5. Instructions prior to use

Read and understand this manual before using the Shank Hook BKT. Read the Safety precautions.

For further recommendations regarding safe use of the Shank Hook BKT 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 Shank Hook BKT is precisely as ordered.
- The manufacturer's certificate is in order.
- It is recommended to choose a larger size hook if your load is close to the recommended WLL.

5.2 Inspection prior to each use

Inspect the Shank Hook BKT for obvious damage or deterioration before each use.

The inspection should be done 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 Shank 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 Shank Hook has been correctly assembled in accordance with the Assembly instructions.
- Ensure that no obstacles obstruct the lift and prepare the landing site.

5.4 Accessories

- The WRIN safety handle enables easier opening and less risk for hand injuries.
- The WRIN handle is compatible with BKT size 10, 13 Grade 10.

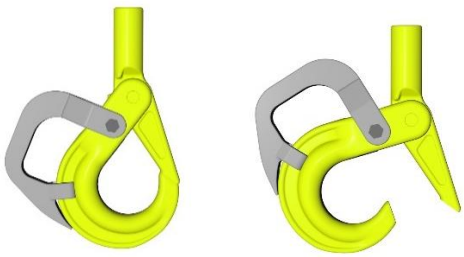


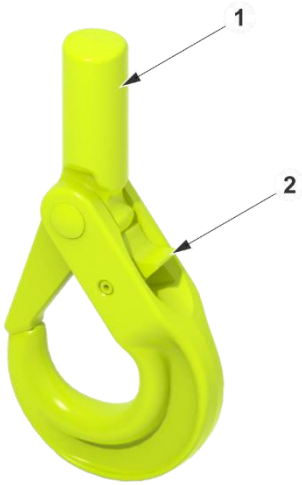
Figure 3: WRIN handle closed and open

6. Assembly

The Shank Hook is self-locking when load is applied.

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

For customization on the cylindrical part of the shank, see illustration and table below.



1. Shank
2. Open/Close trigger

Figure 4: BKT-13-10 Shank area for customization

Code	WLL (t)	Dimensions (mm)				
		L	B	L1	D	d min
BKT-6-10	1.5	90	29	36	20	11
BKT-7/8-10	2.6	111	37	47	24	13
BKT-10-10	4.0	133	45	51	29	16
BKT-13-10	6.8	160	55	77	34	20

Table 3: Shank customization specification

Caution!
When the Shank Hook BKT has been altered by the user (for example machined) the user must secure the functionality with a load test.

Note!
Only a qualified person may execute the assembly of the Shank Hook BKT.

Note!
If the Shank Hook BKT is incorporated as part of a lifting sling, it must be part of the certification and WLL rating of the complete sling.

Note!
The Shank Hook BKT can only be used for lifting when the user has a valid certificate.

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

6.1 Spare parts

- Open close trigger with spring and spring pin.

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

6.2 Limitation placement

Check the trigger function. Open and close. If it does not work do not use the hook before it has been replaced or repaired.

7. Maintenance

When performing maintenance or inspection, always read and follow the Safety Precautions (2).

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 (2).

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

- The Shank Hook BKT 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 Shank Hook BKT if the play between the self-locking latch and hook are within limits (see table 4).

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: Shank Hook BKT 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 Shank Hook.
- Eventual use in demanding environments (such as corrosive or extreme temperature).
- Eventual use where the Shank Hook BKT is subjected to repeated loads that may induce metal fatigue.

Maintain records of such examinations. Before examination, clean the Shank Hook BKT 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 (2).

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 Shank 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.