

User Manual

Roundsling Hook RH



RH-1-10 | RH-2-10 | RH-3-10 | RH-5-10

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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 1677-1:2000+A1:2008, Components for slings - Safety - Part 1: Forged steel components. Tested according to EN 1677-2.

This manual is valid for the Roundsling Hook RH. See [General Description](#) 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, December 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 must understand the limitations of the equipment.

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 fully closed. Never lift an object without the latch closed. If the RH Hook bumps into an obstacle during operation, check again that the latch is fully closed and that the textile sling is in correct position.



Warning!

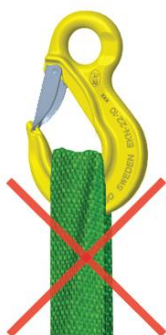
Make sure that the RH Hook and sling leg align with the pull direction. Check that the lifting chain and textile sling are not twisted or rotated.

**Warning!**

The textile sling is sensitive to sharp bending or pinching. During the rigging operation, there is a risk that the textile sling moves around and does not have the desired position when load is applied.

**Warning!**

Do not pinch and damage the textile sling. Use the RH Hook designed for textile strings instead of a general hook.



**Warning!**

Do not attach anything other than a textile sling in the dedicated compartment for textile sling in the RH Hook.

**Warning!**

Check before each lift that the RH Hook has no sharp dents, marks, or surface damage in contact with the textile sling.

**Warning!**

Do not drag the RH Hook on the ground with or without load.

**Warning!**

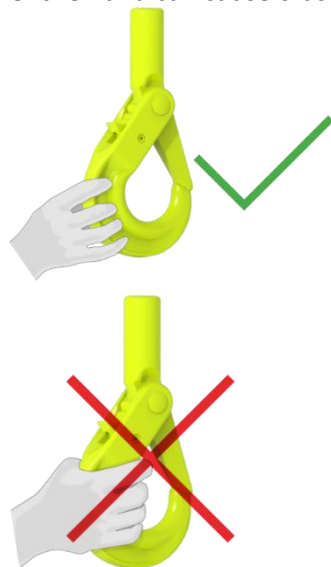
Do not overload.

**Warning!**

Check the label on the textile string for correct match with RH Hook and load. Use only textile sling according to EN 1492 or AXXX, ASXXX or any other corresponding national standard.

**Warning!**

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

**Warning!**

Do not point load the hook. Point loading can cause the RH Hook to fail, or the load to drop.

**Warning!**

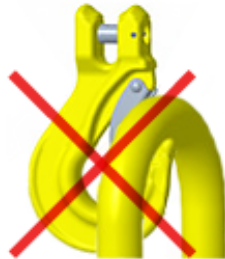
Keep your hands away from the RH Hook during lift.

**Warning!**

Adapt the size of the RH Hook to the lifting object. The lifting object must rest comfortably inside the RH Hook without being pinched.

**Warning!**

Never force an object into the hook opening. Use a hook with a larger opening instead.

**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!**

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

**Warning!**

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

**Warning!**

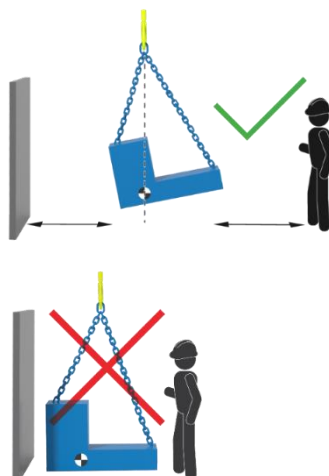
Only insert one object into the RH Hook. In the case of more than one object, the rigger must make a risk assessment.

**Caution!**

Protect the RH Hook from damage and wear.

**Note!**

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



3 General description

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

Size	RH-1-10	RH-2-10	RH-3-10	RH-5-10
Grade	10	10	10	10
WLL (ton, Metric)	1	2	3	5

Table 2: Overview of included variants

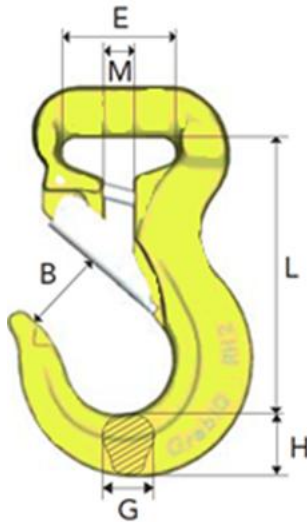


Figure 1: RH-2

Each RH Hook is marked as follows (see cover page):

- Manufacturer identification (GUNNEBO SWEDEN)
- Product name, WLL, 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)
- CE

Gunnebo Industries issue:

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

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 be able to provide the original certificates upon request.

4 Intended use and restrictions

4.1 Intended use

The RH Hook can only be used for lifting when the user has a valid certificate. Authorized resellers may provide their own documentation and will be able to provide the original certificates upon request.

The RH Hook is intended to be a connector between a textile sling and other lifting equipment.

4.1.1 Coupler textile sling - chain sling

Some lifting operations may demand a combination of chain and textile sling. The RH Hook makes it possible to use the best characteristics from each of them.

4.1.2 Coupler textile sling - customized lifting assembly

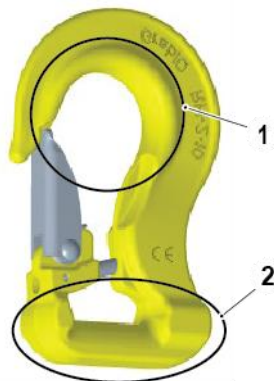
Due to the integrated hook, the RH Hook can be used as a latch hook and connect the textile sling to a variety of different lifting assemblies.

4.1.3 RH Hook in general

The RH Hook has been type tested following the same test procedure as for a forged Hook according to EN 1677-1 and EN 1677-2.

With the RH Hook the textile sling stays in correct position both during rigging and lifting.

The RH Hook has one compartment for the textile sling and another to connect with the hook. The compartments are separated by a blocking pin secured with a flexible retainer pin.



1. Hook compartment to attach to chain sling
2. Textile sling

Figure 2: RH hook with separate compartments

The RH Hook has been designed so the textile sling is not pinched.

The contact area for the textile sling is soft curved and straight.



Figure 3: RH-2 Hook with textile sling, WLL 2 ton

RH Hook - Example of use

Chain sling in the top connected to textile round slings creates a flexible lifting assembly.

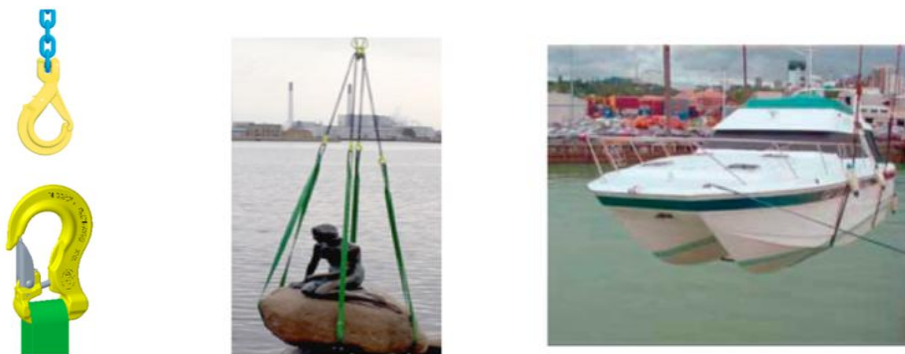


Figure 4: RH Hook used as coupler between chain sling and customized lifting assembly

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.
- Do not 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.
- Only connect textile slings in the RH Hook compartment.

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 table applies.



Caution!

The temperature limitations of use when the RH Hook is used in combination with textile sling is lower. Check maximum allowed temperature for the textile sling. A normal maximum temperature for sling is 100 °C/212 °F but must be checked with the manufacturer.

Service temperature (Only for the RH Hook not the textile sling)	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

4.5 Fatigue

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

Scenarios in which the RH 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.

The RH Hook is designed for a maximum of 20 000 load cycles.

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 5: Recommended area for punched or engraved marking

5 Instructions prior to use

Read and understand this manual before using the RH hook. Read the [Safety precautions](#).

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

The RH hook is designed to be coupled to a textile sling with the same WLL as the RH Hook. As an example, the green textile sling has WLL=2 ton.

The textile sling can be a round sling:



Or equipped with a flat eye loop:



A RH Hook and a flat eye loop sling:



The European standard EN 1492 for textile slings states a color code as function of the maximum allowed WLL.

Each RH Hook is marked with a color to help the rigger with the correct combination.



Figure 6: RH Hooks marked with red, yellow, green, and purple markings

The RH product range is combined with textile sling with 1, 2, 3, or 5 ton in WLL. The corresponding color code according to EN 1492 is:

- Red = 5 ton
- Yellow = 3 ton
- Green = 2 ton
- Violet = 1 ton

Combine the correct RH Hook with the correct textile sling.



Figure 7: Use the color codes to match the correct textile sling with the correct size of RH Hook



Figure 8: The WLL of the RH Hook is marked on the Hook

Always check that the textile sling is not pinched in the RH Hook and not twisted.

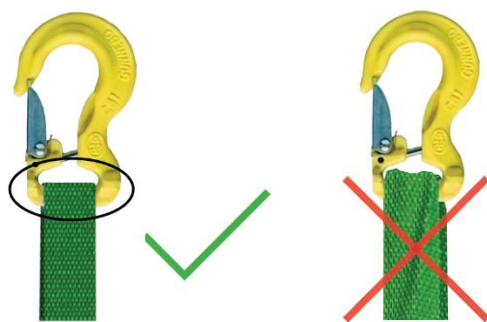


Figure 9: Textile sling width

Check that the spring function of the latch is working. If it does not work, do not use the RH Hook before it has been replaced.

Check that the retainer clip stays in position and that the blocking pin is in position. For some applications the RH Hook can be used without the blocking pin if risk analysis for the specific lift shows lower level of risk.

5.1 Verification prior to first use

Before first use ensure that:

- The RH Hook is precisely as ordered.
- The manufacturer's certificate is in order.

5.2 Inspection prior to each use

Inspect the RH Hook for obvious damage or deterioration before each use 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 RH 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 RH 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 RH hook.

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

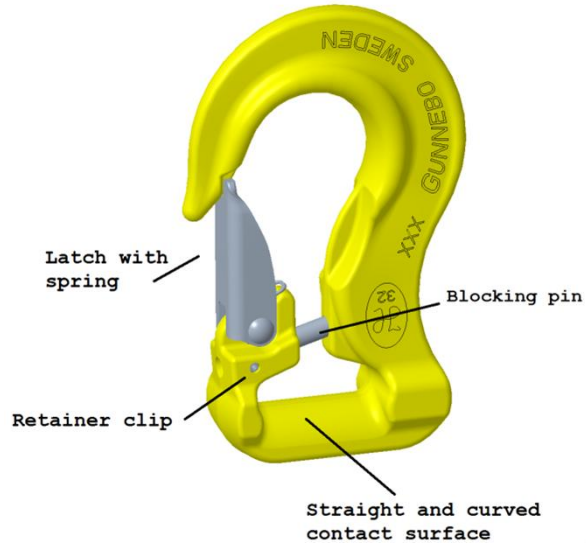


Figure 10: RH Hook part description

6.1 Assemble textile sling

- Verify that the correct size of the textile sling is assembled.
- Verify that all markings are readable on the RH Hook.

1. Press back the latch and put the textile sling in the RH Hook compartment.



2. Slide the sling in position.



3. Lock the textile sling compartment with the blocking pin.



4. Secure the blocking pin with the flexible retainer clip. Check that the clip stays in position, otherwise replace the retainer with a new one.



6.2 Disassembly

To disassemble the textile sling, follow the steps in reverse. Use a pin to get the retainer clip out.

Put the lifting component on a solid support. Position a pin tool smaller in diameter than the retainer. Tap gently to drive the retainer pin out of position.



The RH Hook is disassembled.



6.3 Spare parts

Available spare parts:

- Latch with spring and rivet, code RDEKN
- Blocking pin and retainer clip, code CS

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

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

- The RH 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.

The table below is only valid for forged clamps.

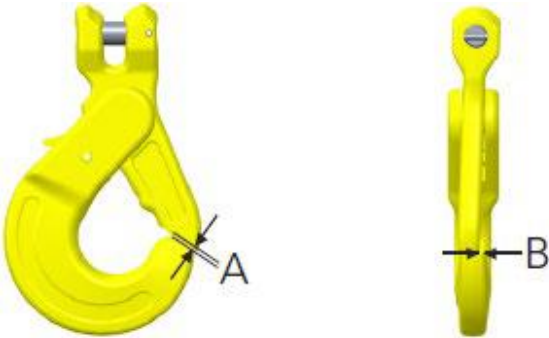
Size	Max A (mm)	Max B (mm)	
6	2.2	3.5	
7/8	2.7	4.5	
10	3	6	
13	3.3	7	
16	4	9	
18/20	5.5	10	
22	6	11	
26	6.5	12	
32	7	13	

Table 4: Play between the self-locking latch and hook

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 RH Hook.
- Use in demanding environments (such as corrosive or extreme temperature).
- Use where the RH Hook is subjected to repeated loads that may induce metal fatigue.

Maintain records of examinations. Before examination, clean the RH Hook 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 RH 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.