Camlok®

BEAM CLAMPS





YC BEAM CLAMP

WLL 1000 – 10,000 KG (PER PIECE)

SC92 BEAM CLAMP

WLL 1000 – 20,000 KG (PER PIECE)

EN- OPERATING MANUAL

(ALSO APPLICABLE FOR SPECIAL VERSIONS)

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Introduction

Products of Columbus McKinnon Corporation Limited have been built in accordance with the state-of-the-art and generally accepted engineering standards. Nonetheless, incorrect handling when using the products may cause dangers to life and limb of the user or third parties and/or damage to the hoist or other property.

The operating company is responsible for the proper and professional instruction of the operating personnel. For this purpose, all operators must read these operating instructions carefully prior to the initial operation.

These operating instructions are intended to acquaint the user with the product and enable him to use it to the full extent of its intended capabilities. The operating instructions contain important information on how to operate the product in a safe, correct and economic way. Acting in accordance with these instructions helps to avoid dangers, reduce repair costs and downtimes and to increase the reliability and lifetime of the product. The operating instructions must always be available at the place where the product is operated. Apart from the operating instructions and the accident prevention act valid for the respective country and area where the product is used, the commonly accepted regulations for safe and professional work must also be adhered to.

The personnel responsible for operation, maintenance or repair of the product must read, understand and follow these operating instructions.

The indicated protective measures will only provide the necessary safety, if the product is operated correctly and installed and/or maintained according to the instructions. The operating company is committed to ensure safe and trouble-free operation of the product.

YC/SC92 Beam Clamps

Model	WLL kg	Beam flange width mm	Weight kg
YC1	1000	75-230	3.8
YC2	2000	75-230	4.6
YC3	3000	80-320	9.2
YC5	5000	90-320	11.0
YC10	10000	90-320	17.2
SC92-1	1000	75-210	5.0
SC92-2	2000	75-210	6.0
SC92-3	3000	100-270	8.0
SC92-3/L	3000	75-305	9.0
SC92-5	5000	100-270	10.0
SC92-5/L	5000	75-305	12.0
SC92-10	10000	75-305	19.0
SC92-15	15000	75-305	35.0
SC92-20	20000	300-410	87.0

Table 1

General Safety

- ALWAYS wear practical, protective clothing, gloves and footwear as a minimum.
- ALWAYS bear in mind your safety and the safety of others while using this equipment.
- DO NOT operate this equipment, if you feel Ill, tired or are under the influence of alcohol or drugs.
- This equipment MUST NOT be used to carry or lift personnel.

General Safety

ALWAYS check the operation of your Camlok lifting clamp before use.

ALWAYS place the palm of the hand on top of the load.

ALWAYS stand clear when lifting or lowering.

ALWAYS keep a record of inspections and repairs.

ALWAYS transport the load as close to the floor as possible.

NEVER use a worn or damaged Camlok lifting clamp.

NEVER lift more than one plate/ product at a time.

NEVER leave a suspended load unattended or place a plate down on edge for a long period of time. **NEVER** exceed the maximum working load limit

NEVER lower fast, **ALWAYS** lift and lower gently.

NEVER stand under a suspended load and if guiding a load by hand, **NEVER** grip the load with fingers on the underside.

NEVER pull or push the load where the crane cannot reach **NEVER** force the locking lever.

Product Overview

The YC and SC92 beam clamp provides a quick and versatile rigging point for hoisting equipment, pulley blocks or loads and comes complete with a locking device. The unit offers flexible applications, due to the wide adjustment range. The central threaded spindle allows easy attachment and a safe and secure grip to the beam flange.

Fitting:

- Check that the beam is free from grease, standing water, oil, scale and is not coated with paint or film.
- The width of the beam flange to which the clamp is to be fitted must be within the range on the clamp
- For long beams use 2 clamps and a lifting beam.
- Check the weight of the clamp and ensure the lifting sling is slack.
- The clamp is opened by rotating the threaded bar using the 'tommy' bar handle until the clamp can be positioned on the beam
- The clamp is then closed by reversing the rotation of the threaded
- Take care not to damage the lifting surfaces.
- The edge of the flanges should contact the back of the recesses with the load points resting on the top of the flange surface.
- The load must be applied to the center of the groove in the clamp suspension bar and side pulling must be avoided
- Check chain sling for twisting.

Lifting & Transport:

- This model must not be used for lifting. It is a suspension point
- Never suspend more than one plate at a time.
- Never exceed the maximum working load limit or pick up loads weighing less than the minimum working load limit as marked on each clamp.
- Check position and fitting of clamp as weight is applied
- Check for obstacles prior to suspend. Always suspend slowly and smoothly.
- Suspension slings must be vertical at all times.
- Always keep clear of the area below and surrounding the load while suspending as the plate may kick or swing as it reaches the floor.
- Minimise the danger area by moving plates as close to the ground as possible.
- Take precautions to stop the load from swinging.
- Only use the clamp from below to pull down, never use it in the other direction to lift a beam
- Loads up to the maximum working load limit are acceptable about a 15º cone from the center line of the clamp.

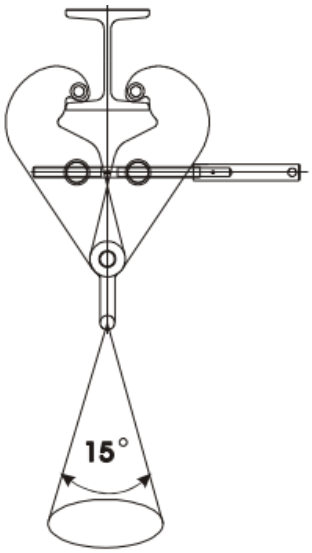


Figure 1 - Loads up to the maximum working load limit are acceptable about a 15º cone from the center line of the clamp.

Release:

- Place loads down gently. Fast lowering may release the clamp.
- Make sure that when depositing the load, there is enough space for freely turning the thread spindle
- The clamp can only be released when the entire load is removed.
- In order to remove the load lifting attachment from the load after the transport process, travel the suspension (e.g. hook, shackle, etc.) downwards until it is unloaded and the shackle moves freely.
- Do not force or hit the lever.

Testing/Service:

All Camlok lifting clamps are tested before sale to a proof load of twice the working load limit. Any clamp that has been repaired must be tested.

Care and Maintenance:

The maintenance schedule is based on normal usage of clamps operating in a workshop environment. Maintenance frequency must be increased if clamps are subject to heavy usage or operated in adverse conditions.

Fasteners fitted to 'Camlok' clamps are retained with Loctite 270 Thread Locking Compound unless the bolt is secured with a nylon nut. DO NOT use any other grade. For maintenance, use heat to loosen locking compound (up to 80o C). Always keep a record of inspections and repairs.

The components which need to be inspected are detailed in the table below with correct frequency.

	Check	Daily	Weekly	3 Months
A	Smooth operation of adjustment screw	✓	✓	✓
B	Distortion in the shell plates	✓	✓	✓
C	Obvious signs of damage	✓	✓	✓
D	Fasteners for integrity & tightness	-	✓	✓
E	Clean teeth, remove all grit, dirt & mud	-	-	✓

Table 2

Screw Replacement:

- Open clamp as wide as possible
- Knock out pin in handle
- Rotate screw until fully disengaged
- Remove old nuts by pushing through the clamp arms. Remove and clean spacer tubes.
- Fit new nuts with existing spacer tubes.
- Fit new screwed bar ensuring that entry into both nuts occurs simultaneously
- Rotate screw until the handle can be fitted with new lock pin
- Close clamp in normal manner.

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