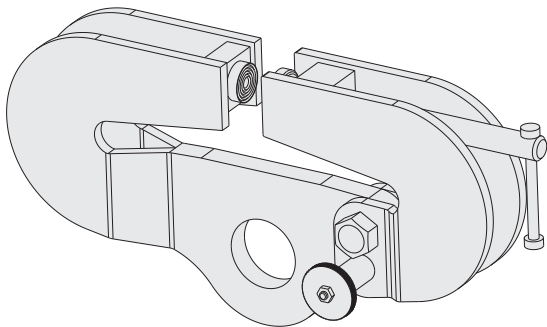




Care & Use Guide

BCU Universal Beam Clamp



Before operating this product, read this manual and follow all safety rules and operating instructions.

Save these instructions for future reference.

1. General

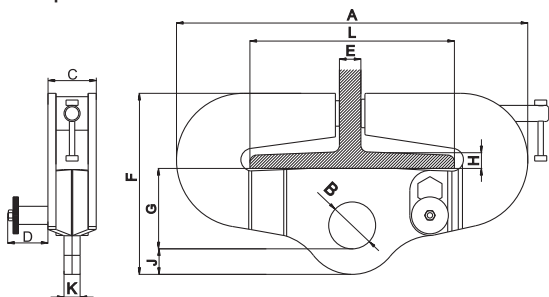
This manual contains important information for the correct installation, operation, and maintenance of the equipment described herein. The use of any clamp presents some risk of personal injury or property damage. All persons involved in such installation, operation and maintenance should be thoroughly familiar with the contents of this manual. To safeguard against the possibility of property damage or personal injury follow the recommendations and instructions in this manual and keep it for further reference.

This product provides a quick and easy rigging point for hoists, blocks and slings. It has been designed for vertical use, and side load applications, where conventional clamps are not. This design is highly flexible for lifting and pulling, and can be used as semi-permanent anchor point. The Working Load limit range is from 2 tonne to 10 tonne, and is designed for both vertical and side loading applications, and can be loaded at any angle. It has a built-in connection point for a low headroom, and with a multi-directional adjusting screw spindle to ensure a high clamping force to the beam web. Each clamp is proof load tested to 1.5 times the Working Load limit. Do not use the clamp in highly corrosive, abrasive, wet environments or in applications involving exposure to temperatures below -20°C (0°F) or above 90°C (200°F)

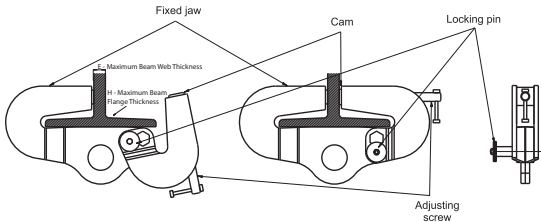
ProCraft BCU beam clamps are designed and tested in accordance with the American Society of Mechanical Engineers Code B30.20, "Below the hook lifting devices"

It is the owner's and user's responsibility to determine the suitability of this product for any particular use. It is the owner or user who is responsible to check, understand and act according to their local industry standards and any other Provincial or federal regulations.

2. Specifications



Model	BCU02	BCU03	BCU05	BCU10
Working Load Limit	2 tonne	3 tonne	5 tonne	10 tonne
Test Load	3.5 t	4.5 t	7.5 t	15 t
"L" Beam Width	5 to 8	5 to 8	5 to 12	5 to 12
Dimensions Inches	A	14.8	15.2	20.7
	B	2.3	2.4	2.8
	C	2.6	2.8	2.9
	D	2.2	2.2	2.4
	E	1.3	1.3	1.3
	F	8.5	9.2	10.6
	G	3.7	3.9	4.7
	H	1.0	1.0	1.0
	J	0.9	1.1	1.5
	K	0.6	0.8	0.9
Net Weight Pounds	21.4	27.6	45.2	59.1



3. Installation

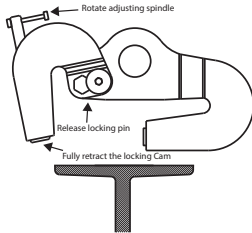
Before installation of the product can begin each operator shall read and understand the instruction manual, and allow only qualified persons to install, operate, inspect and maintain the product. A visual inspection of the product to confirm the clamp is fit for service, and the clamp is assembled correctly and all components are securely fastened.

a - Know the weight of the load and select a clamp with a Working Load Limit that exceeds the load. Ensure the beam flange and web thickness is within the limits of the clamp selected. Verify that the sections or structures for which the clamp is to be connected to has the adequate strength, and is free from any damage or wear.

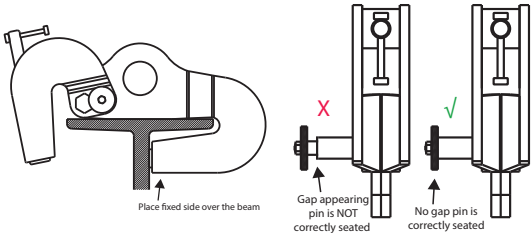
b - The clamp needs to be opened to the maximum opening, turn the adjusting screw counter clockwise fully retracting the locking cam.

c - Position the clamp above the I-beam, and select an attachment point a minimum of six inches from either end of the beam.

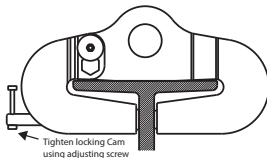
d - Release the locking pin by pulling it out, and rotate the pivoting arm to the open position. Fully support the weight of the pivoting arm because this arm does not lock in the open position.



e - Place the fixed side arm over the beam and then swivel the pivoting arm into the closed position. Make sure the locking pin is inserted and fully seated. The locking pin is not fully seated if there is a gap between the pin head and the pin head housing, if there is a gap reposition arm and clamp until the pin head is fully seated.



f - Confirm the beam is properly seated on both arms, and rotate the adjusting screw clockwise until the locking cam is tightly engaged with the beam. Do not over tighten the adjusting screw. The locking cam applies force to keep the beam in position during lifting and moving operations.





Warning

To avoid damage and /or personal injury:

1. **DO NOT** exceed working load limit of the clamp.
2. **DO NOT** use the clamp to lift or transport people.
3. **DO NOT** use a damaged clamp or clamp that is not working properly. Inspect prior to use.
4. **DO NOT** lift or transport loads over people and make sure all personnel remain clear of supported plate.
5. **DO NOT** lift the beam unless the clamp is fully seated and locking pin is closed.
6. **DO NOT** leave load supported by the clamp unattended
7. **DO NOT** lift loads that are not balanced, and the holding action is not secure.
8. **DO NOT** weld or modify clamp.
9. **DO NOT** lift plate with any debris, oil or grease that may prevent the clamp from solid contact with the plate.
10. **DO NOT** weld or modify Clamp.
11. **DO NOT** attach clamp directly to the Crane Hook
12. **DO NOT** lift an unsafe load.
13. **DO NOT** use on single plate only (do not use as a plate lifting clamp), this clamp is designed to be used with beams only.

4. Operation

When clamp is installed safely, and all inspections are complete for a correctly seated clamp hoisting can begin.

a - Danger zones, do not lift or transport loads while personnel are in the danger zone. Ensure area the beam is being transported is clear of obstructions. Do not stand or place hands or feet under the raised beam. Raised loads are not to be left unattended. The operator may only start to move the load when they are sure the load is secure and all personnel have left the danger zone.

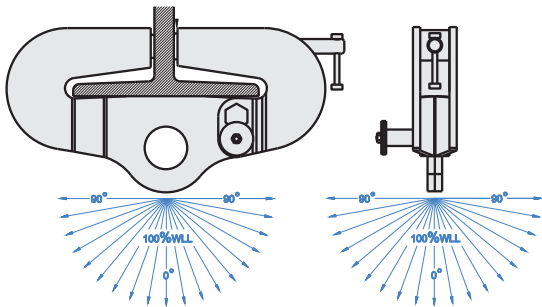
b - Load control, lift slowly and ensure load is balanced and even. If load is not balanced, lower load and reset

until the centre of gravity is found. DO NOT jerk or shock the load. Rapid hoisting or lowering can cause the load to shift and swing erratically.

c - DO NOT drag or pull a load. Avoid swinging the load.

d - Lower the load in a slow controlled manner.

e - Working load limit is across the 180 degree arc (see below) and can be used without a spreader beam in various applications. Check with an engineer for suitability of this product for longer beams.



5. Maintenance/Inspection

To maintain a safe continuous and satisfactory operation of the clamp, a regular inspection procedure must be initiated before the clamp becomes unsafe.

A visual inspection should be carried out prior to each lift, if faults are detected the clamp must be put out of service immediately. In particular, the operator should inspect for:

1. Gripping surfaces must be free of foreign matter, wear, chipped teeth and defects; AND
2. Inspect the pivoting pins and lifting eye for wear and deformation. Check for any crack, deformation or excessive wear to clamp body and lifting points.

Frequent Inspections: the specific meaning of “frequent” varies from daily to monthly depending on the service

classification (normal, heavy, severe, and special/infrequent) of the clamp. Definitions of the service classifications appear in ASME B30.20. The operator or other designated person(s) should visually inspect the clamp for:

1. Cracks, deformation, or excessive wear or damage of any part of the clamp including the cam, the locking pin and adjusting screw;
2. Operating mechanisms for conditions that interfere with proper function. Check the clamp for its function by opening and closing the clamp. If there is tightness or the clamp opening is stiff remove from service AND/OR
3. Loose, worn or missing bolts and fasteners or name-plates.

Periodic Inspections: complete visual inspections performed AND recorded by a qualified person. These reports should be dated, signed by each person who performed the inspection, and kept on file where they are readily available to authorized personnel. The inspection should specifically look for:

1. Worn or loose bolts and fasteners;
2. Excessive wear of cam, locking pin, and other mechanical parts; AND/OR
3. Excessive wear at the points where the clamp connects to the hoist hook, and load support clevises or pins. A visual inspection of any chain or lifting components connected to the clamp should be included.

Any clamp that does not pass the visual inspection should be immediately removed from service.

There are no spare parts available for the ProCraft BCU lifting clamps, therefore if repairing is required the clamp must be replaced.

We reserve the right to modify information and specifications given in this publication, without notice. Specifications and standards change from time to time, if you have any questions please contact your local distributor.