



Vestil Manufacturing Company

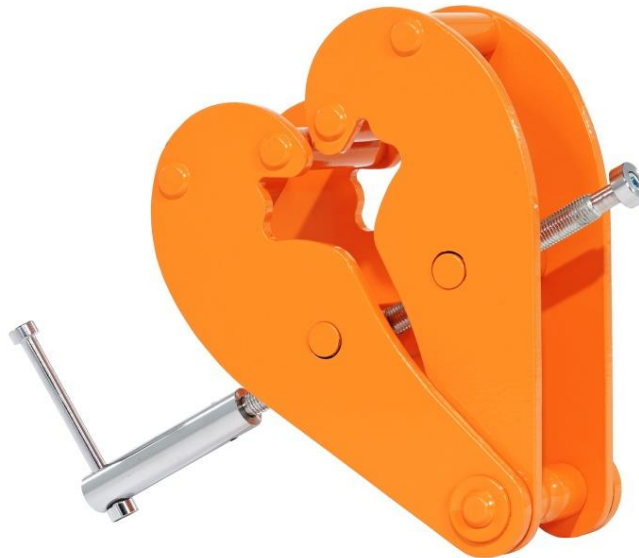
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BC-SERIES BEAM CLAMPS



Receiving Instructions

After delivery, remove the packaging from the product. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it on the bill of lading. If the product is undamaged, discard the packaging.

NOTE: The end-user is solely responsible for confirming that product design, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

Technical Service & Replacement Parts

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The department can also be contacted online at http://www.vestil.com/parts_info.htm.

Electronic copies of Instruction Manuals

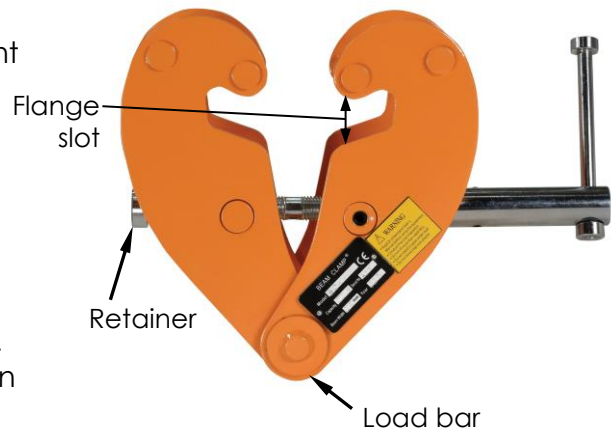
Additional copies of this instruction manual may be downloaded from <https://www.vestil.com/page-manuals.php>.

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RECORD OF SATISFACTORY CONDITION

After unpacking the beam clamp, document its condition to establish a baseline for comparison during future inspections and maintenance.

1. **Visual Inspection:** Examine the clamp for defects, e.g. cracks, deformations, corrosion, or missing components. Check the adjustment screw, jaws, lifting bar, and frame. Take measurements of the flange slots. Confirm that the retainer is securely fastened to the end of the adjustment screw. Tighten the fastener, in necessary.
2. **Function Check:** Manually operate the width adjustment screw to ensure smooth movement without binding or excessive play. Verify that the jaws open and close fully within the specified flange width range.
3. **Markings and Labels:** Confirm that all labels, tags, and safety warnings, are in place, undamaged, and easily legible. See [LABELING DIAGRAM](#) on p. 7.
4. **Photographic Documentation:** Take clear photographs of the clamp from multiple angles (front, side, top, bottom) showing all components. Include close-ups of critical areas such as threads, jaws, and welds.
5. **Written Observations:** Note any observations in the table below or on a separate log sheet. Include the date, inspector's name, and signature.



Retain this record with the manual. Compare future inspections against this baseline. If any discrepancies are noted upon receipt, contact Vestil's [Technical Service Department](#) immediately.

Date	Inspector Name	Observations (e.g. condition of clamp, screw, labels)	Signature

APPLICABLE REGULATORY AND NATIONAL CONSENSUS STANDARDS

This product is designed and intended for use in compliance with the following U.S. regulatory and national consensus standards. Users must familiarize themselves with these standards to ensure safe operation, proper inspections, and effective maintenance of the product. Vestil recommends obtaining copies of these standards for reference.

- **OSHA 29 CFR 1910 (General Industry):** Relevant sections include 1910.179 (Overhead & Gantry Cranes) for inspection and load testing requirements, and 1910.184 (Slings) for rules about rigging accessories, e.g. requiring proof-testing to 125% of rated load and removal of damaged equipment.
- **OSHA 29 CFR 1926 (Construction):** Pertains to material handling in construction. Key provisions in 1926.251 (Rigging Equipment) mandate pre-shift inspections, proof-testing of custom attachments, and safe working limits.
- **ASME B30.20 (Below-the-Hook Lifting Devices):** Provides beam clamp design, marking, installation, inspection, testing, maintenance, and operation standards. Requires frequent and periodic inspections, load testing to 125% of rated load for new or altered devices, and includes specific removal criteria for wear or damage.

- **ASME BTH-1 (Design of Below-the-Hook Lifting Devices):** Provides design criteria that complement B30.20, including stress analysis, fatigue indicia, and material specifications.
- **General Duty Clause (OSH Act Section 5(a)(1)):** Requires employers to provide a workplace free from recognized hazards, including improper use of lifting equipment.

Non-compliance with these standards may result in hazards, equipment failure, or regulatory violations.

SIGNAL WORDS

This manual uses SIGNAL WORDS to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Other signal words call attention to uses of the product likely cause property damage. The signal words used appear below along with the meaning of each word.

DANGER

Identifies a hazardous situation which, if not avoided, **WILL** result in **DEATH** or **SERIOUS INJURY**. Use of this signal word is limited to the most extreme situations.

WARNING

Identifies a hazardous situation which, if not avoided, **COULD** result in **DEATH** or **SERIOUS INJURY**.

CAUTION

Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR** or **MODERATE** injury.

NOTICE

Identifies practices likely to result in product/property damage, such as operation that might damage the crane.

SAFETY INSTRUCTIONS

The most effective way to avoid injury is to exercise sound judgment when installing, using, inspecting, or maintaining this product. **Keep a copy of this manual in a location known, and accessible, to all persons who use this beam clamp.**

WARNING

Improper or careless operation could result in serious injury or death.

- *Read and understand the entire manual before installing, using, inspecting or servicing the product.* Read the manual to refresh your understanding of proper use and maintenance procedures.
- ONLY qualified persons should perform maintenance on this clamp.
- DO NOT use an improperly sized beam clamp. Verify that beam flange falls within the *Flange Width Range* of TABLE 1 for your clamp model. See [TABLE 1](#) on p. 4.
- DO NOT use this beam clamp in corrosive environments. BC series clamps should only be used in nonhazardous areas. See 29 CRF 1910.307.
- DO NOT use a damaged or malfunctioning beam clamp.
- DO NOT side load the clamp. All loads suspended from the clamp must be centered below the clamp before they are lifted to prevent load swing and side loading.
- DO NOT use the clamp unless it is solidly attached to the lower flange of a beam. The clamp must not be able to wobble, slide, or rotate, etc. while in use.
- DO NOT use the clamp to lift people or to lift loads over people.
- DO NOT open the clamp while it is in use, i.e. while a load is suspended from the clamp.
- DO NOT perform work on lifted loads until they are disconnected from the clamp and rigging.
- DO NOT modify the product in any way without first obtaining written approval from the manufacturer. Unapproved modifications automatically void the [LIMITED WARRANTY](#) on p. 7, and might make the clamp unsafe to use.

PRODUCT DESCRIPTION AND SPECIFICATIONS

The BC-series beam clamps are designed to attach to I-beam flanges and provide a secure point for hoist connection in overhead vertical lifting applications. are steel devices with painted finish. They feature a manual locking screw for adjustment and a bottom bar for hoist attachment (hoist sold separately). These units are interchangeable between gantries or fixed beams via easy mechanical adjustment.

Dimensions, net weight, and capacity information for BC-series beam clamps are provided in the following table. However, product design changes might affect specifications, particularly dimensions and net weight, for 1 or more model.

TABLE 1: Model Specifications

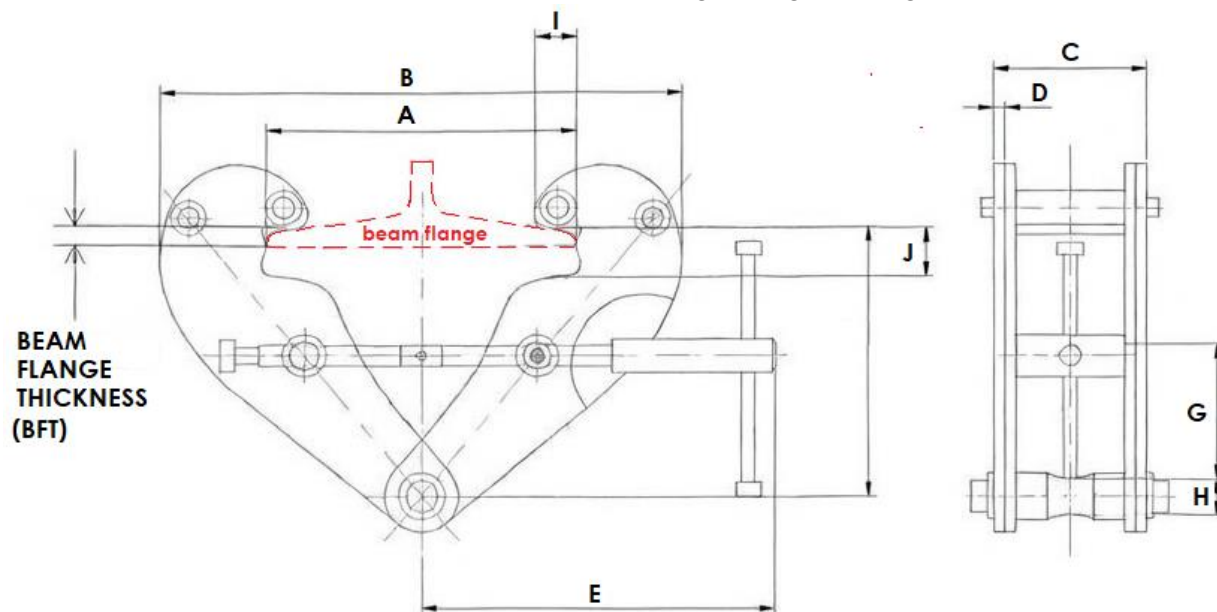
Model	Uniform Capacity (lb.)	Weight (lb.)	Color
BC-1	1,000	9	Orange
BC-2	2,000	11	Orange
BC-4	4,000	15	Orange
BC-6	6,000	26	Orange
BC-8	8,000	31	Orange
BC-10	10,000	37	Orange

Materials: Steel.

Operating Temperature Range: -20°F to 150°F.

Design Factor: Per ASME B30.20 for anchoring clamps.

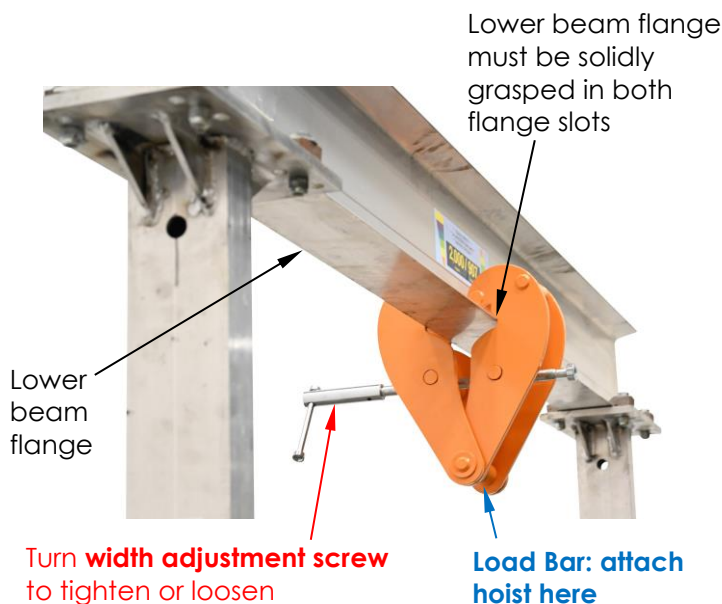
Prohibited Uses: Not for horizontal pulling or angled lifting. Do not side-load.



MODEL	UNIFORM CAPACITY (LB.)	FLANGE WIDTH RANGE (IN.)	A (IN.)	B (IN.)		C (IN.)	D (IN.)	E (IN.)	F (IN.)		G (IN.)	H (IN.)	BFT (IN.)	I (IN.)	J (IN.)
				MIN.	MAX.				MIN.	MAX.					
BC-1	1,000	3-9	10.5	7.5	13.5	3	0.16	8	4.56	6.06	1.2	0.8	$\frac{5}{16} - \frac{3}{4}$	0.78	0.79
BC-2	2,000	3-9	10.5	7.5	13.5	3	0.16	8	4.56	6.06	1.2	0.8	$\frac{5}{16} - \frac{3}{4}$	0.78	0.79
BC-4	4,000	3-9	10.5	7.5	13.5	3.25	0.24	8	4.56	6.06	1.2	0.8	$\frac{5}{16} - \frac{3}{4}$	0.78	0.79
BC-6	6,000	4-12	15	10	18	4.5	0.3	10.35	6.68	8.64	2.25	0.9	$\frac{5}{16} - \frac{3}{4}$	0.9	1.32
BC-8	8,000	4-12	15	10	18	5	0.39	10.35	6.68	8.64	2.12	1	$\frac{5}{16} - \frac{3}{4}$	0.9	1.32
BC-10	10,000	4-12	15	10	18	5	0.39	10.35	6.68	8.64	2.12	1	$\frac{5}{16} - \frac{3}{4}$	0.9	1.32

INSTALLING THE BEAM CLAMP

1. Verify beam flange width matches your clamp's "Flange Width Range" in [Table 1](#).
2. Perform a *Frequent Inspection* of the clamp as instructed in the [Inspecting and Maintaining the Clamp](#) section on p. 6.
3. Open jaws by turning the **width adjustment screw** counterclockwise.
4. Position the clamp on the flange of your crane's bridge girder. Tighten the clamp onto the flange by turning the **width adjustment screw** clockwise. Make sure that both sides of the clamp solidly grip the flange.
5. Tighten screw clockwise until secure.
6. Attach hoist to **load bar**.



⚠ WARNING

Hazard: Unstable attachment due to inadequately tightened clamp.

Consequence: Clamp sliding, or detachment, from beam flange during lift.

Avoidance: Tighten the clamp adequately to eliminate all clamp wobbling, sliding, or other movement during use. Do not install on damaged or non-I-beam structures.

USING THE BEAM CLAMP

1. After installing the clamp, attach a hoist to the bottom bar. Center the hoist above the load; then attach the load to the hoist via appropriate rigging. Ensure the lift is vertical (no side loading) with force applied straight down through the load bar. Do not apply side loads, horizontal pulls, or angled forces.
2. ****Lift slowly.** Monitor the beam clamp for slippage or unusual movement. Immediately return the load to the ground if the clamp wobbles or slides. Tighten the clamp to eliminate wobble/slippage before resuming lifting operations.
3. Lower the load carefully.
4. Remove the clamp from the beam only when the clamp is completely unloaded.

⚠ CAUTION

Hazard: Dynamic loading (shock loading).

Consequence: Clamp fatigue; stress fractures.

Avoidance: Avoid shock loading the clamp! Eliminate slack in the hoist cable/chain as well as rigging before commencing lifts. Only apply loads that are equal to or less than the rated capacity of the clamp.

****Conform use of the beam clamp to OSHA rules 1910.179 & 1926.251, as well as to the latest revision of ASME B30.20.**

INSPECTING AND MAINTAINING THE CLAMP

NOTICE

Proper use, inspections, maintenance, and storage are essential.

- Always use this product in accordance with the instructions in this manual and consistent with any training relevant to machines, devices, etc. used in conjunction with this product.
- Keep the product clean & dry. Store the clamp in a dry, indoor location away from corrosive substances or extreme temperatures.

Compare inspection results to the [RECORD](#). Do not continue to use the product unless every component is in [SATISFACTORY CONDITION](#). Cosmetic changes, like damaged paint/powder coat do not constitute changes from satisfactory condition. However, touchup paint should be applied to all affected areas as soon as damage occurs. Contact [TECHNICAL SERVICE](#) to order replacement parts. Contact information is provided on the cover page of this manual.

Inspect per ASME B30.20:

Frequent Inspection (Daily/Pre-Use): Visually inspect the clamp for cracks, deformation, wear on threads/jaws, loose parts, corrosion. Clean as needed. Verify that the screw turns easily. Apply lubrication, if necessary.

Periodic Inspection (Monthly/Annually): Detailed by qualified person; measure jaw wear (max 5% reduction), check labels and tags (markings). Record inspections.

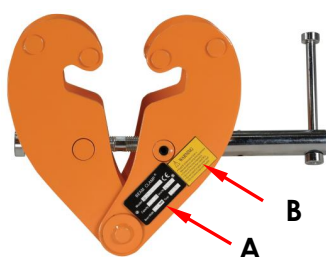
Removal Criteria: Remove the beam clamp from service if cracks, bends, excessive wear (>10% on critical dimensions), bent components, illegible labels.

Maintenance:

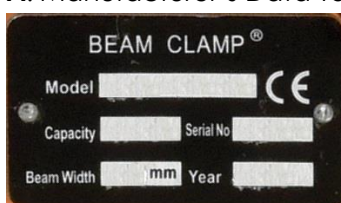
1. Lubricate screw threads with grease annually.
2. Store in dry location.
3. Proof-test by qualified personnel all new or altered clamps to 125% capacity per ASME B30.20. Annual proof-testing is recommended for high-use applications.
4. Labels – Replace labels that are missing, damaged, or not easily readable from a reasonable distance.
5. Overall structure – Examine the whole structure for rusting or metal erosion, rot, thinned regions. In particular, examine pivot points, and flange slots. If rusting is purely superficial, remove the rust/corrosion. Clean the affected area and apply touchup paint. If rusting, rot, or thinning has weakened the material, contact [TECHNICAL SERVICE](#) for advice.

LABELING DIAGRAM

Label content and location are subject to change, and therefore, your product might not be labeled exactly as shown in the diagram below. If the labels applied to your unit differ from those shown in the diagram, contact [TECHNICAL SERVICE](#) and report the inconsistency. Thoroughly photograph the unit when you first receive it as discussed in the [RECORD OF SATISFACTORY CONDITION](#) section on p. 6. Make sure that your [RECORD](#) includes at least 1 photograph of each label. Replace all labels that are, or later become, damaged, missing, or not easily readable (e.g. faded). To order replacement labels, contact the [Technical Service & Parts Department](#) online at <https://www.vestil.com/page-parts-request.php> or by calling (260) 665-7586 and asking the operator to connect you to the [Parts Department](#).



A: Manufacturer's Data Tag



B: Manufacturer's Warning Label





LIMITED WARRANTY

Vestil Manufacturing Company ("Vestil") warrants this product to be free of defects in material and workmanship during the warranty period. Our warranty obligation is to provide a replacement for a defective, original part covered by the warranty after we receive a proper request from the Warrantee (you) for warranty service.

Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

Definition of "original part"?

An original part is a part used to make the product as shipped to the Warrantee.

What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the Customer Invoice that displays the shipping date; AND 2) a written request for warranty service including your name and phone number. Send requests by one of the following methods:

<u>US Mail</u>	<u>Fax</u>	<u>Email</u>
Vestil Manufacturing Company	(260) 665-1339	info@vestil.com
2999 North Wayne Street, PO Box 507	<u>Phone</u>	Enter "Warranty service request"
Angola, IN 46703	(260) 665-7586	in subject field.

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: motors, hydraulic pumps, motor controllers, and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original dynamic components is 90 days. For wearing parts, the warranty period is 90 days. Both warranty periods begin on the date Vestil ships the product to the Warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend a warranty period for products shipped from authorized distributors by up to 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any covered part. An authorized representative of Vestil will contact you to discuss your claim.

What is not covered by the warranty?

The Warrantee (you) are responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

Events that automatically void this Limited Warranty.

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments;
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- Unauthorized modifications: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

Do any other warranties apply to the product?

Vestil Manufacturing Co. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty. Vestil makes no warranty or representation that this product complies with any state or local design, performance, or safety code or standard. Noncompliance with any such code or standard is not a defect in material or workmanship.