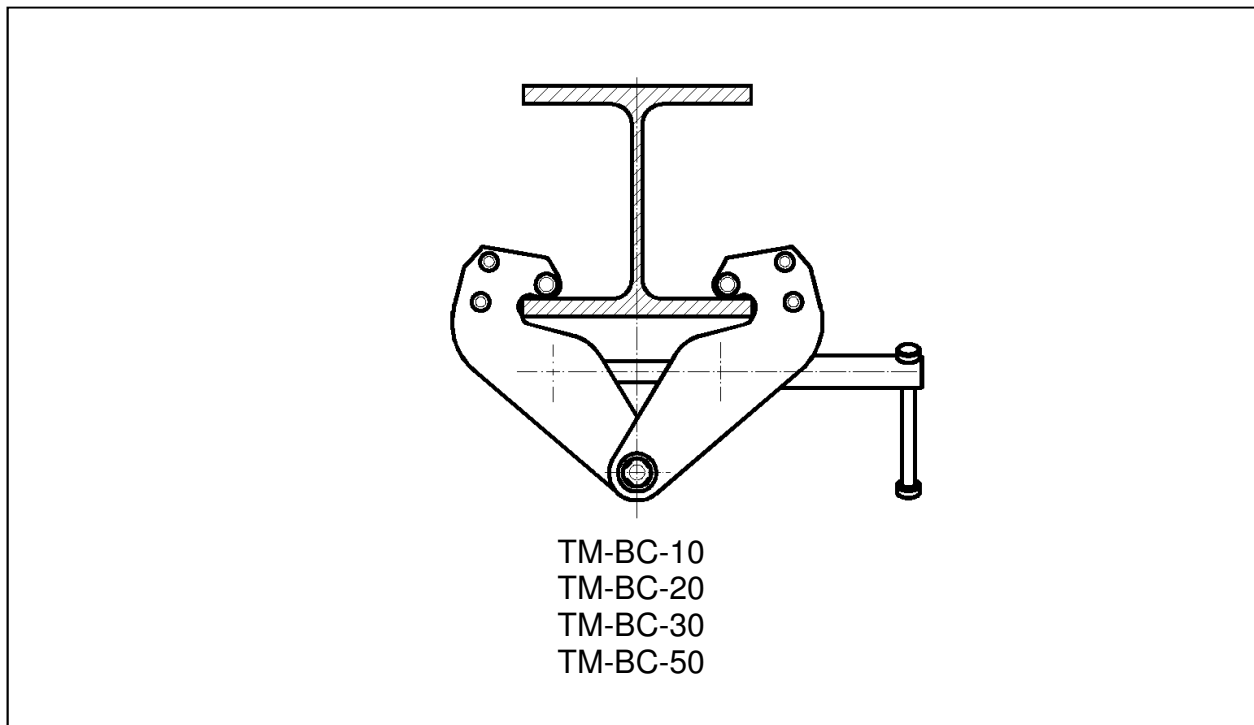


Operating Instructions

TM Girder Clamps

Original operating instructions in keeping with
the EC Machinery Directive



TM girder clamps meet requirements as per EU Machinery Directive 2006/42/EG and were type tested by a certification body (TÜV Rheinland inspection agency).

Read the operating instructions before using TM Girder Clamps.
This document includes very important information concerning safety and operation.

Warning

TM girder clamps are not intended for lifting, carrying or transporting of persons and thus must not be used for this purpose!
Any improper use may result in loads falling down causing severe or even fatal injury of persons.

1 General Information

THIELE girder clamps serve as safe attachment points on steel girder or beam sections. They are designed to suspend lifting tackle or loads.

The clamps shall exclusively be used as anchoring point and must not be employed for hoisting duty in connection with spreader or lifting beams.

2 Safety Notes

The subsequent safety information provides an overview of the general methods of action in order to safely operate TM girder clamps. Disregard of these safety notes may result in death, severe injury or damage to property.

The following list shall not be deemed to be all-inclusive.

1. Only persons who have been trained with regard to the safety measures and the operation of this device are permitted to use girder clamps.
2. Operators must be given relevant instructions and familiarize themselves with this operating manual as well as applicable accident prevention regulations (UVV) „Betreiben von Lastaufnahmeeinrichtungen im Hebezeugbetrieb, BGR 500“ (Use of load suspension devices for hoisting purposes). Only authorized persons as per BGR 500, Chapter 2.8 must be entrusted with relevant clamp mounting and removal work.
3. Check whether the suspension points are able to assume the forces to be applied.
4. Structural modifications, attachments or conversions are not permitted.
5. Girder clamps that are worn, damaged, bent or modified may not be put into operation.
6. Girder clamps must only be employed for commercially available girders or beams and within the prescribed girder width range.
7. Girder clamps shall not be mounted/arranged in the operating range of traveling carriages/equipment.
8. You may only lift loads that are smaller than or equal to the load capacity of the girder clamps. (See table for technical data).
9. If a load is fastened to two girder clamps simultaneously, the load capacity of each girder clamp must be greater than or equal to the load.
10. Do not use girder clamps as grippers or buffers.
11. Do not open girder clamps sustaining loads.
12. Position the girder clamps vertically above the load's center of gravity. Never use an attached chain block to drag or pull a load sideways or obliquely.
13. Never attach loads to the girder clamps by impermissible means.
14. Loads must be attached in accordance with BGI 556 – "Government safety association information for load attachment personnel".
15. Always make sure no one including you (operator) is in the way of the moving load (hazard area). Persons must never move or stay below suspended loads.
16. Start lifting or moving the load only if the load has been safely attached and there are no persons within the hazard area.
17. Do not use girder clamps during welding work.
18. Make sure clamps are not subjected to jerky or abrupt loading strains.
19. Never leave a suspended load unattended.
20. Do not remove or cover warning labels located on the device.
21. Only operate girder clamps applying hand force and without lever handle extensions.
22. Using the girder clamps without removal preventing guard is prohibited.

23. After use or in the event the girder clamps are inoperative make sure they have been secured to prevent unauthorized or inadmissible use.
24. Do not clean girder clamps with water or with a high-pressure cleaner.
25. Using the clamps when exposed to chemical or corrosive influences or in hazardous areas is prohibited.
26. During transportation and storage protect the girder clamps against inclement weather.
27. Do not use girder clamps for the lifting of hazardous goods such as, for example, molten or radioactive materials.
28. Application temperature range is between -10 °C and +50 °C.
29. Storage temperature range is between -0 °C and +40 °C.
30. Observe national regulations that may not be stated here.

3 Commissioning

Prior to commissioning (first use) the user must observe any applicable local or other provisions relating to the specific operation of the girder clamps.

Before using the clamps for the first time read this operating manual as well as any labels attached to the girder clamps to rule out the equipment is operated improperly. Further points to be observed:

- Prior to commissioning the girder clamps are to be checked by a competent person for damage caused in transit.
- Ensure that a functional and visual inspection is performed by an expert.
- Ensure that testing intervals and the next testing date is determined. A notification regarding the next test must be attached to the girder clamp.
- The data pertaining to the girder clamps should be documented on a suitable record card for example.
- Before used girder clamps are taken into service check the service history and any documentation provided for the clamps.
- Make sure the threaded spindles function properly.

4 Operation

1. Open the clamping jaws by turning the threaded spindle counterclockwise.
2. Mount the clamp on the girder flange at the desired position.
3. Close the clamping jaws by turning the lever of the threaded spindle clockwise. Tighten the spindle so as to be hand-tight. Be careful: this is a pinch point hazard!
4. Make sure the clamping jaws fully embrace the girder flange.
5. The load may only be hung into the suspension bolts. Attach the hoisting unit or the load in such a manner that the lifting tackle (e.g. hook, lug) is located in the centre of the suspension bolt.
6. Girder clamps left in position for longer periods must be checked at regular intervals to make sure they are firmly seated.

Immediately stop using girder clamps that show the following defects:

- Identification marks are unreadable
- Deformation, cuts, notches, grooves, incipient cracks, severe corrosion
- Operation conditions outside permissible temperature range
- In the event of a stiff threaded spindle

5 Inspection and tests

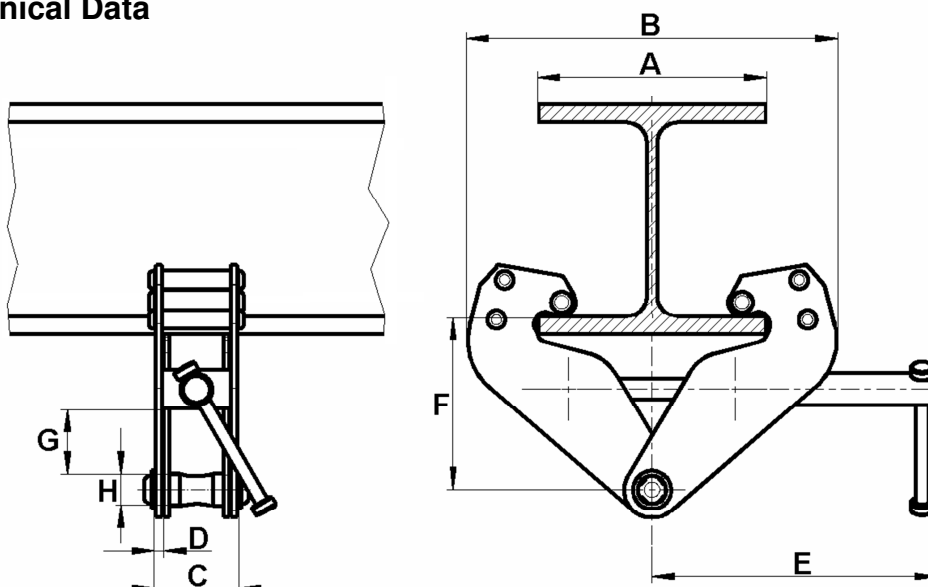
The girder clamp must be visually examined for damage or malfunction by the operator and, if necessary, taken out of operation prior to each use. The girder clamp must be examined by an authorized body at least once per year. In the event of heavy usage, this examination must be performed more often. Document tests/maintenance work in the respective file. The girder clamp must be re-certified at least every 4 years. Re-certification must also be performed following a repair which may only be performed by an authorized body.

Tests and maintenance work must be arranged by the user.

6 Maintenance and repair

For design reasons, girder clamp repairs must exclusively be performed by a service workshop authorized by us. Spare parts are thus available with these service stations only.

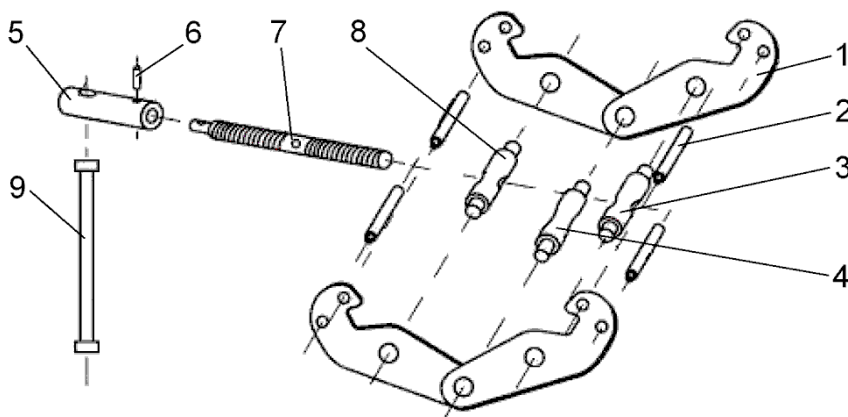
7 Technical Data



		Type ▶	TM-BC-10	TM-BC-20	TM-BC-30	TM-BC-50
Working Load Limit (WLL)		[t]	1	2	3	5
Flange Width A		[mm]	75 - 220	75 - 220	80 - 320	80 - 320
Dimensions	B _{min.}	[mm]	180	180	235	235
	B _{max.}	[mm]	360	360	490	490
	C	[mm]	64	74	103	110
	D	[mm]	5	6	8	10
	E	[mm]	215	215	260	260
	F _{min.}	[mm]	102	102	140	140
	F _{max.}	[mm]	155	155	225	225
	G _{min.}	[mm]	25	25	45	45
H		[mm]	22	22	24	28
Weight		[kg]	4.5	5.0	9.5	11.0

Components

- 1 Clamping jaw
- 2 Pin
- 3 Spindle pin, left
- 4 Carrying pin
- 5 Adapter
- 6 Screw
- 7 Threaded spindle
- 8 Spindle pin, right
- 9 Lever



8 Service Address

THIELE GmbH & Co KG, Postfach 8040, 58618 Iserlohn, Tel. +49(0)2371/947-0

9 Warranty

For TM girder clamps, a one-year warranty is granted from the date of purchase for defective materials or executions. Wear parts as well as parts that have been overloaded and incorrectly used are excluded from the warranty. In the event of a justified complaint, the girder clamp will be repaired or replaced.

10 Documentation

Each girder clamp supplied will include this operating manual, an acceptance test certificate and the Statement of Compliance.

The information included in this manual has been carefully checked with respect to correctness and completeness.

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