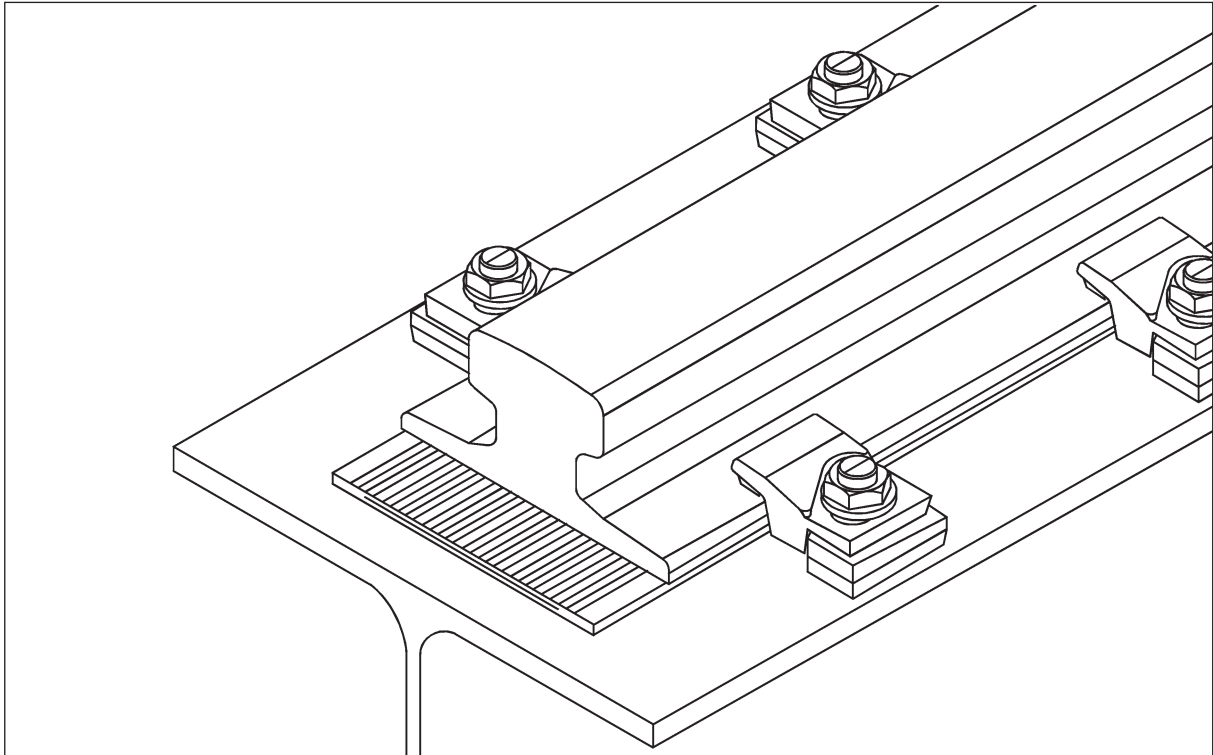


CONTINUOUS MOUNTING ON STEEL GIRDER CSS SYSTEM



Rail track fastening on steel girder is mainly found in gantry crane installations : long travel and cross travel.

For this type of installation, the rail is continuously supported by the upper flange of the girder.

General characteristics

The patented **GANTREX**[®] fastening system of soft mounting of crane tracks comprises two components. Firstly, a range of pads which are laid under the rail, and secondly, a series of clips for fastening the rail.

The track support consists of metallic girders of suitable dimensions.

The rails are butt-welded. They are laid over their whole length on **GANTREX**[®] type MK6 pad mounted on the supporting girder.

The most commonly used rails are low profile rails type DIN 536; they are fastened by adjustable **GANTREX**[®] clips.

The soft mounting system eliminates the fatigue effect on the fastening and reduces maintenance to a minimum.

Components

CLIPS

All clip types can be used. The choice between boltable or weldable clips is dependent on :

- horizontal wheel loads;
- the available free space on of the girder width and the chosen rail;
- the accessibility;
- the possibilities of work preparation in workshop;
- the type of work to carry on : new track or refurbishment;
- the applicable norms;
- the local uses and habits.

The clip spacing can be confirmed by our Technical Department, taking into account the specific installation data. Usually this distance varies between 500 and 750 mm.

TIGHTENING TORQUES

The clip resistance to horizontal loads is influenced by the tightening torque of the fixing bolts, themselves related to the bolts grades. Please refer to the specific clip data sheet.

PAD

As the mounting is of the continuous type, GANTREX® pad type MK6-RB or -RF is used (see the specific MK6 pad data sheet).

PROTECTION AGAINST CORROSION

A protection against corrosion, after sandblasting Sa 2,5 may be undertaken either by hot dip galvanizing or by paint or metallization.

- **Hot dip galvanizing**

Boltable clips, as well as upper parts of weldable clips, can be protected by hot dip galvanizing (standard thickness : 70 microns).

The fixing bolts can also be protected by galvanizing (standard thickness : 50 microns).

- **Paint**

On request, various paint or coating types can be proposed : this protection can only take place after complete installation.

The use of solvents is prohibited.

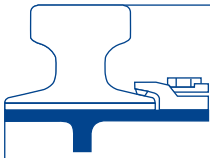
TIE-BACKS

As a complement to the soft rail fixing system, the link between supporting girders and column of the building structure can be made by means of GANTREX® tie-backs.

These tie-backs are specially designed to transmit gantry cranes side loads to the building structure without introducing further stresses in the girders. The GANTREX® tie-backs consist of a steel link plate into which 2 spherical bearings in treated steel are inserted.

These bearings absorb the small relative movements in the girder-column connection, introduced by the girder's flexibility. In that way, no torsion or negative stress is transferred to the column connection or in the girder.

Please refer to the relevant specific data sheet for more information.



MOUNTING ON STEEL GIRDER



Advice on installation

These recommendations only give general guidance on continuous installation. A detailed method statement can be issued by our Technical Department.

1. Drillings for boltable clips or welding of lower parts of weldable clips can be carried on in workshop on the basis of the theoretical axis of the track supporting girders.
2. After erection and levelling of the girders, pads can be installed and rails mounted : the rail sections should be buttwelded to make a continuous rail.
3. Placement and hand tightening of GANTREX® clips.
4. The rail joints are then ground, followed by rail final alignment.
5. Final clip tightening at the required torque with a correctly calibrated torque wrench (see the relevant clip specific data sheet). The use of an impact wrench is not recommended.
6. Possible final protection by paint. In this case, the use of solvent is prohibited and the contact surfaces between clip elements must not be coated. Contact our Technical Department for the selection of an appropriate protection system.
7. Issue of a track survey report in accordance with applicable norms.

For more information, please consult us.

We reserve the right to discontinue or change specifications or design at any time without prior notice and without incurring any obligation whatsoever.



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