

73.02 - Railway or tramway track construction material of iron or steel, the following : rails, check-rails and rack rails, switch blades, crossing frogs, point rods and other crossing pieces, sleepers (cross-ties), fish-plates, chairs, chair wedges, sole plates (base plates), rail clips, bedplates, ties and other material specialized for jointing or fixing rails.

7302.10 - Rails

7302.30 - Switch blades, crossing frogs, point rods and other crossing pieces

7302.40 - Fish-plates and sole plates

7302.90 - Other

This heading covers iron or steel railway and tramway track construction material, whether of normal or narrow gauge.

- (1) **Rails** for railways or tramways are hot-rolled products. The heading covers all lengths of such rails including bull head rails, flange (or flat-bottomed) rails, grooved tram rails, slot rails for electric tramways, and conductor-rails, etc.

This heading covers all rails of the type normally used for railway or tramway track, irrespective of their intended use (over-head transporters, mobile cranes, etc.). It **does not**, however, cover rails not of the railway or tramway type (e.g., sliding door rails and lift rails).

Check-rails, also known as guard rails or safety rails, are fixed to track rails to prevent derailments at crossings and curves.

Rack rails are intended for steep gradient railways. One type consists of two long parallel bars connected by closely spaced transverse rods; the spaces between these rods are designed to engage the teeth of the cogged wheel beneath the locomotive. A second type consists of a toothed rail which engages similarly with the cogged wheel.

All the above rails may be straight, curved or drilled with bolt holes.

- (2) **Switch blades, crossing frogs, point rods and other crossing pieces** which may be cast or otherwise obtained, are used at the junctions or intersections of the permanent way.
- (3) **Iron or steel "sleepers" (cross-ties)** are used to support the rails and keep them parallel.

They are usually pressed into final shape after rolling, but they may also be assembled by welding or riveting several elements together. They normally have a cross-section in the form of a "U" or a very short-legged capital omega, and they remain in the heading whether or not drilled, punched, slotted, or fitted with chairs or sole plates, or with integral formed rail fastening housings.

- (4) **Fish-plates** are hot-rolled, forged or cast products of various shapes (flat, shouldered, angled, etc.) used for jointing one rail to the next. They fall in the heading whether or not drilled or punched.
- (5) **Chairs** (usually of cast iron) are used to fix bull-head rails to the sleepers; they are secured by coach screws or bolts.

Chair wedges are used to hold the rails in the chairs.

Sole plates (base plates, sleeper plates) are used in fixing flat-bottomed rails to sleepers. They protect the sleepers and are fixed to them by cramps, bolts, coach screws, spikes or, in the case of steel, by welding.

Rail clips are likewise used to fix flat-bottomed rails to the sleepers; they are bolted to the sleepers and clamp the flat bottom of the rail to them.

The heading also covers other **rigid railway rail fixing devices**, such as those obtained by bending a steel bar into an approximate L-shape, the shortest side pressing against the flange of the rail and the longest side, with its end slightly flattened but not pointed, being fixed in a hole previously drilled in the sleeper.

Furthermore, **resilient rail fastening devices** are covered by this heading. These are manufactured from spring steel and clamp the rail to the sleeper or sole plate. The clamping force is obtained by a geometrical deflection of the fastening from the "as manufactured" condition. A pad or insulating device, usually of rubber or plastics, is interposed between the fastening and the rail or the fastening and the sleeper.

- (6) **Bedplates and ties** are used to fix the rails in their parallel position.

Some special spacing-ties and angle-bars are designed to be bolted on to a number of successive wooden sleepers; being thus fixed at right angles to the sleepers they serve to prevent deformation (or "creep") of the track at certain points.

- (7) **Other specialised rail anchors** are devices attached or clamped to the rail where longitudinal creep occurs. These bear against the sleeper or sole plate tending to prevent such longitudinal movement.

The heading **does not cover** :

- (a) Screws, bolts, nuts, rivets and spikes used for fixing track construction materials (**headings 73.17 and 73.18**).
- (b) Assembled track, turntables, platform buffers and loading gauges (**heading 86.08**).