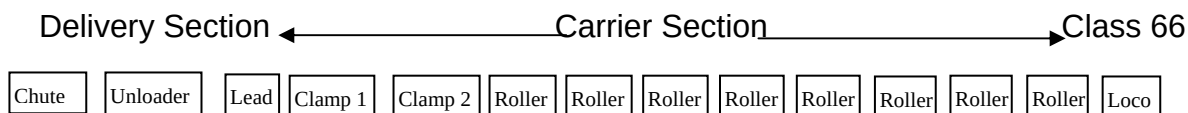


WAGON TYPE	COMMODITY
RAIL DELIVERY TRAIN (RDT)	Long Welded Rail

Carrying Capacity:

The RDT comprises of self-contained roller bank and clamping units mounted on container wagons. The RDT can carry up to 32 CEN 56E1 or CEN 60E2 rails or up to 24 Conductor 75 kg rails.



Load Positioning:

CEN 56E1 and CEN 60E2 rail can be loaded in 4 tiers of up to 8 rails.

Conductor 75 kg rail can only be loaded in 4 tiers of up to 6 rails, the outer rail positions 1 and 8 shall remain empty.

Only rails of approved lengths can be loaded: 108 m /180 m /183 m /216 m. (when loading rail of 180 m or 183 m a special check shall be made to confirm that the rail end is supported by an additional roller bank positioned centrally on the 3rd wagon from the locomotive end as shown in the diagram above)

The lead wagon is fitted with safe marker areas to position the rail ends for various lengths of rails. This consists of a band painted blue across the wagon with an appropriate label identifying the corresponding rail length. Rails shall be loaded so that the rail ends are positioned over the safe rail end area on the lead wagon and subsequent wagons at the other end of the train.



Rail ends shall not overhang roller banks by more than 5.2 m.

Short rails may be carried in any position, however wherever possible they should be positioned above the longer rail. Mixed lengths should be avoided on any one tier in order to maintain the 'pairing' and shall not be carried on the top tier because the Rail Restraining Devices shall be correctly placed.

Rails shall not be loaded in high positions if lower positions are available. The load shall be kept as low as possible.

To maintain even weight distribution when unloading, rails shall be unloaded from the upper tiers first before commencing to unload lower tiers. The load should be distributed as evenly as possible, however it is permissible for only one roller bank on a wagon to be part or fully loaded.

CEN 56E1 and CEN 60E2 rails are normally delivered in pairs and in order to avoid any possibility of the manipulators clashing, there is always a 'gap' of three rails between the pairings. Rail Pairings are as follows –

Rails 1 and 5, Rails 2 and 6, Rails 3 and 7, Rails 4 and 8.

It may be necessary to adjust the rail slightly so that welds do not coincide with the rail clamps.

Once the rail has been positioned correctly it is then clamped into place. Each rail type has its own clamp type, which are identified by different colours.

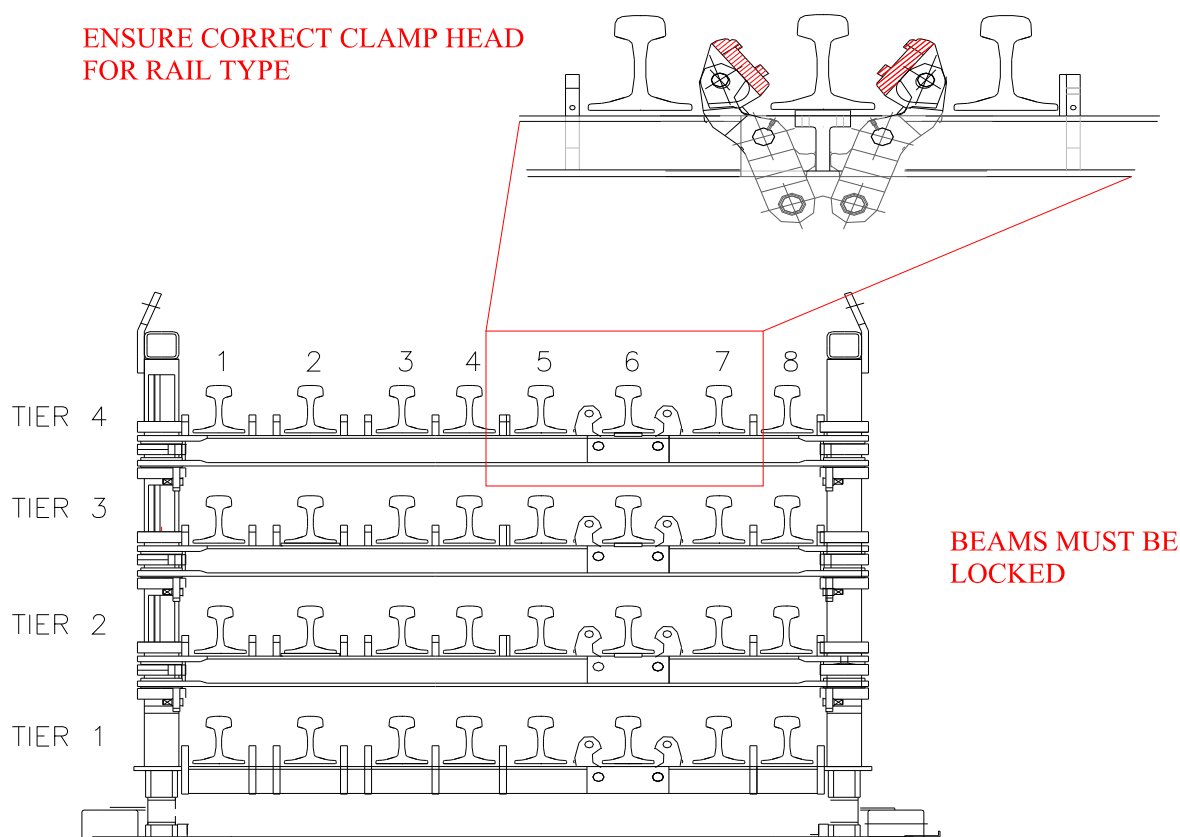
CEN 60E2 (Blue) CEN 56E1 (Red) 75 kg Conductor (White)

Unused clamps are stowed in the stowage compartment on the lead wagon.

The clamps are torqued to the following settings.

CEN 56E1 & CEN 60E2 - 800N-m (590 lbs-ft)

Conductor 75 kg – 700N-m (516 lbs-ft)



When rails have been secured, the rail should be marked with chalk either side of the clamps. This is so that any rail movement can be reported at the destination.

Rail ends on the lead wagon are also painted to identify different rail types and lengths