

**1. DESCRIPTION**

Building Maintenance Units (BMUs) in the U.S. and Canada typically traverse along steel track. Standard Tractel BMUs are designed to run on flanged track. Special conditions arise from time to time when other track types are employed.

**1.1 Standard steel track**

The track components are designed for fast and accurate assembly. Track sections are joined together using bolted or welded fishplates.

The track and track supports are hot galvanized to prevent corrosion. The size of the rail depends on the weight of the machine and the distance between the track supports.

Five rail sizes are recommended: *W10x22*, *W10x30*, *W12x50*, *S12x31.8*, & *S12x35*.

The wheel assembly types are defined by the type of BMU machine (Fig. 2 and 3).

**General track tolerances:**

1. Track joints to be within 1/16 in. (1.5mm) max. in all directions
2. Track joints should not exceed 1/8 in. (3 mm) gap.
3. Track to maintain a constant elevation of  $\pm 1/4$ " in. (6.4 mm) over every 120 in. (3m) length.
4. Track system (by elevations) to maintain a constant elevation of  $\pm 1$ " in. (25 mm).

Fig. 1:  
Track joint using 2 bolted fishplates

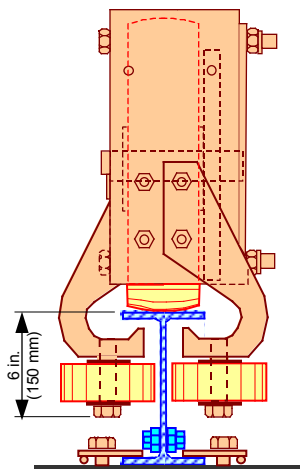
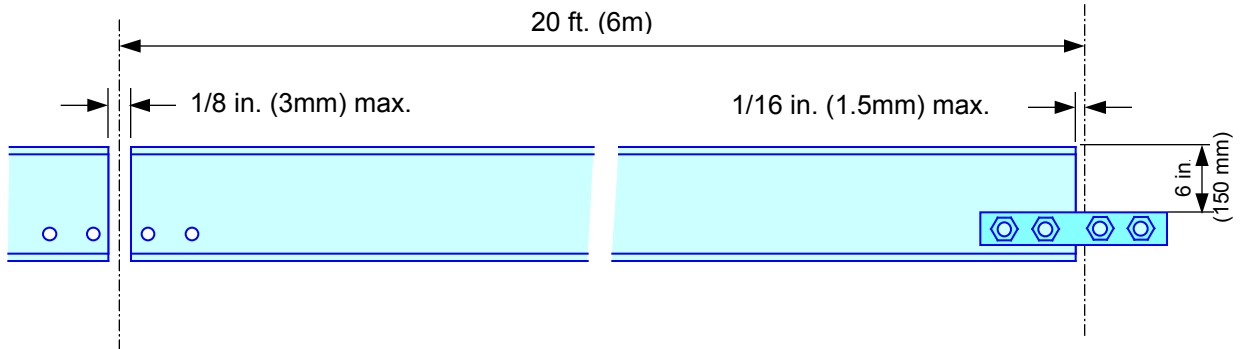
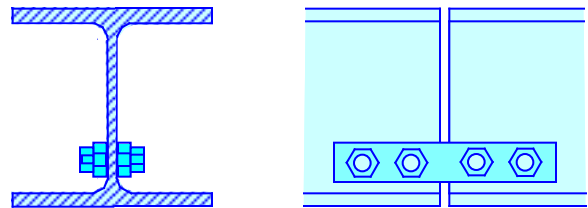


Fig. 2  
10 K (45kN) wheel assembly  
on I-Beam IPE 160

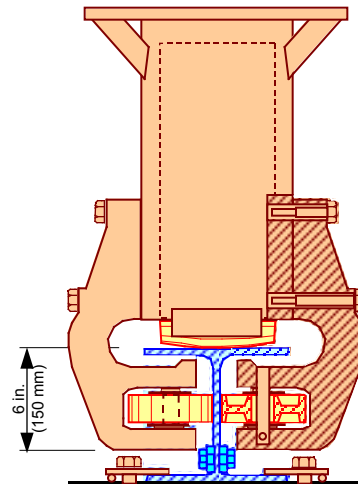


Fig. 3  
Over 10K (45kN) wheel assembly  
on WF-Beam HEB 180

**1.2 Track supports**

Track sections are supported on supports every 8 to 10 ft. (2.4 to 3 m) depending on the loading on the BMU wheels.

Standard steel track supports (Fig. 4) are a length of tube section with a welded top plate. The track sections are fixed to the top plates with clamp plates.

The clamps have been specially designed to meet the requirements of Tractel machines, particularly the transverse adjustment and resistance to the lateral pressure applied by the guide rollers.

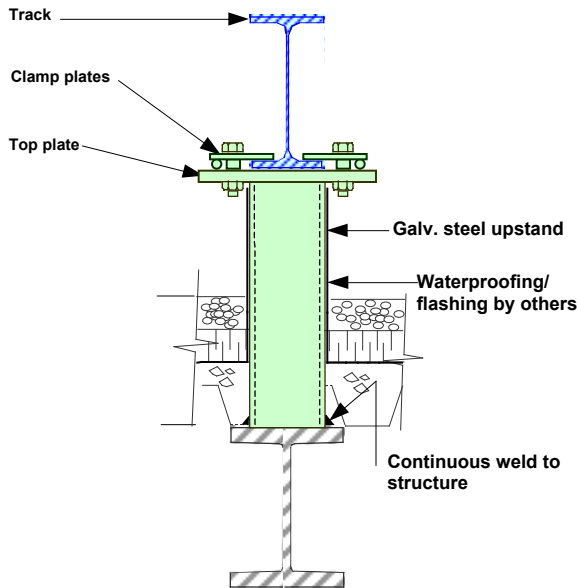
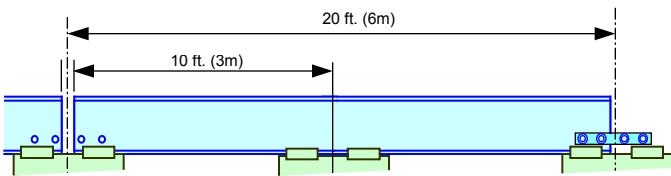


Fig. 4



The low profile clamp plates allow the uninterrupted travel of the wheel assemblies. Each are fixed to the top plate with A235 galvanized bolts.

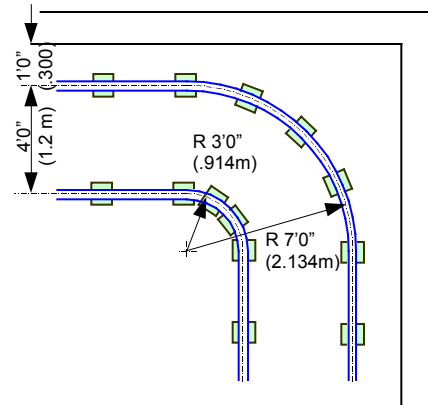


Fig. 5 – Example of track layout

