



## Rectangular Steel Rails

### **Introduction:**

Steel Rails are used in industries like EoT Cranes, Gantry Cranes, Railways, Smithies, etc for smooth running of the wheels of hoists and other mobile equipments over it. Rolling of these steel rails is divided into two main categories: Hot rolling process and cold rolling process.

### **Hot-Rolling process:**

Hot rolling is a mill process which involves rolling the steel at a very high temperature. It can then be shaped and formed easily. When the steel cools off it will shrink slightly thus giving less control on the size and shape of the finished product.

### **Cold-Rolling process:**

Cold rolled steel is essentially hot rolled steel that has had further processing. The steel is processed further in cold reduction mills, where the material is cooled followed by rolling of tempers. This process will produce steel with closer dimensional tolerances and a wider range of surface finishes.

### **Benefits of ST-52 Cold-Rolled Steel Rails:**

1. High accuracy in length and cross-sectional dimensions due to tempering and annealing at room temperature.
2. Accuracy in size with only +/- 0.20 mm tolerance range.
3. No bends and/or twists over the surface of the steel rails. Giving a very smooth finish to the rails.
4. 45° notch cut ends lead to ease in installation and alignment between two rails. Thereby, reducing hours of man power. Welding of joints not required.
5. Shot blasted and primed to prevent the rails from rusting. These rails can then be stored for longer durations.
6. Ready to use, no re-work or resizing required.
7. Hardness measures between 180 to 210 BHN (Brinell Hardness Number).