



# TEE RAILS

This portion of our catalog provides a comprehensive list of “tee rails” available from Harmer Steel. All of the rail sections shown on pages I-5 through I-21 are standard ASCE (American Society of Civil Engineers), ARA–A (American Railway Association Type A), and AREMA (American Railway Engineering and Maintenance-of-Way Association) designs mostly in current manufacture. ASCE rails are primarily designed for light overhead cranes, mining track, automated warehouse retrieval systems, and other industrial applications. ARA–A and AREMA rails are primarily designed for railroad tracks, including sidings and spur tracks. Rail weighing 60 pounds per yard or more is normally manufactured to ASTM A–1 or AREMA specifications.

## Relay Rail

In addition to new rail, Harmer Steel also stocks a wide range of good quality used rail. Used rail in good enough condition to be re-laid is called “relay rail.” Relay rail is often used for industrial sidings and spur tracks, where the slower speed and infrequent traffic do not warrant the expense of new rail. Relay rail is graded and classified according to the type and number of flaws and the amount of wear exhibited. Harmer Steel takes pride in grading relay rail carefully to ensure that all material shipped will meet each customer’s exact specifications.

There are several different types of rail wear that are usually measured when grading relay rail. “Top wear” and “side wear” are measured by comparing the difference between the height and head-width of the relay rail with a newly manufactured rail section of the same weight and size. (Side wear is sometimes referred to as “gage wear” or “curve wear”). “End batter” is the term for the difference in height measured at the end of a rail and the height of the same rail measured behind the joint. “Flow” is the term used to describe a small lip sticking out at the side of the rail head. Flow can be present on one or both sides of the head, however, the highest quality relay rail exhibits only a small amount of flow on one side only. Relay rail with flow on one side is often turned around when re-laid so that the lip is then on the field side (outside) of the track.

Relay rail is generally classified as “Number One” or “Number Two Relay.” The definitions of Number One and Number Two Relay vary somewhat according to whose specifications are used. Different railroads and associations have developed different classification systems for grading relay rail. Generally speaking, Number One Relay allows a maximum of 1/8” top wear for rails up to and including 115–lb., a maximum of 3/16” top wear for rails between 119 & 133, and 1/4" for rails 136–lb. and heavier. Please contact your Harmer representative for more complete specifications.

In addition to the rail sections shown on pages I-5 to I-21, a great number of relay rail sections, even those not currently manufactured, can be supplied by Harmer Steel. The table on pages I-3 and I-4 provides an extensive list of new and older rail sections.