



NORTH AMERICA'S LEADER IN SUSTAINABLE STEEL TIES & TURNOUT SETS



THE MOST COST-EFFECTIVE OPTION FOR YOUR TRACK

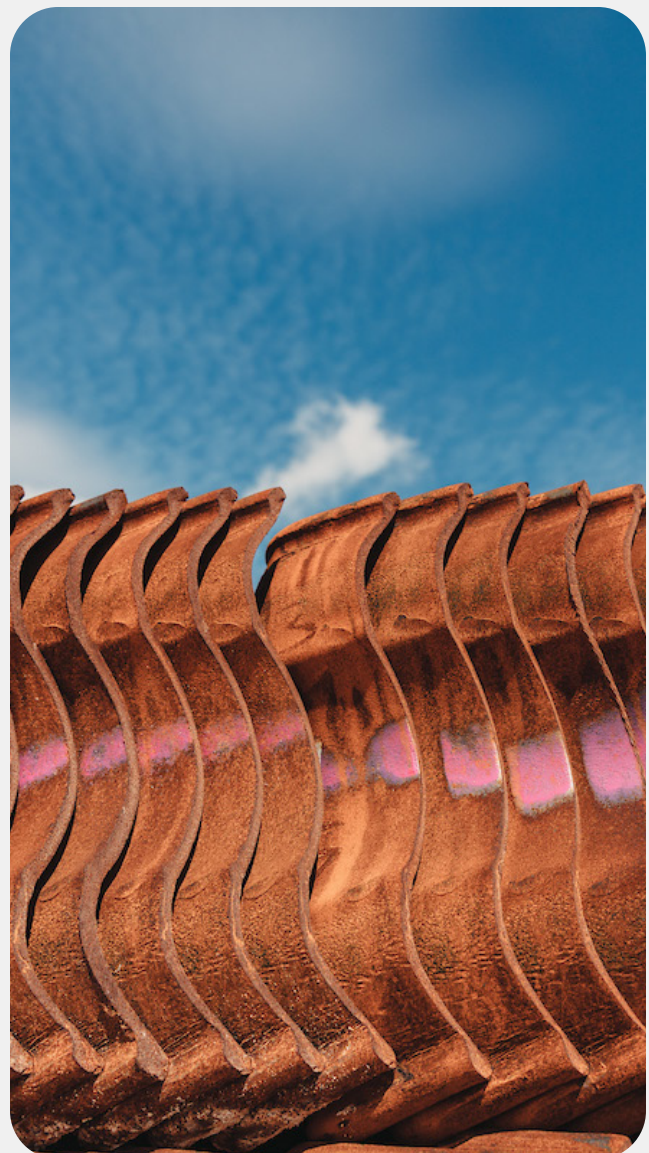
NARSTCO manufactures sustainable steel ties and turnout sets for Class I, transits, short lines and industrial rail customers across North America.

NARSTCO steel railroad ties and turnout sets operate efficiently under the most adverse conditions. Steel ties are installed with less cost, labor and material.

With a proven track record approaching two decades of service across North America, high quality NARSTCO steel ties and turnout sets deliver an outstanding return on investment for mainline, siding and yard applications of all types.

- Safer, easier and faster to install than alternatives
- Can be interspersed with wood ties to strengthen track structure
- Design allows for reduced ballast section ... up to 40 percent savings vs. wood!
- Extended service life and minimal maintenance requirements compared to alternatives
- Manufactured from recycled steel and 100 percent recyclable

NARSTCO steel ties and turnouts – the innovative solution to your toughest problems to put you on the right track!





WHY STEEL TIES?

VERSATILE, DURABLE, GREEN & COST EFFICIENT, NARSTCO

Steel railroad ties and turnout sets offer exceptional financial and operational benefits for today's rail industry.

SUSTAINABLE

NARSTCO steel ties are manufactured from recycled steel and are recyclable. Steel ties are a green product that helps customers reduce the use of creosote.

LESS EXPENSIVE

Compared to wood ties, steel ties are less expensive to handle and transport, last longer and require less ballast, which reduces overall costs.

VERSATILE

NARSTCO steel ties can be used in a variety of applications and can be customized to meet customers' needs.

EXTENDED SERVICE LIFE*

Steel ties can have a service life of 50+ years and reduce track maintenance requirements relative to wood ties.

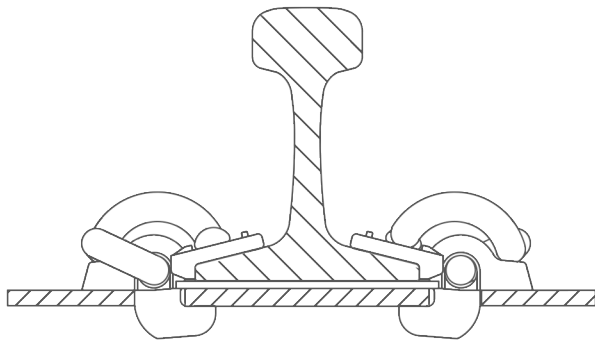
BUILD FAST & SAFE

NARSTCO steel ties are often safer, easier and faster to install than wood ties. Less ties and ballast requirements for steel tie track projects can result in considerable upfront savings and faster track construction. NARSTCO's steel tie fastening system provides a consistent hold of gauge.

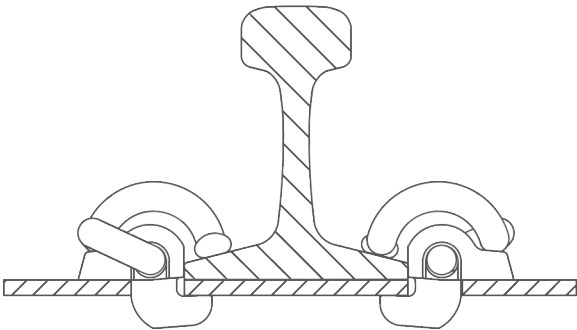


STEEL TIE APPLICATION GUIDELINES

| STEEL TIE INFORMATION | | | |
|------------------------|-------------------------|----------------------------------|---|
| STEEL TIE APPLICATIONS | | | |
| TIE | MGTM | SPEED MPH | APPLICATION |
| M8 | <3MGTM Class I | Freight 10mph Passenger 15mph | Light branch line, flat storage yard tracks, industrial yards and concrete encasement |
| M10 | 3 - 10 MGTM Class 2 | Freight 25mph Passenger 30mph | Mainline, yard tracks, grade crossings, turnout tie sets, sidings, passing tracks, interspersed with wood ties, industrial tracks and concrete encasement |
| H10 | 10 - 25 MGTM Class 3 | Freight 40mph Passenger 60mph | Mainline, yard leads, turnout tie sets, grade crossings, and tunnels |
| H12 | >25 MGTM Class 4 & 5 | Freight 80mph Passenger 90mph | Mainline, yard leads, grade crossings and tunnels |



TYPICAL INSULATED RAIL ASSEMBLY



TYPICAL UNINSULATED RAIL ASSEMBLY

