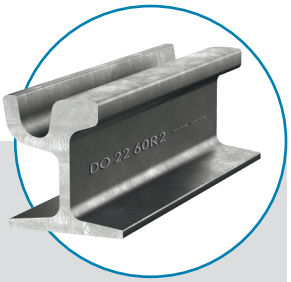
RAILWAY SYSTEMS
by voestalpine

R290GHT

Standard steel grade for curves on tram track



Description

The rail steel R290GHT according to EN 14811:2019 is a pearlitic, heat treated rail grade with a minimum hardness of 290 HB. This steel grade offers the perfect balance between wear resistance and gauge corner repair weldability.

Area of Application

This rail steel grade is recommended in curves for customers following an “easy to maintain” strategy.

Your Benefits

- material concept is designed for easiest gauge corner repair welding
- increased service life due to HSH® heat treatment

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TECHNICAL CHARACTERISTICS

Rail Steel Grade R290GHT

This data sheet applies to rails produced by voestalpine Rail Technology GmbH, 8700 Leoben-Donawitz, Austria – according to state of the art rail production technology and according to the international standards EN14811:2019.

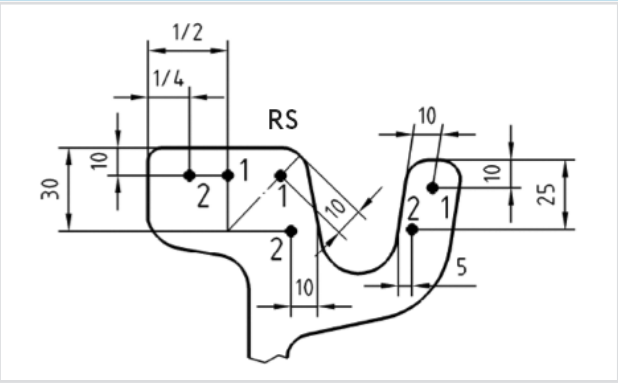
Steel Grade Description

Steel Grade	Surface Hardness [BHN]	Description of Steel Design	Field of Application	Branding
R290GHT	290-330	» Non Alloy (C-Mn) » Extra low carbon content » Heat treated – HSH® Technology	» Primarily in curves of tramway tracks » Build-up welding without pre-heating	— —

Chemical Composition

C [%]	Si [%]	Mn [%]	Cr [%]	P [%]	S [%]	H [ppm]
0.50-0.55	0.15-0.58	1.00-1.25	max. 0.15	max. 0.025	max. 0.025	max. 2.5

Hardness



Position	Hardness [BHN]
RS	290-330
1	> 290
2	> 270
3	–
4	–

Tensile Testing

Tensile Strength [MPa]	Elongation [%]
≥ 960	≥ 11

Thank you very much for your interest.
We are happy to answer your questions under
product_management@voestalpine.com
Also your local contact person is looking forward to support you.

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