

# COATED 400 UHC® HSH® RAIL PROTECTING THE BEST RAIL BY THE BEST COATING

#### RAIL

Heat treated rail head with more than 400 BHN hardness according to EN13674-1 offering highest resistance against:

- » Wear and Plastic deformation,
- » Head Checks and
- » Corrugation

Well established in world-wide urban metro, mixed traffic, industrial and heavy haul lines.

Scientifically proven that wheel wear is not negatively affected, in-turn due to high profile stability force to the superstructure are reduced. 123

## **SUCCESS STORIES 400 UHC® HSH®-RAIL**

- » Italy (ATM in Milano)
- » Federal railways of Austria, Hungary and Slovakia
- » Local operators in Switzerland
- » Metros in Europe, South-America and Asia
- » Heavy Haul operators in Brazil, Australia, Africa and North-Europe

### WELDING INFORMATION

400 UHC® HSH® rail is weldable with all commercially available procedures (aluminothermic, flash-butt, electrode).

Coated rail strings can be provided in length of up to 360 m length.

With the user friendly repair sets, welds are optimally protected by the same coating technology as the rail itself.



# **RUBBER COATING**

The Rubbercoat® is a polyurea elastomer hot spray, which is a very strong and durable coating which guarantees

- » Best prevention against extreme corrosion
- » Very high electrical insulation of the rail
- » Resistance against salt influences
- » High degree of elasticity
- » Protection against stray currents
- » Wear, UV- and chemical resistance
- » Waterproof
- » Maintenance free

### **SUCCESS STORIES COATING**

- » Netherlands (mandatory for level crossings and embedded rails)
- » Belgium (stray current corrosion prevention)
- » Eurotunnel (extreme corrosion protection)
- » UK (Glasgow subway tunnels)

### **COATING INFORMATION**

This coating is applied on the web, foot, and underside of the rails under controlled conditions at the factory site. Several tests have been performed to guarantee an optimum adhesion of the coating. No signs of corrosion, blistering, bleeding or cracking were found.

Besides, in many cases, the coating is applicable with the most common fastening systems.

<sup>&</sup>lt;sup>3</sup> Pietsch, L.; Jussel, W.-D.; Joch, M. et al.: "Application of Wear Resistant Rails in Curves and their Influence on Running Behaviour". ZEVrail 140 (2016), S472-480



 $<sup>^1</sup>$  Steele, R.; Reiff, R.P.: "Rail – Its behaviour and relation ship to total system wear". Proceedings of the  $2^{nd}$  Heavy Haul Conference, 1982, S115-164

<sup>&</sup>lt;sup>2</sup> Jörg, A.; Stock, R.; "The Heat Treated Premium Rail Grade R400HT - High-Strength Rail Steels in Austria and Switzerland". ZEVrail 136 (2012), Sonderausgabe Innotrans 2012, S72-79