

## NEXT GENERATION INSULATED RAIL JOINT

## Less malfunctions through new technologies

## NRG joint: last as long as the rail

To ensure safe signal control in rail networks, insulated rail joints are used to determine the exact position of the train. Even though these joints are highly important, they are also quite vulnerable, and often causing malfunctions. The development of the next generation glued insulated rail joint or NRG joint was therefore inevitable.

Its design meets the highest demanding performance specifications set by international railway operators. It has undergone extensive and rigorous testing, and it can absorb high tensile and compressive track forces in extreme temperatures. Because of new technologies added, the NRG joint can even withstand 25 t axle load to over 300 million gross tons. Since the stiffness of the joint system is designed to be within 5 % of the parent rail, it enables the adoption of the wave motions of the rail from the driving dynamics of the train. The NRG joint 'moves' in the same way as the rail, a property that formed the basis for our new product's name: eNeRGy joint.



Since 2016, the NRG joint proved itself to be the solution to extend the lifespan of the tracks.

## **Key features**

- » Multi-groove locking pins do not loosen
- » Cold hole expansion technique provides protection from fatigue cracking
- » Isolating coating provides 15 year water resistance guarantee
- » Can be used on all major track structures

- » Tested to the highest standards of any known railway operator
- » Successfully withstood 16 million deflections
- » Can withstand temperatures between -20 to +60 degrees °C
- » Guaranteed electrical isolation through the service life of the joint

one step ahead.

voestalpine