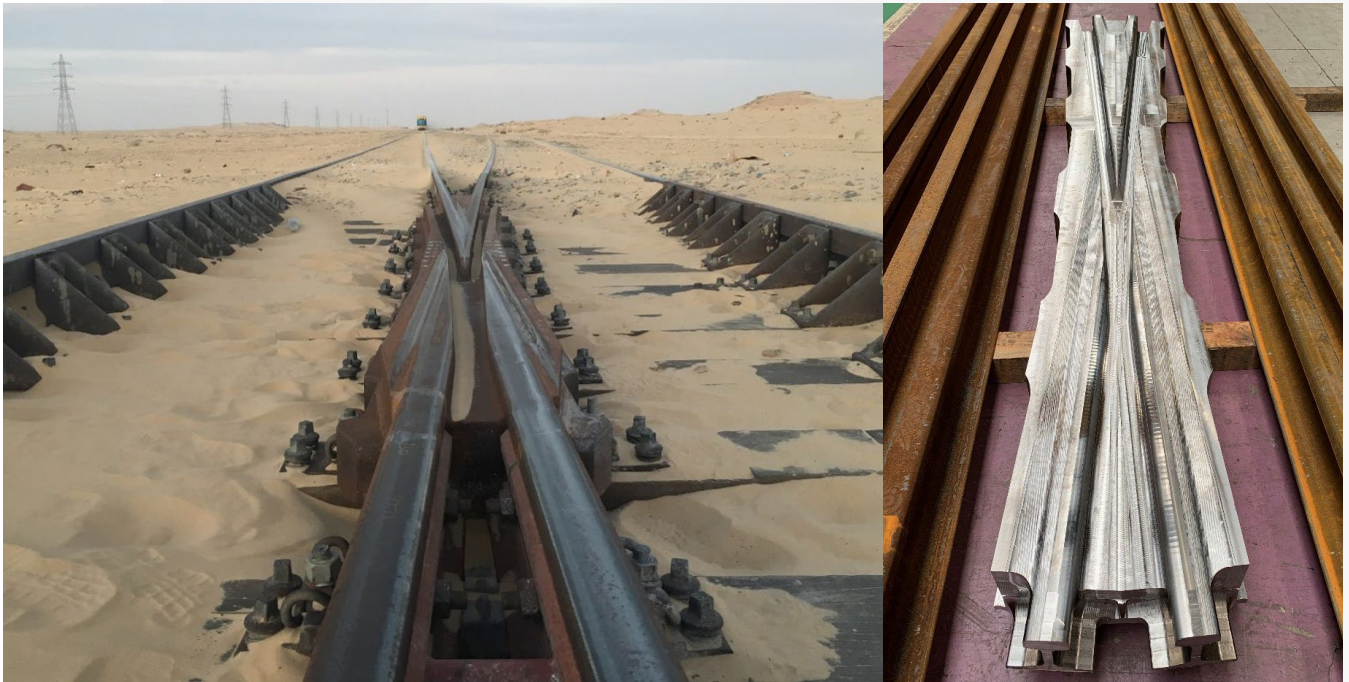




CogX

The hard & durable rolled steel for railway crossings
and switch components

vossloh
enabling green mobility



CogX

the hard & durable rolled steel

CogX is a rolled and heat-treated steel which complements Vossloh's product portfolio and offers new possibilities for customized designs with high performance levels:

- › Tramway : half switch blocks, switch blades
- › Railway crossings
- › Expansion joint cradles

CogX is a heat-treated steel before machining and offers many advantages when compared to available steels of the same category. Thickness of CogX plates ranges from 60 to 200 mm covering all the needs.

Already installed on track

- › Sweden / Trafikverket
- › Great Britain/ Tramway of Manchester
- › Belgium/Gent / Arcelor plant
- › Mauritania / SNIM
- › Netherlands / RET
- › Denmark / Metro of Copenhagen
- › Portugal / Expansion Joint

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In-track tests for many types of applications since 2017 give fully satisfaction and proves that CogX is to be considered for your turnouts in the future.

Co-Development with ArcelorMittal Industeel

Material characteristics

- › Initial hardness: 450 HB
- › Extremely hard at the running surface up to 550 HB
- › High profile stability & creep resistance
- › No material flow or deformation
- › Allows higher transit tonnage
- › High wear and impact resistance compared to existing solutions
- › Excellent weldability
- › Specific solution for turnouts with high traffic density

Technical advantages

- › **Hardness** of approximately 450 HB after machining quickly evolves up to 550 HB after the natural phenomenon of hammering during wheel passage
- › **Elasticity** required for impacted parts
- › **Wear resistance** : the lifetime can go up to 300 MT of passage, where crossings of equivalent design must be replaced much earlier



**50% Production
time reduced!**

**REDUCED
LCC**

CogX offers various industrial flexibility:

- › No foundry pattern needed
- › High flexibility in creation of new design
- › Direct welding between bloc and rail

**Up to 550HB in service
IMPROVED LIFETIME**

All geometries for frogs can be cut and milled very precisely.

A large number of new designs and new track types can be realized:

- › Crossings, half switches & switches for tramway application
- › Crossings or point of crossings for conventional railways
- › Crossings for heavy haul
- › Crossings for metro application



**IDEAL
PROCESSING
PROPERTIES**

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