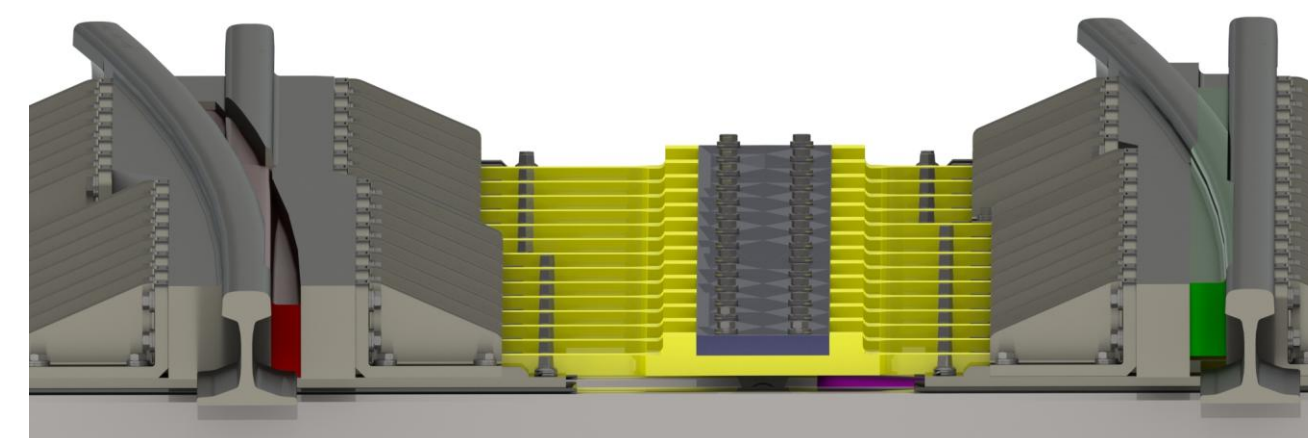
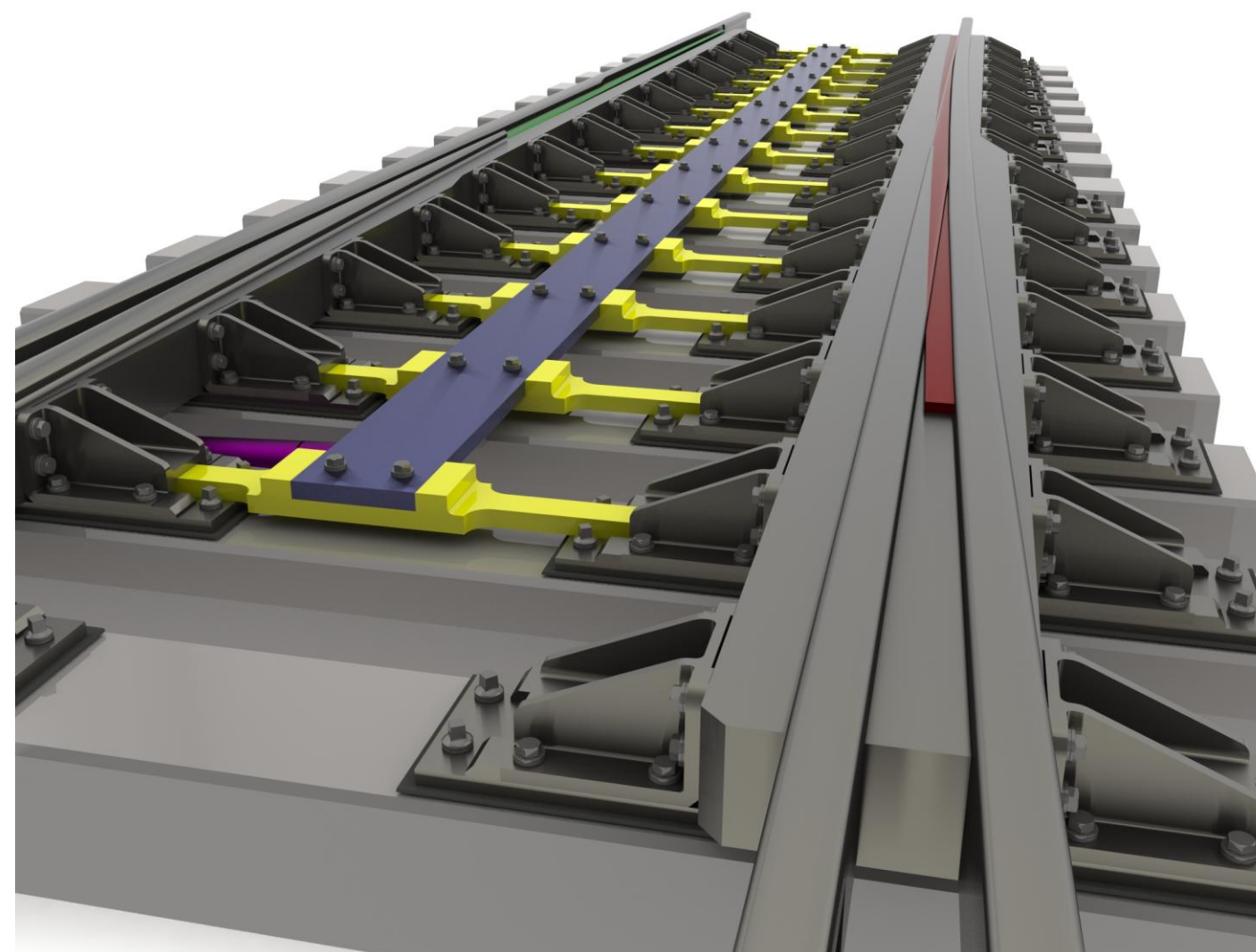


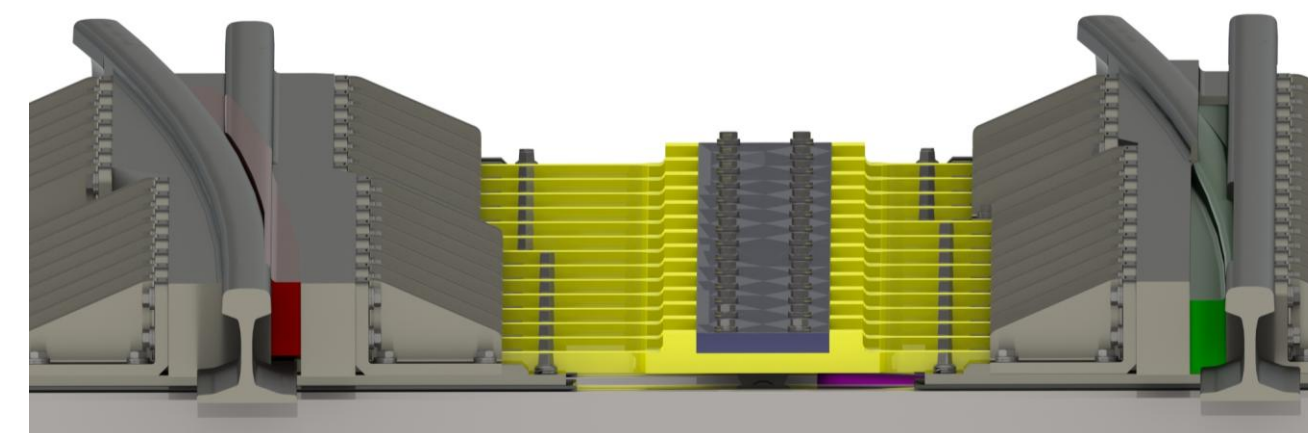
A new concept railway turnout that has the answer to all operational problems caused by snow and ice during winter : The Winterproof Railway Turnout Version 2.0 (WRT 2.0)

This WSW 2.0 is so winterproof that it even doesn't need point-heating anymore. Costs for purchasing, installing, monitoring, repairing, inspecting and malfunctioning point-heating systems are history. Also CO2-emissions connected to the high-power consuming point heating systems (and resulting high energy-bills) are history now. This new turnout uses an innovative but very simple mechanical setup which doesn't allow snow or ice will block the correct functioning of all moving parts, using vertical moving tongues.

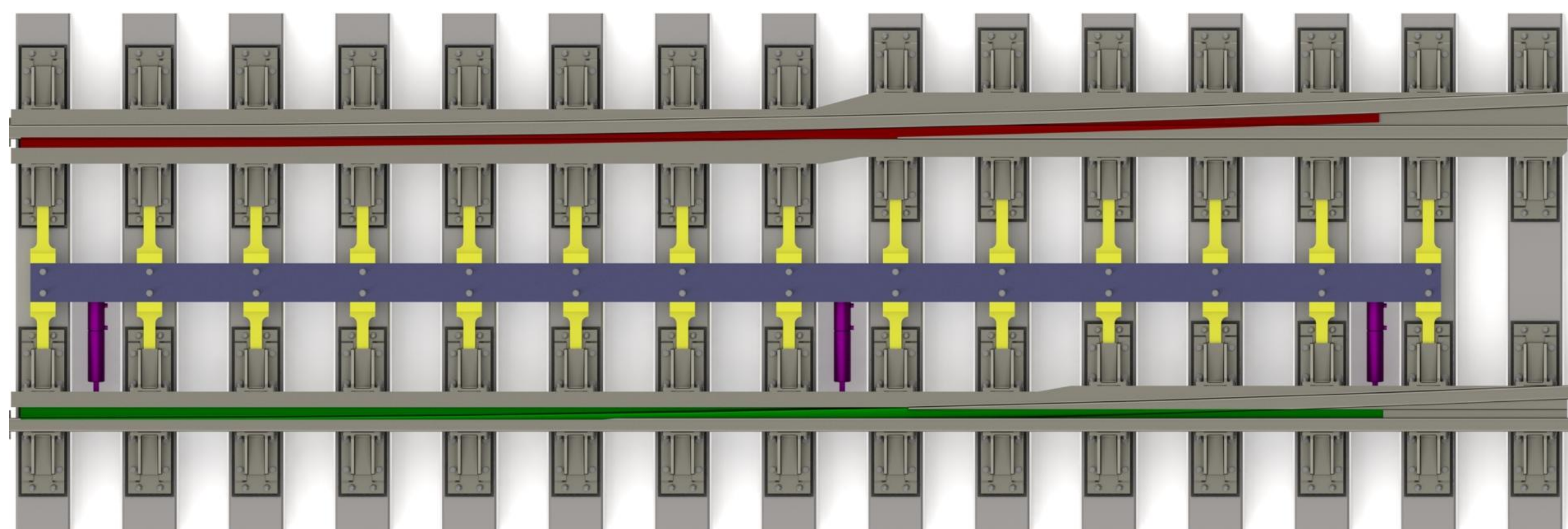
This in contrast with conventional turnouts fitted with open horizontal moving tongues which can be easy jammed and blocked by snow and ice falling in between the moving parts, causing delay, jamming and dangerous situations for rail-traffic, resulting in intensive (expensive) monitoring effort.



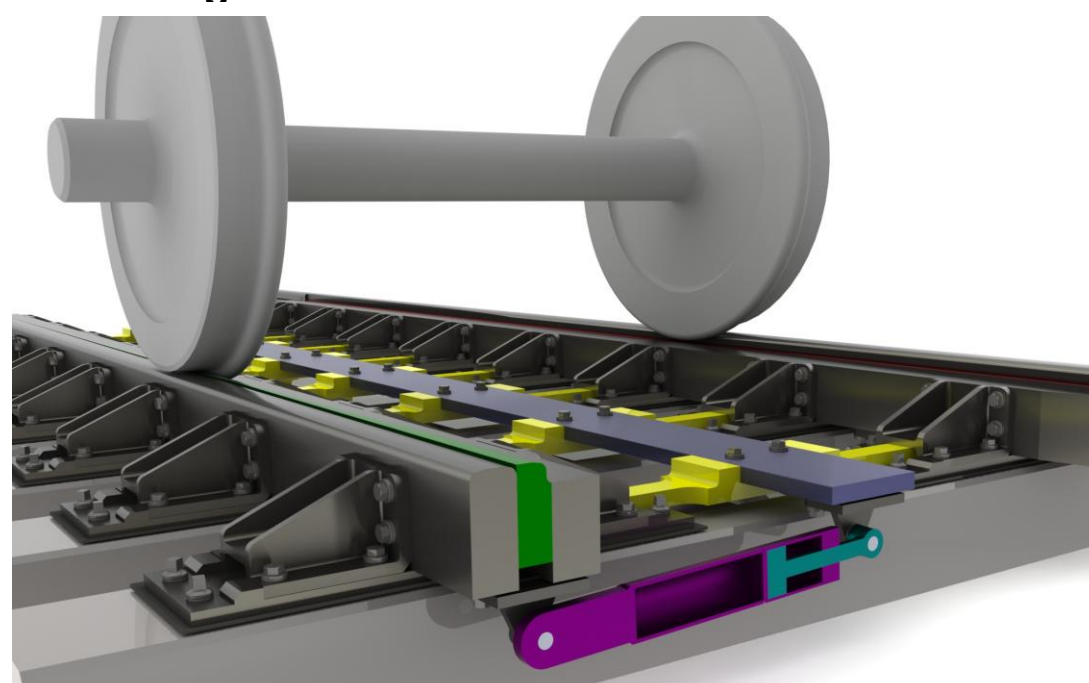
Left (red) tongue low, right (green) tongue high : Train moves to the left



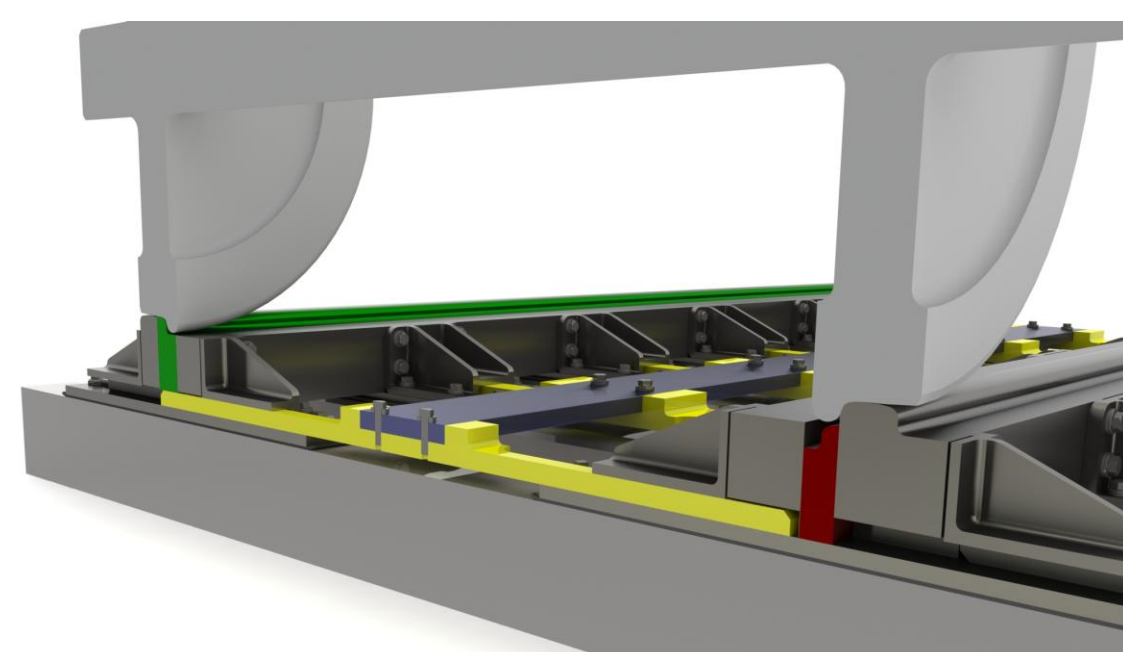
Left (red) tongue high, right (green) tongue low : Train moves straight forward



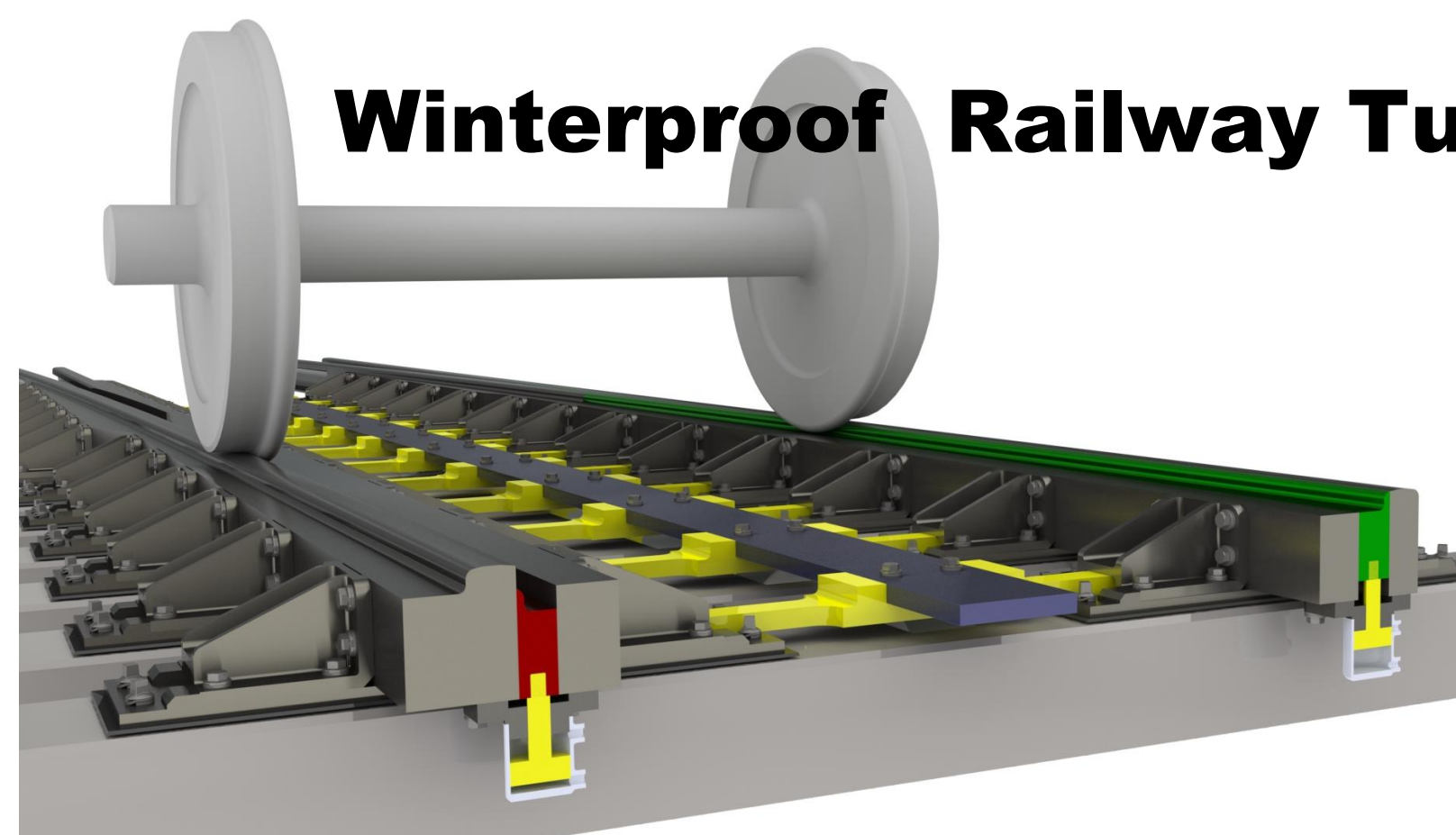
Top-view Winterproof Railway Turnout (WRT 2.0)



14 (yellow) lock-bars are connected to each-other by the (blue-gray) connection-strip. The (blue-gray) connection-strip can move horizontally by 3 simultaneous moving (purple) electro-hydraulic actuators or conventional electro-mechanical actuators.



The left (green) tongue (high position) is mechanically locked by 14 (yellow) horizontal moving lock-bars.



Each left (red) and right (green) tongue is provided with 5 small vertical moving hydraulic actuators.

Winterproof Railway Turnout Version 2.0

Features Winterproof Railway Turnout version 2.0 as shown :

Length	: 10,4 m
Radius	: 190m
Mass	: 15,2 tonne
Rail	: UIC60E1
Tongue movement	: vertical, electro-hydraulic
Lock-bar movement	: horizontal, electro-mechanical or electro-hydraulic

No mechanical functioning errors anymore caused by : snow, ice, glaze, frost, blizzards, sand, falling tree-leaves, stones etc....

No point-heating system needed.

Patent pending : September 2012