

# TURNOUT GRINDING WITH MODERN RAIL GRINDING MACHINES

## Turnout grinding as integrated part of modern turnout maintenance

### Description

The demand for a reduction in life cycle costs and growing environmental awareness means that care of tracks is becoming increasingly important. For us, a maintenance strategy based on these needs is a prerequisite for guaranteeing the availability and reliability of the railways.

A fixed part of an integrated maintenance strategy is regular grinding of the rails in track and turnouts; either to remove rolling skin from new rails and to shape the design profile, or to remove damage from the rail head – rail corrugations or rolling contact fatigue. The laydays of rails in tracks and turnouts are significantly extended by individual rail grinding, which reduces life cycle costs substantially. From the analysis and planning to proper, professional execution through to relevant cleaning: we offer a tailor-made concept

#### Benefits to the Customer

- » Cost optimization in LCC (Life Cycle Costs)
- » Short shut-down periods
- » Safety
- » Responsible environmental protection







# SPECIALIZED FOR TURNOUTS

### **Technical description**

- » Automotive 20 motor (stone) rail grinding machine for the removal of rail surface defects, removal of damage due to material fatigue caused by rolling contact, or at the low-carbon rail edge areas resulting from the rail production rolling process, and for rail head profiling
- » For use in turnouts, intersections, level crossings and tracks, without the need to dismantle any equipment
- » Two identical systems with 10 grinding units each, double safeguarding of grinding performance and operability
- » Each grinding head, consisting of a hydro motor, a spindle-bearing-unit and a grinding disc, is mounted and controlled independently allowing 10 different facets to be ground in one passing over the rails

- Grinding angle, lateral position as well as set positions are entirely programmed as grinding sequences
- » Grinding pressure individually selectable for each grinding disc
- The admissible angle range is 75° on the inside of the rail, up to 45° on the outside of the rail, measured vertically (see picture above)
- » Dust collection systems in both grinding carriages
- » Rail profile measuring system



