

## Recycling of railroad ballast for the construction of a container transshipment center for LEONHARD WEISS

### Jobsite report

**Location**  
Michelbach, Germany

**Execution**  
April 2014

**Milling depth**  
45 cm



Railways



## **Characteristics of this project**

- › The highly contaminated railroad ballast should be replaced
- › The disposal would be very expensive
- › The planned soil replacement would cause lots of transports and high expenses for new material as well as a high environmental impacts

## Factors of success for NovoCrete®

- › Immobilisation of the pollution in the existing railroad ballast material
  - ›› *Secure, durable and environmentally friendly*
  - ›› *Savings of costs for disposal and space in the waste disposal sites*
- › Solidification of the existing railroad ballast and the initial soil material for the later use as a base layer
  - ›› *Savings of costs for transportation and material as well as a decrease of environmental impacts*
- › Reducing of the strength of the asphalt layer
  - ›› *Time and money savings*

**Stone crushing and breaking of the initial material to a grain size distribution in the range of 0 to 50 mm**



**By stone crushing and breaking of the initial material a homogenisation can be achieved**



**The homogeneous initial material can later be milled easily and secure**



**Loading of the spreader unit with the delivered cement-NovoCrete mixture**



**Spreading of the exactly defined amount of cement-NovoCrete mixture per square meter (m<sup>2</sup>)**





**Milling of the cement-NovoCrete mixture by adding water**



**Milling of the cement-NovoCrete mixture by adding water**



**Levelling and compaction of the fine level is executed parallel and in several work steps**



**Leveling of the fine level by using a laser guided grader**



**Static and dynamic compaction of the fine level by using a steel drum roller for achieving the required degree of compaction**



**Fine level after compaction with subsequent irrigation (protection against evaporation)**



**Finished fine level after two days - ready for the installation of the asphalt layer**



**Installation of the new asphalt layer (strength 8 cm)**





**Installation of the asphalt layer by using a finisher**



## Utilisation of the finished area



# NovoCrete®

Soil stabilization technology

Please find further information about NovoCrete® as well as further jobsite reports for the fields of application paths, roads, areas, foundations, railways and harbours on our website [www.novocrete.com](http://www.novocrete.com)

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