#### Modular Tamping Machine

#### **ROMITAMP 2.0 PRODUCT PRESENTATION**

**A** 

BOBEL

ROMITAMP 2.0

### **SMALL TAMPING MACHINES DEVELOPMENT**

#### THE GOOD GETS BETTER





47 kW Engine Weight approx. 5,5 t Speed up to 15 km/h



100 kW Engine Weight from 8,5 t Speed up to 25 km/h



# VERSION SINGLE: SINGLE FIXED TAMPING UNIT

The ROMITAMP 2.0 "Single" is the basic version of the ROMITAMP 2.0 series and has a fixed tamping unit on one side. The asynchronous compaction movement and optimal tamping frequency ensure a homogeneously compacted ballast bed.

The following features characterize the ROMITAMP 2.0 "Single":

Tamping performance: up to 200 sleepers / h Working on both sides via optional turning device Optimally visible work area Adjustable tamping depth (up to 500mm) Driving speed up to 25 km / h Stage V Engine Hydraulic disc brakes Main dimensions LxWxH: 5.40 x 2.35 x 2.75 m Weight from 8,700 kg Track gauge variable from 900 to 1,676 mm





# VERSION DUAL: TWO FIXED TAMPING UNITS

The ROMITAMP 2.0 "Dual" has a fixed tamping unit on both sides. As a result, the working speed is doubled by tamping both rail tracks in parallel. The asynchronous compaction movement and optimal tamping frequency ensures a homogeneously compacted ballast bed.

The following features characterize the ROMITAMP 2.0 "Dual":

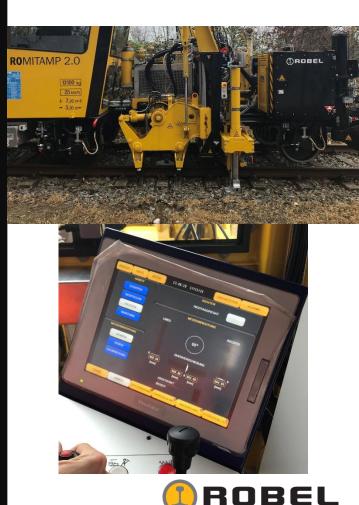
Tamping performance: up to 400 sleepers / h Optimally visible work area Adjustable tamping depth (up to 500mm) Driving speed up to 25 km / h Stage V Engine Hydraulic disc brakes Main dimensions LxWxH: 5.40 x 2.35 x 2.75 m Weight from 9,219 kg Track gauge variable from 900 to 1,676 mm





# **OPTION: LIFT AND LINE MODULE**

- Hydraulic lifting tongs with max. 100 mm height correction
- No additional tools for height correction required
- No additional staff for manual correction
- Lateral displacement +/- 100mm (2<sup>nd</sup> Person for continuous measuring required)
- Digital display of cross level
- Width of the machine increased from 2250 to 2760 mm (Gauge 1435 mm)
- Module weight: approx. 1060 kg



# OPTION: ON/OFF TRACKING WHEELS (STATUS: PROTOTYPE)

- Hydraulically extendable and driven
- all terrain wheels for on/off tracking parallel to the direction of travel on different surfaces
- Steering (max. +/- 10°) of 4 wheels (2 disengageable)
- On/Off tracking without crane and overhead isolation
- Increase availability of track
- On-road logistic possible
- The machine length is increased by 1700 mm
- Module weight: approx. 2090 kg







# **OPTION: TURNING DEVICE**

- The machine can be turned on the track
- Can be moved in and out without a crane (in combination with the rubber wheels extension)
- Allows working in both directions
- Option also available for turning on track cant
- Simplified logistics





# **OPTION: RUBBER TYRES**

- Attachable rubber wheels
- The machine can be moved on asphalt / low loaders
- On/Off tracking without crane possible (in combination with the turntable)





### **OPTION: CABIN**

- Heated and air-conditioned, closed cabin
- Offers a protected and comfortable workplace
- Operation in all weather conditions
- Protection from ballast dust
- Height of the machine with cabin: 3030 mm

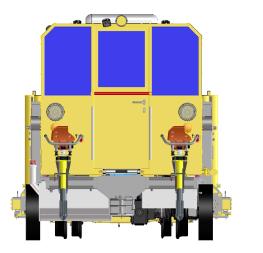




# **OPTION: TRANSPORT OF SMALL MACHINES**

- Allows transportation of all ROBEL vertical tampers and other hand-held machines
- Machine length increases by 550mm
- Not compatible with the On/Off tracking wheels







### **GAUGES AVAILABLE**

- 900 mm
- 914 mm
- 950 mm
- 1000 mm
- 1067 mm
- 1435 mm
- 1520 mm
- 1524 mm
- 1600 mm
- 1668 mm
- 1676 mm





## **OPTION: CHANGE GAUGE**

- Scope of delivery is two wheelsets
- Possibility to operate on different gauges
- For configuration without lifting & lining device
- Modifications can be carried out by the user in the depot

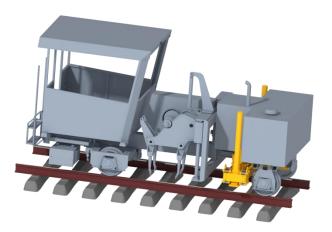




# **OPTION: CONVERSION PACK**

- Contains two wheel sets for two track gauges
- Contains components to adjust the lift and lining unit for two track gauges
- Modifications can be carried out by the user in the depot







# **OPTION: MOTOR WITH EMISSION LEVEL 3A**

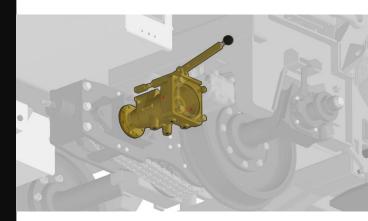
- Ideal for countries with lower emission requirements
- Allows the use of poorer fuel quality
- EDG engine (emission downgrade) corresponds to emissions level IIIA.
- The difference to the Stage V engine is that the EDG engine is equipped without exhaust gas after treatment and a simpler control unit is built.





# **OPTION: COUPLING FOR EMERGENCY TOWING**

- In order to tow the ROMITAMP 2.0 without having to remove the hydraulic motor, an optional coupling can be installed.
- This coupling can be engaged/disengaged using a lockable lever.





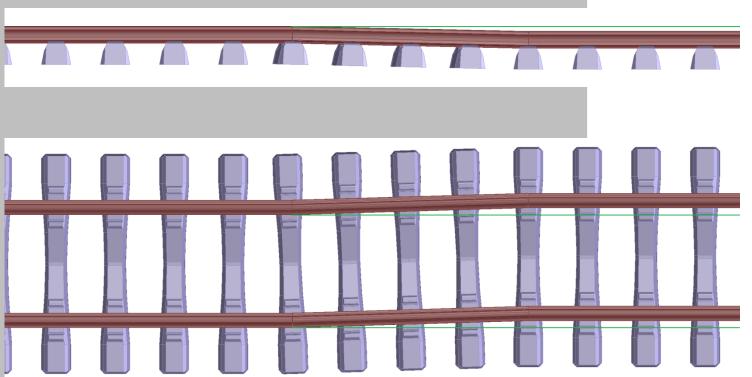








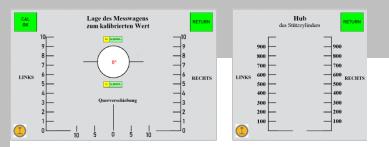


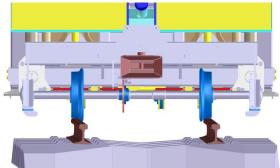


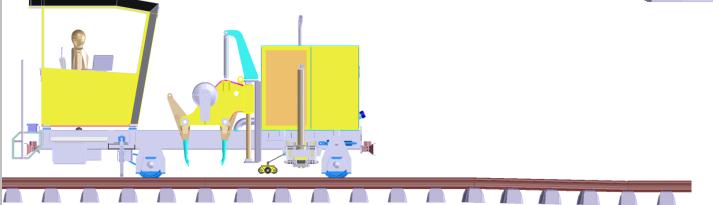
The following parameters are determined by a preliminary measurement:

- Height
- Offset
- Cant







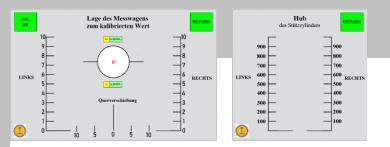


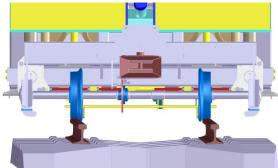
The machine enters the worksite

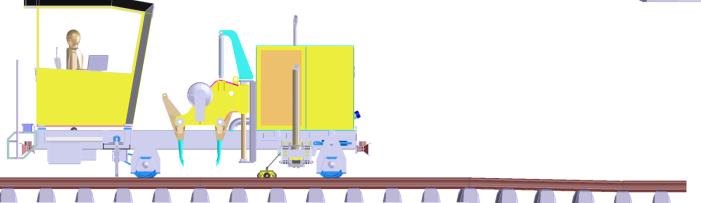
Track erro

**1.Construction Site Start** 2. Attach meas

**C**ROBEL



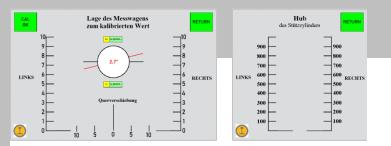


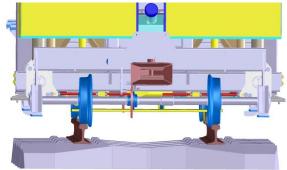


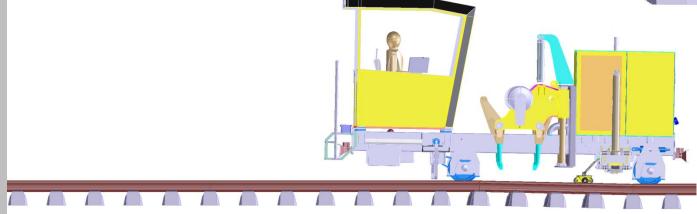
Measuring device is placed on the track

1.Construction site start **2.Attach measuring device** 3.Record track error





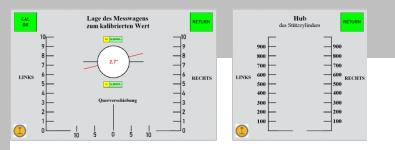


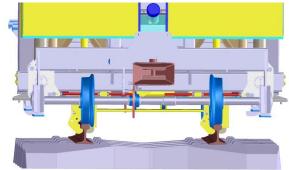


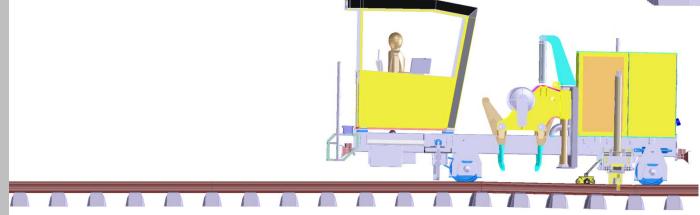
The machine goes through the worksite and records the track error (cant).

2. Attach measuring device **3. Record track error** 4. Clamps grip rail





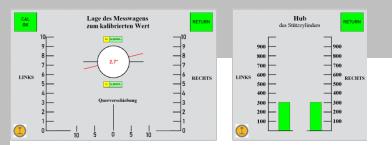


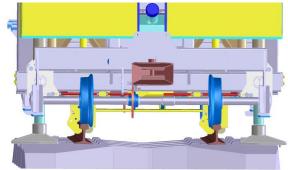


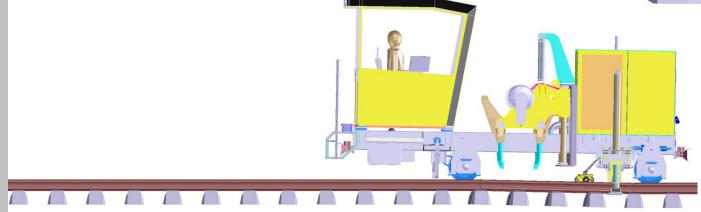
Clamps grip the rails to allow track lift & alignment

3.Record track error **4.Clamps grip rail** 5.Extend the lift cylinders





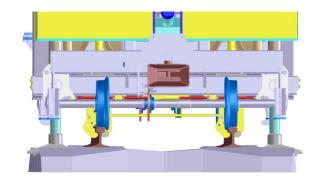


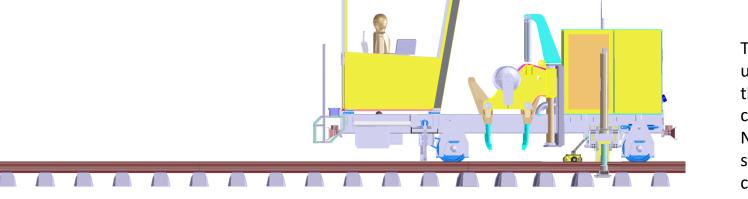


Lift cylinders are extended until they have a firm footing in the track bed

4.Clamp grip rails **5. Extend the lift cylinders** 6.Lift the track







The machine is raised until the difference in the cant has been corrected. NB: The indicated stroke of the support cylinders has no relation to the track height.



5.Extend the lift cylinder

Lage des Messwagens zum kalibrierten Wert

Ouerverschiebung

LINKS

RECHTS

LINKS

50

20

#### 6.Lift the track

Hub des Stützzylinders

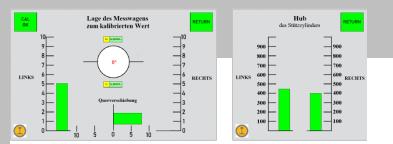
RECHTS

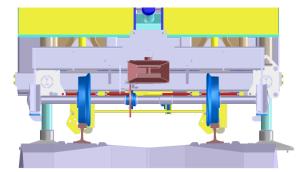
500

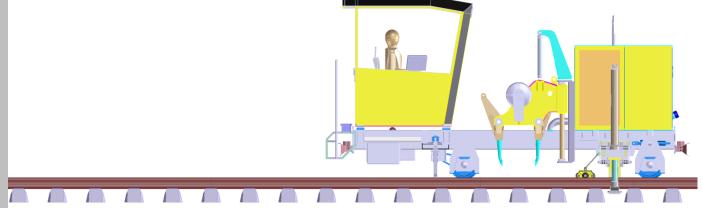
200

100

7.Align the track







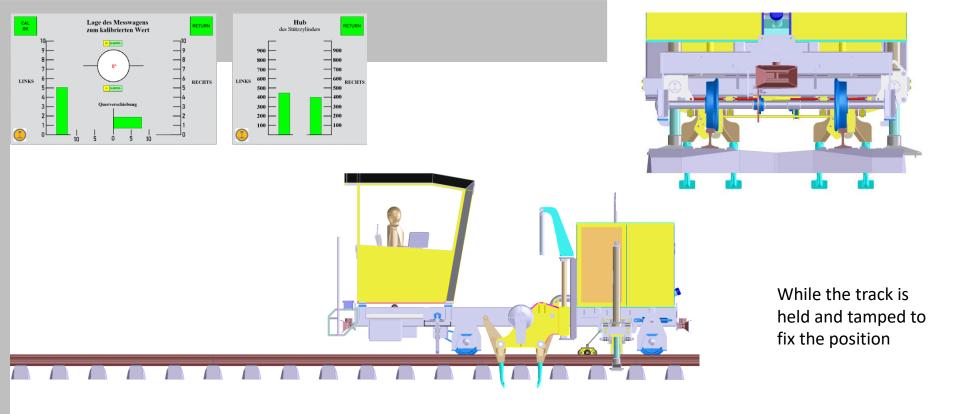
Track is aligned in the horizontal plane to correct the measured error

#### 6.Lift the track

#### 7.Align the track

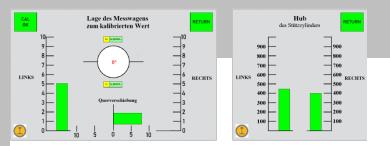
8.Tamp

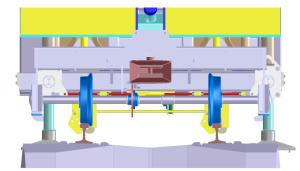


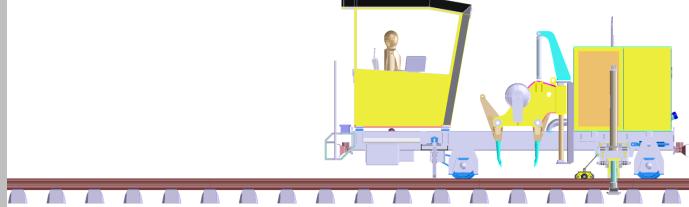






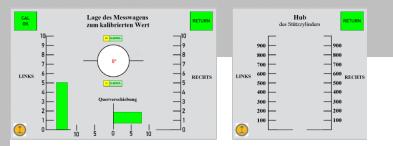


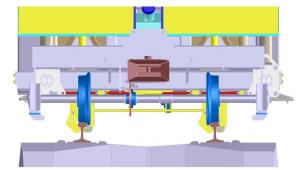


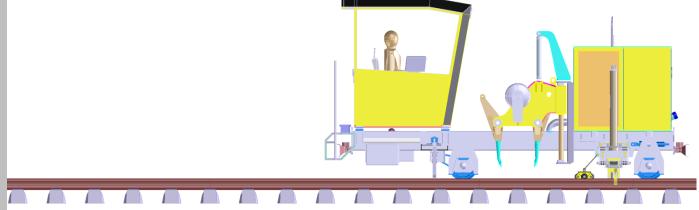


8. Tamp 9.Tamping complete 10.Retract the lift cylinder





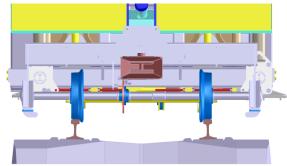


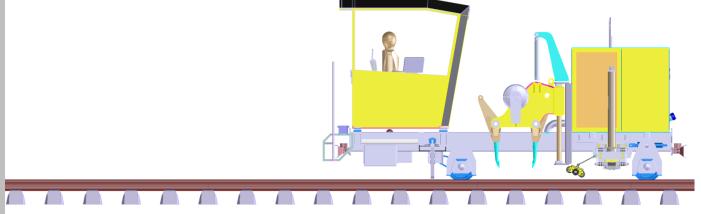


The lifting cylinders are retracted after the tamping process

9. Tamping complete **10. Retract lift cylinders** 11. Open rail clamps & lower track







600 RECHTS 500

Hub des Stützzylinders

Lage des Messwagens zum kalibrierten Wert

Ouerverschiebung

LINKS

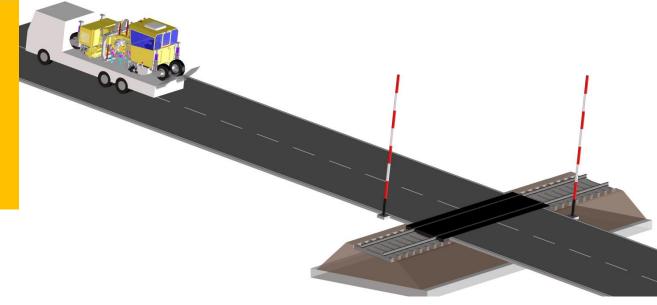
RECHTS

LINKS

Once the fault has been repaired, the rail clamps are released and the measuring instrument is raised

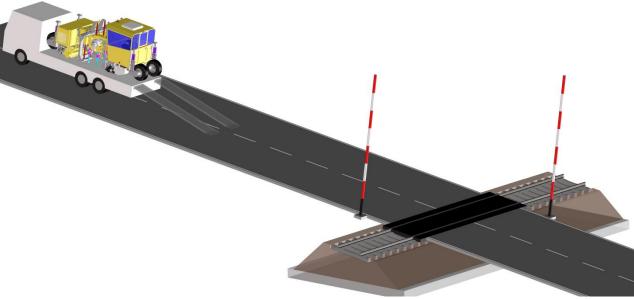


11. Open rail clamps & lower track 12. Open rail clamps & Raise measure device



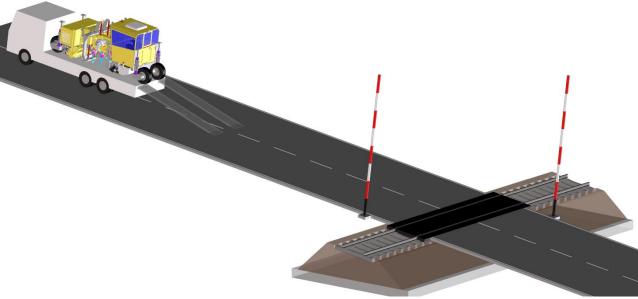






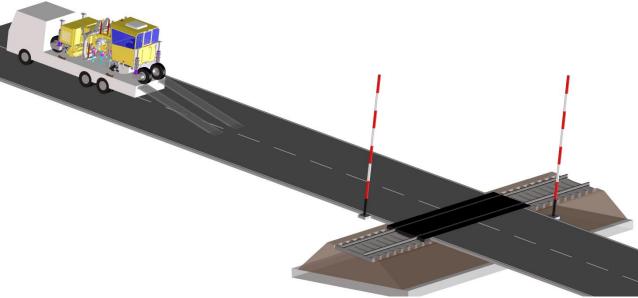






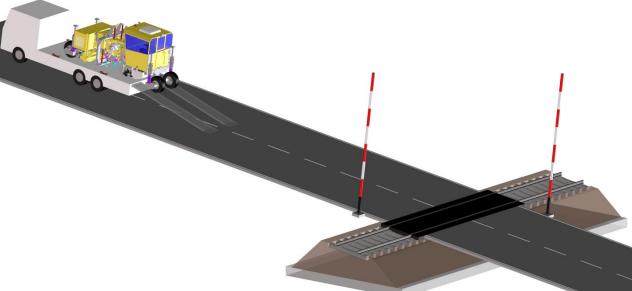


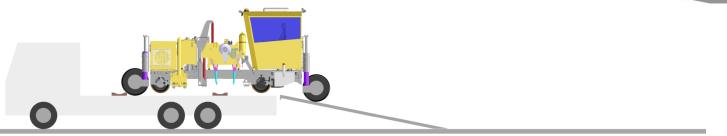




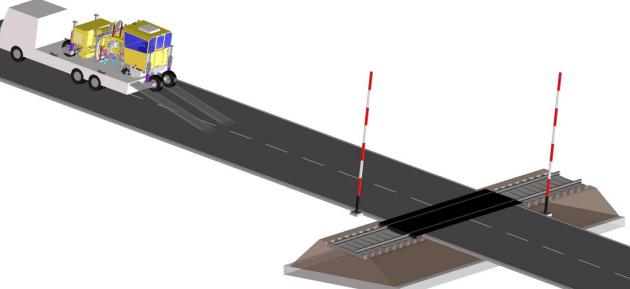


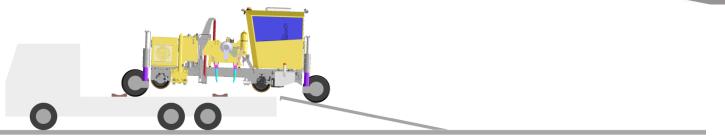




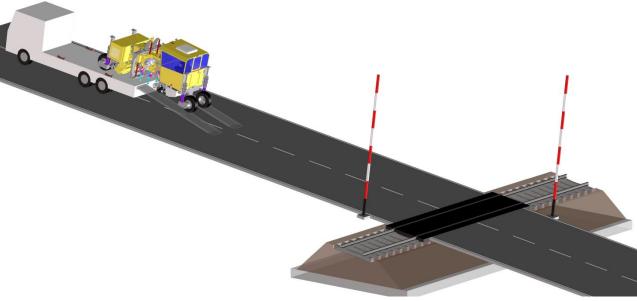






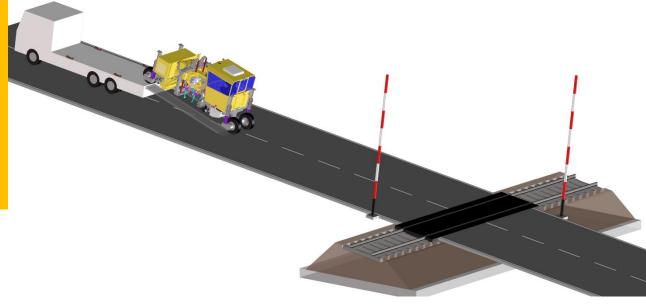


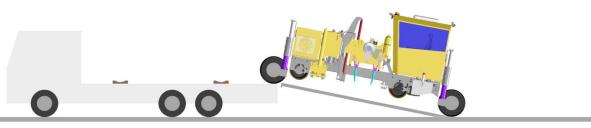




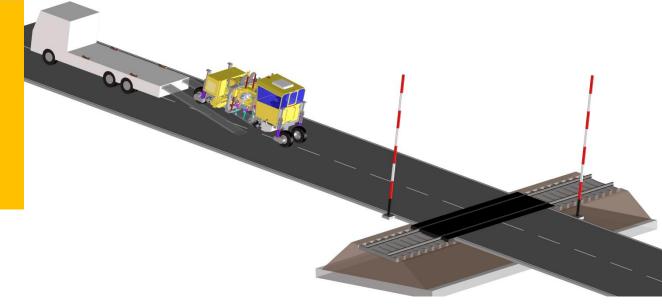


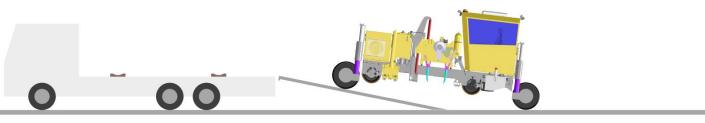




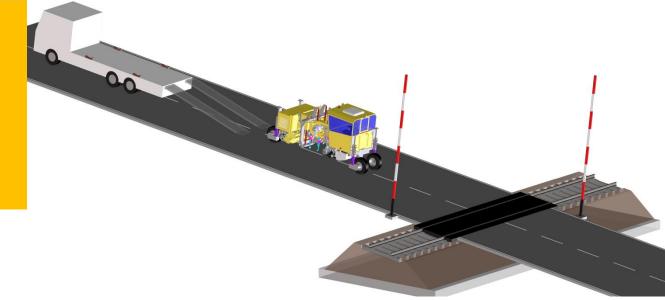






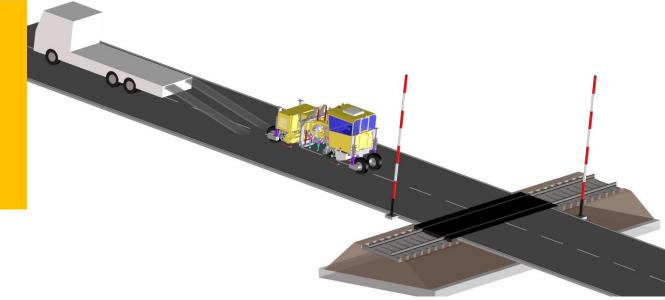






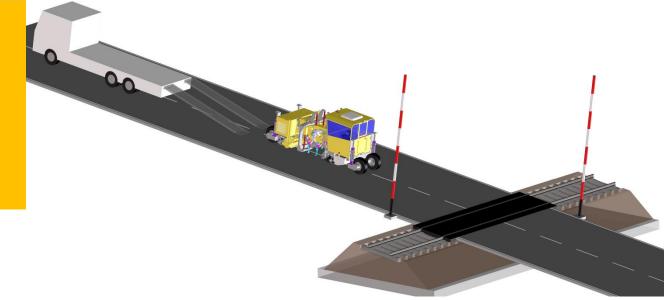






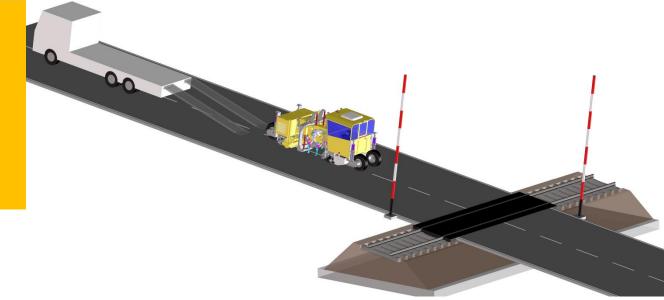






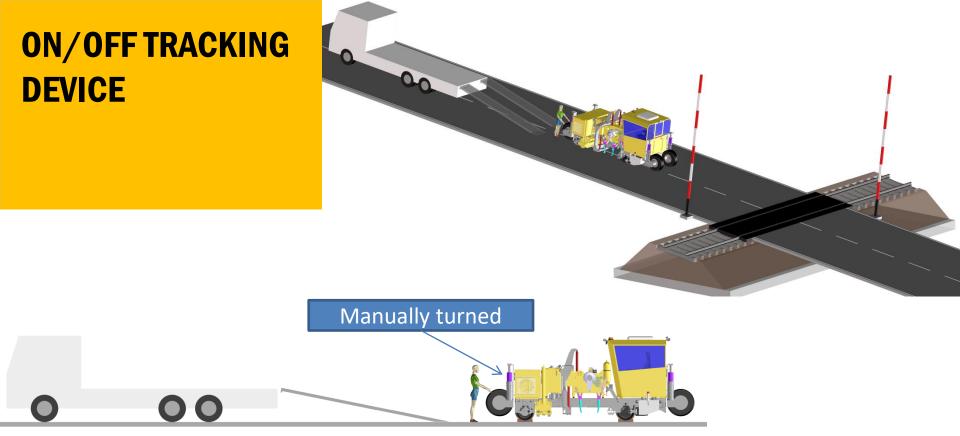




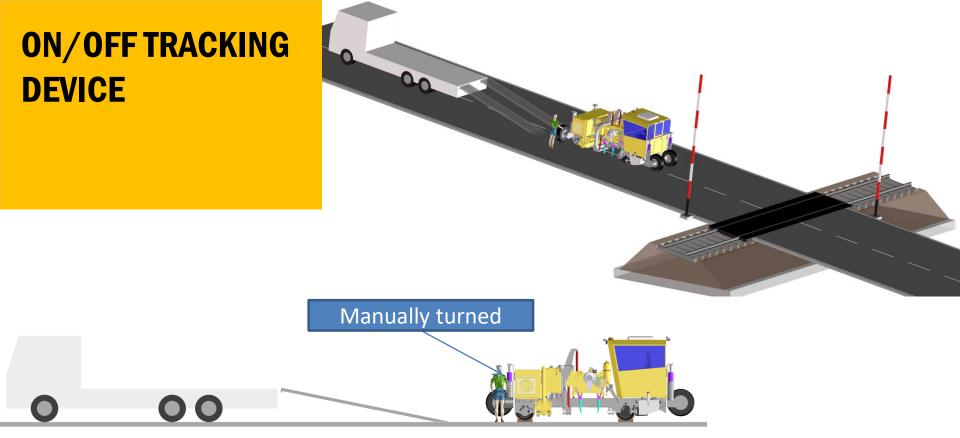




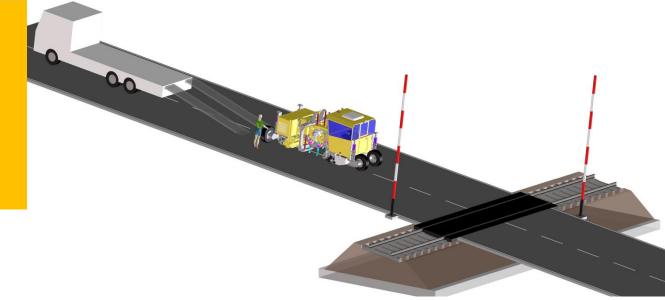






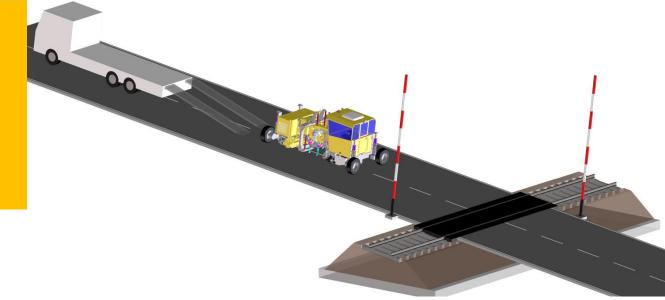






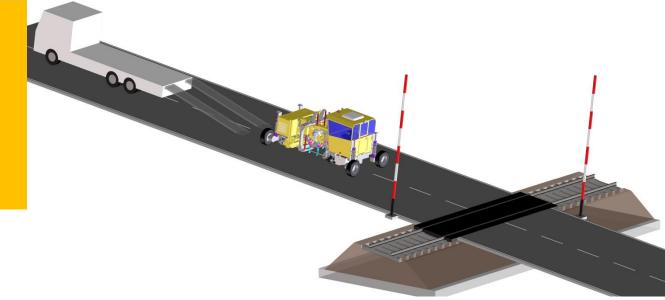






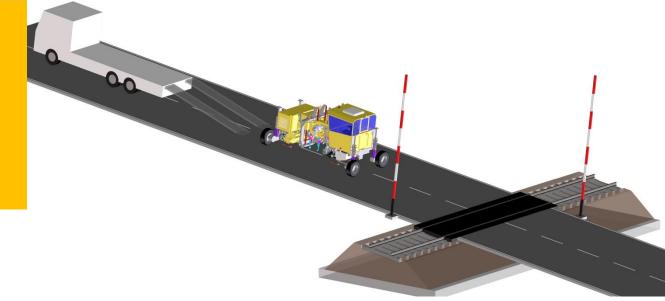






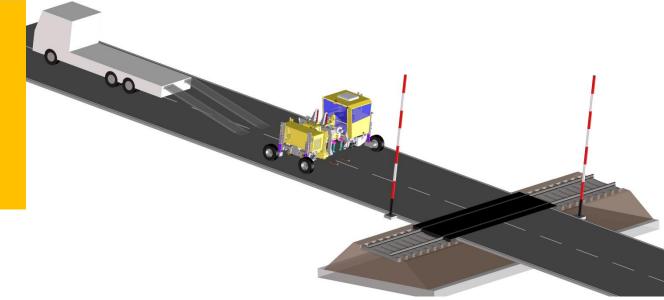






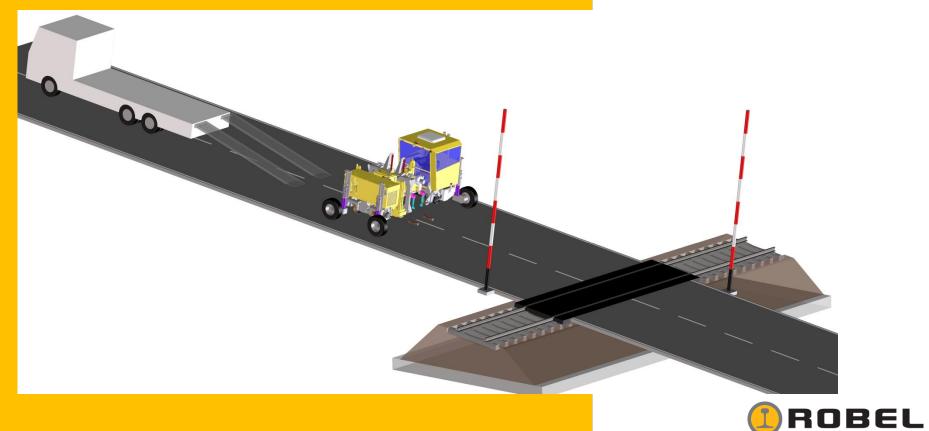


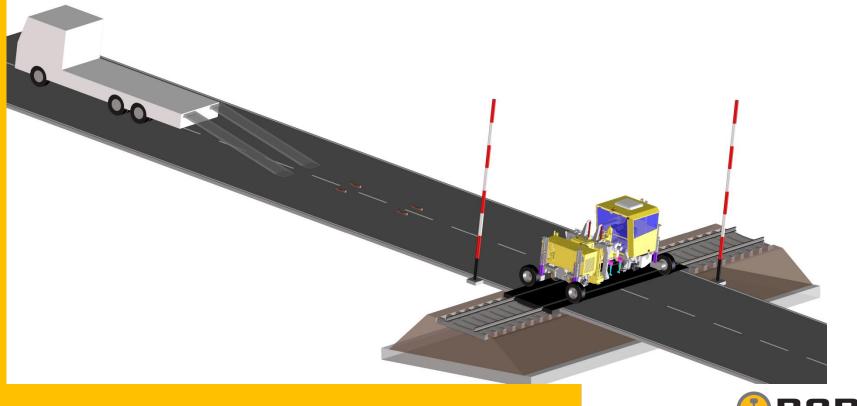




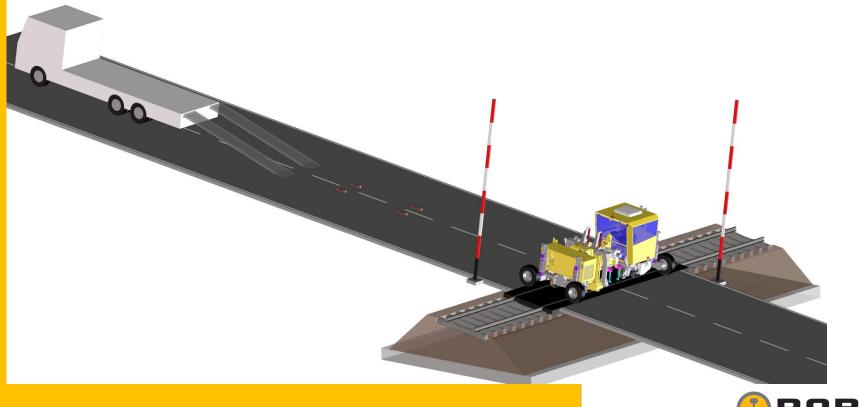




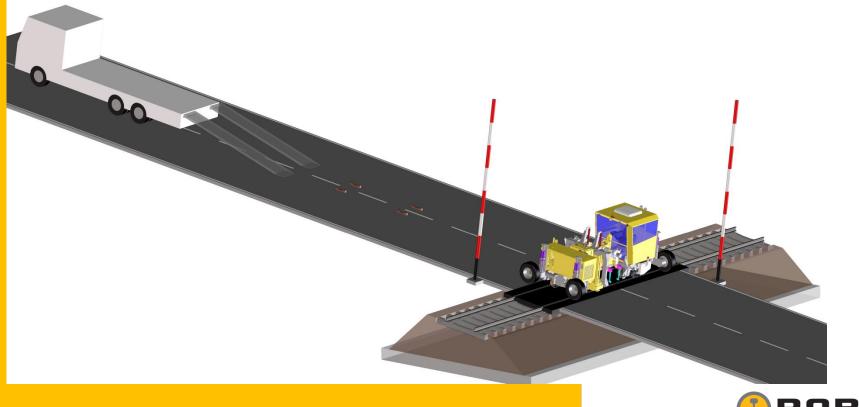




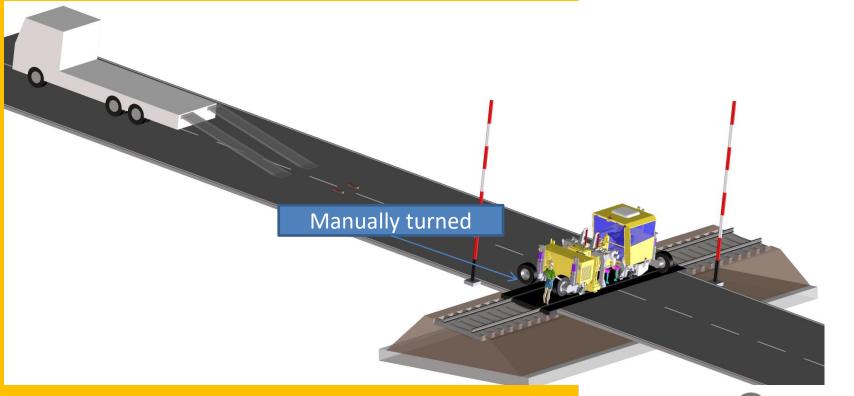




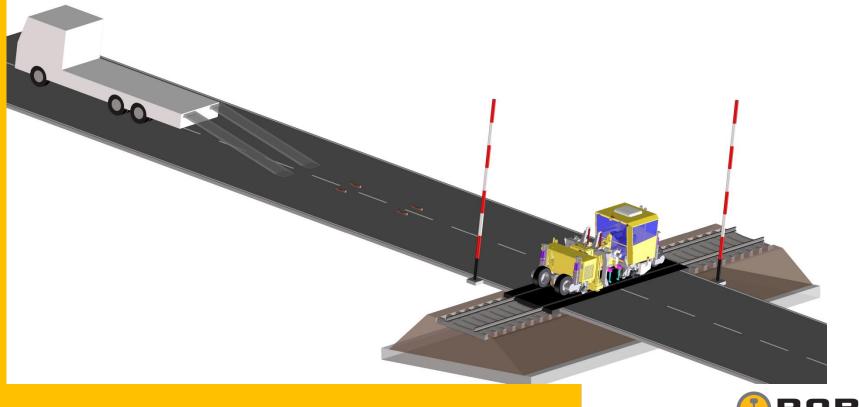




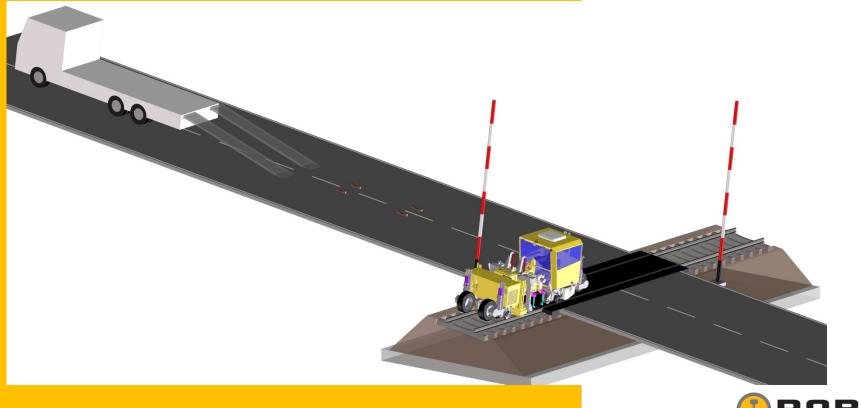














## LOADING BY MEANS OF A CROSSBEAM

Crane Crossbeam

- On / off tracking using Rockinger coupling and cable winch (incorporates turntable + rubber wheels)
- Loading eyes are welded to the frame



# **OFFLOAD RAMP**

