











# **Installation Instructions**

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These instructions describe the installation of our "STRAILastic\_A" rail damper.

#### **PLEASE NOTE**

All work surfaces need to be cleaned prior to starting installation. In addition, all guidelines and manufacturer's instructions need to be followed unconditionally.

Read all documents accompanying the supplied materials prior to use.

All legal requirements, as well as guidelines concerning health and environmental protection are to be complied.

#### # 1 / TRACK AVAILABILITY

The system can be installed during ongoing train traffic, as well as during nighttime check intervals, as soon as extended train breaks (time window), which are longer than 5 min. become available.

In order to coordinate work progress we absolutely recommend drawing up an appropriate and detailed work schedule (always depending on the train schedule).

### # 2 / PREPARATION OF THE RAIL WEBS

If required, clean rail web using suitable brushing devices (must be freed of any substantial rust and/or dirt) and afterwards remove loose dirt particles with compressed air.



### #3/INSTALLATION

Bring **STRAILastic\_A** rail damper to installation position (use transport platform), place into sleeper bay.

Wet the entire surface of the rail chamber with **STRAILastic\_A** release agent (e.g. using a spray container / portable pressure sprayer, brushing also possible).

Apply **STRAILastic\_A** fixing paste (color: black; painted gray in the picture for better visibility) to the entire contact area of the rail dampers with a toothed spreader.

Just before installing the **STRAILastic\_A** rail dampers wet the entire surface of the rail chambers a second time (the rail is allowed to be wet).





Press the rail damper with applied **STRAILastic\_A** fixing paste onto the rail (install as much as possible in the middle of the sleeper bay) and pass the part of the fixing clamp with the fixing pins under the rail.

The STRAILastic\_A fixing clamp is delivered pre-assembled.



Press the opposite component (**STRAILastic\_A** fixing paste applied here as well) as parallel as possible onto the rail and mount the other half of the fixing clamp onto the fixing pins.

Assemble manually using a bit of pressure.



After the rail dampers with applied **STRAILastic\_A** fixing paste have been properly positioned on both sides of the rail and assembled using the **STRAILastic\_A** fastening kit, fix as follows:



Using the **ROBEL Fast-Clip-Machine** (incl. special attachable **STRAILastic\_A** attachment) the clamps are pressed into the sleeper bay, so that the clamps snap into their final position.



#### PLEASE NOTE

Different lengths are necessary for the fixing pins, due to the different widths of the rail base. You receive the pre-assembled and proper fitting fixing clamps with delivery. The machine, however, needs to be set to the corresponding end stop position of the respective width of the rail base. A corresponding template is included in the scope of supply for an exact positioning.

In case of welding joints etc. the area of the rail damper can be cut out using commercially available tools.

#### Add rail branding

using a branding iron or embossing die.



### # 4 / EXTENSIONS (e.g. current return, grounding etc.)

Extensions or recesses (e.g. current returns), which we have been informed about in a timely manner prior to manufacturing/delivery your product, can be taken into consideration during production of the **STRAILastic\_A** rail dampers (please give us the appropriate measurements).

In case of undefined extensions (e.g. grounding cables) it is possible to prepare these areas using commercially available tools (see also Welding Joints).

**STRAILastic\_A** rail dampers have been tested in compliance with DIN IEC 93 & EN 61340-5-1:2007, VDE 0303/30 regarding their electrical volume and surface resistivity.

See Test Report EMA-SMG-No. 8191186-AT/1 from TÜV Rhineland > LGA dated 26 March 2009.

### # 5 / INSTALLATION PERFORMANCE

Current experience allows a manual installation performance (without check intervals, dependent on the cycle time) of approx. 60 meters of track per hour (calculation is based on using 10 workers).

### # 6 / RAIL GRINDING / RE-PROFILING / TAMPING

For rail grinding, tamping, rail measurement as well as track works with ballast plough it is usually not necessary to remove any **STRAILastic\_A** components.

# # 7 / SELECTIVE REMOVAL

### 7.1 / Rail Welding

**STRAILastic\_A** rail dampers are resistant against temporary increasing temperatures. This however applies only to the scope of minor build-up welding.

The components need to be removed in cases of rail breakage and/or multi-layer build-up welding.

# 7.2 / Rail Replacement

First loosen the anchoring of the fixing clamps using dismantling tool and remove the clamps. Then place a special lever-tool behind the rail damper and lever it out. After removing the **STRAILastic\_A** rail dampers the attachments can be opened and the rail can be easily lifted from the sleepers.

Before reinstalling the **STRAILastic\_A** rail dampers, wet the rail using **STRAILastic\_A** release agent and apply a new layer of **STRAILastic\_A** fixing paste on the components.

Afterwards, installation is carried out as described in the assembly instructions.

### 7.3 / Rail Breakage

In this case remove the components over a length of approx. 100 cm on both sides of the rail breakage area > see Rail Replacement.

Afterwards, the broken joint can be welded.

After welding has been completed the removed component needs to be adapted to the new rail geometry. Complete installation in accordance with Assembly Instructions/Rail Replacement.

#### 7.4 / Removal

#### **INSTALLED STATE**

**STRAILastic\_A** rail damper and fixing clamp (painted white for better visibility – see pictures on right).



### ASSEMBLY TOOL TO INSTALL STRAILastic\_A

Prepare the removal aid (see picture below).



Insert the **STRAILastic\_A** removal aid into the openings of the fixing clamp provided for this purpose.



Shove the slide hammer handle removal aid **STRAILastic\_A** with some force in direction of the **STRAILastic\_A** fixing clamp.

As a result of this movement the pins are shoved into the fixing clamp.



The latching grip is opened far enough to remove one half of the fixing clamp.



After the first half of the fixing clamp has been removed, the other side with the fixing pins can also be removed.







Remove the **STRAILastic\_A** rail damper from the rail using a crowbar or something similar (avoid damaging the damper).

Clean rail from any residues with a wire brush/broom.

# 6.5 / Re-Installation

For re-installation please follow the steps as described in point # 3 / INSTALLATION.

# #7/QUALITY & ENVIRONMENT

KRAIBURG / STRAIL is a certified company according to standard ISO 9001: 2000.

KRAIBURG / STRAIL uses environmentally sound materials.

Third party controlled according to DIN ISO EN 18200