

Made in Germany

Gauge N

LUX-Modellbau

For more than 30 years

Innovative cleaning technology
for model railways

usable with analog and digital control devices



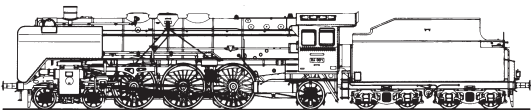
Rail vacuum cleaner wagon



Rail beveling wagon



Wheel cleaning devices



Status: February 2017

N-rail vacuum cleaner wagon

For all N-rail and operating systems analog or digital

Art.-No. 9070



Made in Germany

With the N-rail vacuum cleaner wagon you will remove from your railway layout:

- dust and dirt particles from the surrounding air or landscape construction

you will achieve:

- safe function of the model vehicles
- safe conductivity from the rail or mid-point conductor
- trouble free running

The mobile and fully functional LUX-rail vacuum cleaner wagon for all N-rails and control systems was specially developed to remove loose dust and dirt particles over the complete track layout. From experience, these small deposits of dirt from the surroundings and construction of the landscape are the main reason preventing safe function of the precision parts (gear box, stanchions, bearings, electric pick-ups etc.). Even the smallest deposit of dirt on the rail head can lead to disruption of the operation. The innovative and reliable cleaning system of the LUX - rail vacuum cleaner wagon is built into a boxcar. This enables the wagon to reach especially difficult to access areas of the model railway layout like tunnels, staging yards and rails with overhead catenaries and assures their proper cleaning. The service-free operation times of all model railway vehicles are drastically increased. The rail vacuum cleaner wagon gets its power directly from the rail and it can be towed or pushed by any motorized model engine. It cannot run on its own and does not have its own drive mechanism.

Due to the integrated electronic control the cleaning wagon can be used on analog or digital layouts. The cleaning technique is driven by a long living and service-free bell anchor motor (Faulhaber¹). The revolution of the cleaning unit cannot be changed. The current supply is assured by a 4-point wheel pick-up at the bogie of the wagon. The innovative control electronic (SSF-09) works by movement (start-stop automatic). If the wagon is moving (pulled or pushed by an engine) on a current supplied rail, the cleaning drive is activated automatically. If the running unit comes to a stop - for example in front of a signal - the cleaning drive will be deactivated automatically.

The vacuum brush (see picture 1) is fixed at the chassis of the boxcar and can be replaced. This assures the optimal effectiveness of the brush at the top level of the sleepers. It clears

minute particles from the sleepers and the rails. Through the suction duct, the dirt particles are blown into a collection box. The sucked in air is blown out through a micro filter in the cover of the dirt receptacle.

As an augmentation for the N-rail vacuum cleaner wagon we offer a N-scrap collector Fe 1 (Art-No. 9075) add-on set to collect iron containing parts (nails, screws, shavings etc.) from your whole track layout.

Technical details:

The wagon is constructed according to the Norm of European Model Railways (NEM) and is protected by a patent. The N-rail vacuum cleaner wagon can be operated by standard half wave or impulse width controllers.

The current should be 0-25 V (DC). The current draw is approx. 30 mA, max. motor voltage 5 volt DC. The standard coupling is according to NEM 356; weight approx. 50 grams (1.76 ounces), length over bumper 115.5 mm (4.55 inches), width 21.7 mm (0.85 inches), height over rail top 31.5 mm (1.24 inches).



N-rail beveling wagon

For all N-rail and operating systems analog or digital



With the N-rail beveling wagon you are able to remove from your layout:

- persistent oil and dirt residue
- residues of traction tires
- oxidized layers on rails heads

you will achieve:

- considerable increase in running hours of all vehicles
- safe current pick up from rails, mid-point conductors and overhead catenaries
- trouble free running on the whole layout

The fully functional mobile rail beveling wagon for all N-rail and control systems was especially developed for the removal of

persistent oil and dirt residues on the rails. Even minute dirt particles on the rail head can lead to major operation problems. Due to the innovative and reliable cleaning system in a boxcar, you can clean without any problems difficult to reach areas of your layout in tunnels, staging yards and overhead catenaries equipped track systems. The running times (operating times) of all model rail vehicles will be considerably increased and a safe conductivity from your rails will be achieved. The beveling wagon is supplied by the rail current and can be pulled or pushed by any of the shelf model engines. It does not have a driving motor on its own.

Due to the integrated electronic control, the cleaning wagon can be operated on analog or digital controlled layouts. The cleaning technique is driven by a long living and service-free bell anchor motor (Faulhaber¹). The revolution speed cannot be changed. The current pick-up is assured by 4-point wheel pick-ups at the bogie of the wagon.

The innovative control electronic (SSF-09) works by movement (start-stop automatic). If the wagon is moving (pulled or pushed by an engine) on a current supplied rail, the cleaning drive is activated automatically. If the running unit comes to stop - for example in front of a signal - the cleaning drive will be deactivated automatically. The drive unit is completely closed and therefore optimally protected from dirt.

A rechargeable battery included in the cleaning boxcar is charged by the rail current and buffers the motor of the cleaning mechanism during interruptions of the current supply of the rails (e.g. due to dirt). Hence, it can keep up the cleaning function even during short current interruptions of rail sections.

The high revolution rotary cleaning unit runs over the top of the rail profile and can be adjusted by a height control screw. Due to the positioning of the bogies, the beveling wagon is extremely safe running in curves and on switches. A special guidance system for curves of the polishing rotor assures an optimal cleaning effect even in complicated arranged set of switches.

The mainly soft polishing material moulds itself slightly around the rails profile and therefore even cleans the problematic inside of the rail head with the least amount of friction.

To clean the rail installations, there are rotors available with different materials (see picture 2). The rail beveling wagon will be delivered with the polishing rotor (Art-No. 9417).



As an augmentation for the N-rail beveling wagon, we offer a N-scrap collector Fe 2 (Art-No. 9475) add-on set to collect iron containing parts (nails, screws, shavings etc.) from your whole track layout.

Technical details:

The wagon is constructed according to the Norm of European Model Railways (NEM) and is protected by a patent. Important! The built in control circuit board protects the motor from too high voltage and assures the proper revolution direction of the rotor. The integrated control electronic enables the operation by standard half wave or impulse width controllers.

The current should be 0-25 V (DC). The current draw is approx. 60mA, max. motor voltage 2 volt DC. The standard N-coupling according to NEM 356, weight approx. 56 grams (1.98 ounces), height over rail 31.5 mm (1.24 inches), length over bumper 111 mm (4.37 inches), width 21.8 mm (0.86 inches).

N-wheel cleaning unit

For all N-rail and operation systems analog and digital



The N-wheel cleaning unit

- available as flush mounted or table unit
- cleans driving and non driving wheels of model railway vehicles
- removes oil and dirt residues from the wheels

Therefore you achieve

- clean wheel arches of engines, coaches and trucks
- removal of oil from the traction tires
- safe function of all model railway vehicles

The unit is supplied by the rail current (analog or digital) and therefore you can run over it. The N-wheel cleaning unit will clean oil and dirt residue from all wheels moving or not moving of track bound vehicles. The unit is equally suited for engines and wagons und can be integrated into the model railway layout. Complete trains can run over it.

Two brass rods covered by polishing material - driven by a 12V DC motor (by Faulhaber¹) - oscillate under the engine or wagon wheels. Therefore, the cleaning effect acts on the wheel arches of engines and wagons. The 175mm (6-89 inches) long polishing rods (see picture 3) achieve that even wheels with bigger diameters are cleaned.

With the induction of a small driving voltage, the wheels of the standing engine will start to turn. Non motor driven wheels (e.g. wagon wheels) will be cleaned by running them over the oscillating polishing material. To achieve this effect the wagon can be moved by hand or a pulling or pushing engine. For digital

control of the wheel cleaning unit it can be ordered with a built in decoder (later upgrade possible as well).

The time consuming cleaning of the wheel arches is not necessary any more. Your engines

or wagons receive clean wheel arches which results in optimal conductivity between the rails and the wheels.

The motor of the wheel cleaning unit can be supplied with regulated **0-12 Volt (DC)** direct current. Any of the shelf-controllers will provide this supply current. Operated digitally you need an engine decoder with high frequency motor control. The cleaning areas of the flush mounted and the table unit are identical. Whilst the flush mounted unit is for integration into the layout board we will deliver the table unit built into an acrylic glass mounting ready to use. To control the wheel cleaning unit digitally you can order it with your system compatible decoder (can be upgraded later). We will upgrade your specifically needed decoder (if applicable for a fee) according to your wishes. Please specify clearly when ordering.

The flush mounted unit should be inserted into the layout board at an easily accessible position preferably into a siding of your layout. For the mounting, you need a cut out with the following measurements: Length 300 mm (11.81 inches), width 40 mm (1.57 inches) and height from the layout top edge 55 mm (2.17 inches).

Technical details:

The wheel cleaning unit was constructed under consideration of the Norm of European Model Railways (NEM) and is protected by a patent. The electric power of the driving motor cannot be supplied by half wave or pulse width controlled current.

Voltage 0-12 V DC, current supply digital by a multi protocol decoder (Motorola-, DCC-, Selectrix-data format), current draw approx. 100 mA, max voltage at the operating motor 12V DC, effective operating area of the cleaning mechanism is 175 mm (6.89 inches) flush mounted and table unit, table unit measurements: length 900 mm (35.43 inches), width 70 mm (2.76 inches), height 62 mm (2.44 inches).

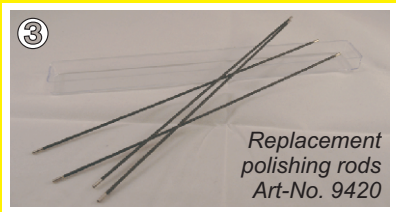
Changes in construction and design features are reserved. All products are made by us in Germany.

Repair service:

- Repair works
- Maintenance works
- Refit and upgrade works

The small ¹:

In this flyer, products from the following companies is mentioned: Dr. Fritz Faulhaber GmbH & Co KG, Daimlerstr. 23, 71101 Schönaich



Article-list for gauge N

Art-No. Identifier name

N-rail vacuum cleaner wagon

9070 N-rail vacuum cleaner wagon for analog and digital operation. With SSF-09 control electronic (automatic start-/stop function and Faulhaber¹-motor.

Accessories - replacement - spare parts for all N-rail vacuum cleaner wagon

9075 Fe1 N-scrap collector unit, augmentation set for all N-rail vacuum cleaner wagons

9068 N-replacement vacuum brush, for all N-rail vacuum cleaner wagons.

N-rail beveling wagon

9470 N-rail beveling wagon for analog and digital operation. With SSF-09 control electronic automatic (start-/stop function) and Faulhaber¹-motor.

Accessories - replacement - spare parts for all N-rail beveling wagon

9475 Fe2 N-scrap collector unit, augmentation set for all N-rail beveling wagons.

9417 N-felt rotor (especially suitable for grease and oil residues), for all N-rail beveling wagons.

9418 RP-11 N-cleaning and high gloss polishing rotor, for all N-rail beveling wagon.

9416 N-polishing rotor with 1500 grains (standard), for all N-rail beveling wagons.

9415 N-beveling rotor with 280 grains (not suitable for continuous use), for all N-rail beveling wagons.

9413 Socket wrench, to replace the rotors of the N-rail beveling wagons.

9423 Screw driver, for the height adjustment of the rotors of the N-rail beveling wagons.

N-box car

9071 N-box car, **without technique**, 4axle, yellow with black chassis, length 111,5mm (4.55 inches).

N-wheel cleaning unit

9310 N-wheel cleaning **flush mounted unit**, for analog or digital operation, with Faulhaber¹-motor.

9310.7 N-wheel cleaning **flush mounted unit**, for analog or digital operation, with Faulhaber¹-motor and **decoder**.

9315 N-wheel cleaning **table unit**, for analog or digital operation, with Faulhaber¹-motor.

9315.7 N-wheel cleaning **table unit**, for analog or digital operation, with Faulhaber¹-motor and **decoder**.

Accessories - replacement - spare parts for all N-wheel cleaning unit

9420 N-replacement polishing rods (4 pieces), for all N-wheel cleaning unit.

N-double pack and sets

N-double pack

9670 N-double pack Art-No. **9070** and **9470** as set

N-triple pack

9678 N-triple pack Art-No. **9070** and **9470** and **9310** as set

9679 N-triple pack Art-No. **9070** and **9470** and **9310.7** as set

Cleaning equipment

8720 Lux-Dust-Witch 2.17 (Staubhexe) Suction and blow jet for cleaning the model landscape.

Overview of our products

- For all model railway systems -

Rail vacuum cleaner wagon

For gauge H0, N, TT, H0m, H0e

To remove loose dust and dirt particles from the whole track layout.

Rail beveling wagon

For gauge N, TT, H0m, H0e

To remove hardened oil and dirt residues, residues of driving tires, oxidation layers on the rails.

Rail and overhead catenaries beveling wagon

For gauge H0

To remove hardened oil and dirt residues, residues of driving tires, oxidation layers on the rail, mid-point conductor and overhead catenaries.

MLR-1 Mid-point conductor cleaning unit or MLR-1 exchange unit

For gauge H0

To remove oil and dirt residues as well as oxidation layers from the mid-point conductors.

Wheel cleaning flush mounted or table unit

For gauge H0, N, TT, H0m, H0e and large gauge 0, 1, IIm

To clean driven or not driven wheels of rail using vehicles from oil and dirt residues.

Cleaning wagon for large gauge

For gauge 0, gauge 1, gauge IIm

To remove loose dust and dirt particles from the whole track layout and to remove hardened oil and dirt residues, residues of driving tires, oxidation layers on the rails.

Under floor electric switch motor with or without switch lantern control

For gauge H0, gauge 0 and gauge 1

Control switches life like, silent and safe.

Augmentation scrap collector Fe1 and Fe2

For gauge H0, N, TT, H0m, H0e

Replacement wheel contact sets (construction kit)

For gauge H0 (up to 28mm axle distance)

Mounting systems for overhead catenaries

For all gauges

To mount overhead catenaries in tunnels and **shadow stations staging yards** using your rail profile.

Vacuum Cleaner for the Car System

For gauge H0

To remove loose dust and dirt particles from the whole street layout.

Lux-Dust-Witch 2.17 - suction and blow jet for cleaning the model landscape.

DLE-90 print and paint remover

With the DLE-90 print and paint remover, you will be able to remove print and paint residues from nearly all of the shelf metal and plastic models, without damaging the basic material.

KSP-98 Synthetic material cleaner

To clean dirty car and rail models as well as household appliances.

KC-05 contact cream

KC-05 prevents current disruptions and wear and tear at mechanically strained contact points, e.g. axle and wheel pick-ups at model railway vehicles or rail connectors.

KC-10 contact oil

KS-10 is used with low voltage appliances at all movable gliding and rubbing parts to prevent disruption and malfunction of the motion-sequence. It prevents flying sparks and forming of corrosion at current leading engine or wagon wheel sets.

Other accessories

Motors, decoders, light rods, wire, connectors, rechargeable batteries, springs, screws, screw threads, thread anchors etc.

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LUX-Modellbau



Innovative model railway solutions - rail cleaning units
Large and small scale production