



TECHNICAL INFORMATION

T107

Cleaning

Powerail

U25, U35,

U20, U30, U40

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1. Cleaning intervals

A general statement cannot be made since the intervals depend on the local conditions or application conditions and the frequency of use. In general, basic cleaning is recommended once a year.

If contact problems arise, the conductor line has to be cleaned.

2. Type of soiling

Different cleaning methods have to be used depending on the type of soiling:

2.1 Loose dust and carbon abrasionManual cleaning

To remove loose dust or carbon abrasion, the **completely disconnected** conductor line can be cleaned using a commercially available industrial vacuum cleaner.

2.2 Heavier soiling with tightly adherent dirtManual cleaning

For heavier soiling caused by light burn points or tightly adherent dirt, the **completely disconnected** conductor line can be brightened with a rubbing block or emery cloth and subsequently cleaned with a commercially available industrial vacuum cleaner.

Automatic cleaning

For heavier soiling caused by light burn points or tightly adherent dirt, powerail cleaners in the form of current collectors can be installed in the installation.

The powerail cleaners brighten the conductor surfaces of the powerails during operation. Any resulting dust and carbon abrasion can be subsequently cleaned off with a commercially available industrial vacuum cleaner.

2.3 Oiled conductor surfaces

Manual cleaning

The cleaning of oiled conductor surfaces should only be carried out manually with suitable cleaning agents once the surfaces have been **completely disconnected**.

The cleaning process and the applicable cleaning agents are described in the Technical Information TI02 "Wet cleaning of powerails and conductor lines".

Powerail cleaners in the form of current collectors can be installed in installations which, from the outset, are expected to experience light coating of oil.

They have to be checked and cleaned at regular short intervals or the cleaning element has to be replaced. Already oiled conductor lines cannot be cleaned by retrofitting powerail cleaners.

3. Cleaning materials

3.1 Powerail cleaners in the form of current collectors

The powerail cleaners differ from "normal" current collectors with regard to a cleaning element installed instead of carbon brushes.

Powerail cleaners have no electrical function and brighten the conductor surface on the powerail.

Depending on the degree of soiling, there are two types of powerail cleaners:

1. Powerail cleaners with a Scotch Brite cleaning element for lighter soiling of the conductor surface
2. Powerail cleaner with brass or bronze cleaning element for tightly adherent dirt, e.g. in zinc coating installations. (not for U25)

Below the powerail cleaners which correspond to the compact current collector KDS 2/40. (Other types on request.)

3.2 Position of the powerail cleaners

The ideal position of the powerail cleaners is in front of the current collectors in transport direction.

For installations which function with reversing operation, the powerail cleaners should be positioned in front of the first and after the last current collector.

This ensures that the powerails brightened by the current collector are fully cleaned.

Depending on the desired cleaning effect and the degree of soiling, either single or double power cleaners can be used.

3.3 Assembly and maintenance of the powerail cleaners

Attachment of the powerail cleaners corresponds to the attachment of the respective current collector. (see table).

Powerail cleaners grind off material along the conductor surface of the powerails and should, therefore, only be fitted for cleaning and removed once this task has been completed.

The attachment construction provided by the customer must be easy to dismantle or have a fold-down design.

The service life of the powerail cleaners depends greatly on the degree of soiling. Therefore, it is not possible to make a general statement about the service life of individual cleaning elements.

It is recommended to continuously monitor the cleaning process to prevent worn out cleaning elements damaging the installation.

4. Table of powerail cleaners

Powerail	Current collector	Powerail cleaner Scotch-Brite	Order no.:	Photo no.:
RST	KST 15-60	RST	153827	1
	KDST 30-120	RDST	150723	2
U20,U25	KSTL 15-60	RSTL	150485	3
	KDSTL 30-120	RDSTL	150476	4
	KSTLU 15-60	RSTLU	150609	8
	KDSTLU 30-120	RDSTLU	150474	9
U25	KST 140/25	RST 140/25	170805	6
U30	KST 140/30	RST 140/30	131198	6
U35	UST 200/35	RUST 200/35	175402	18
		Powerail cleaner brass/bronze		
U20	KST 15-60	RST-BZ	152565	12
U20	KSTL 15-60	RSTL-BZ	126930	13
U30	KST 140/30	RST 140/30 MS	131068	16
U35	UST 200/35	RUST 200/35 MS	175506	20
U40	UST 200/40	RUST 200/40 BZ	136593	22

Spare cleaning elements for powerail cleaner

Powerail	Powerail cleaner	Cleaning element Scotch-Brite	Order no.:	Photo no.:
U20,U25	RST - RDSTL	RMK 60	121266	5
	RSTLU - RDSTLU	RMK 60 U	121267	10
	RST - RDSTLU	RE	151588	11
U25	RST 140/25	RE 140/25	170313	7
U30	RST 140/30	RE 140/30	133931	7
U35	RUST 200/35	RE 200/35	175135	19
		Cleaning element brass/bronze		
U20	RST-BZ-RSTL-BZ	RMK 60-BZ	156851	14
	RST-BZ-RSTL-BZ	RE-BZ	1013790	15
U30	RST 140/30 MS	RE 140/30 MS	131008	17
U35	RUST 200/35 MS	RE 200/35 MS	175507	21
U40	RUST 200/40 BZ	RE 200/40 BZ	135881	23

5. Photos**5.1 Powerail cleaner U20, U25****5.1.1 Powerail cleaner with Scotch-Brite cleaning element**

Photo 1: Powerail cleaner RS



Photo 2: Powerail cleaner RDST

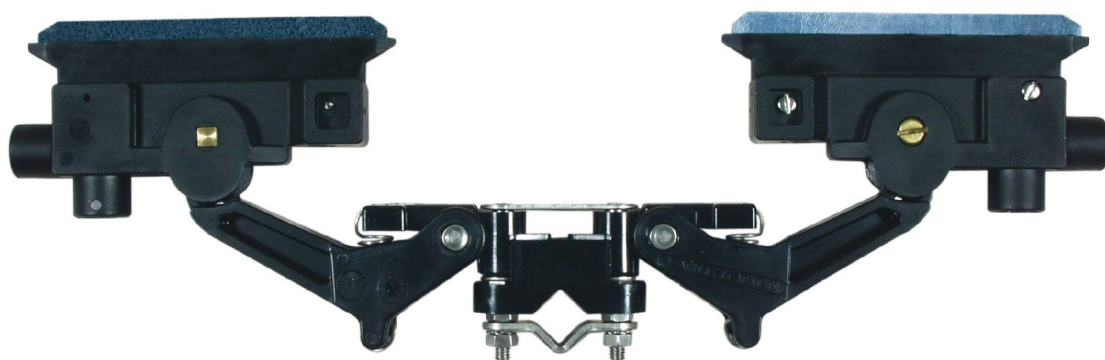


Photo 3: Powerail cleaner RSTL



Photo 4: Powerail cleaner RDSTL



Photo 5: Cleaning head RMK 60
Spare head for
Powerail cleaner
RST – RDSTL



Photo 11: Cleaning element RE
Spare cleaning element for
Powerail cleaner
RST - RSTLU



Photo 6: Powerail cleaner RST 140/25

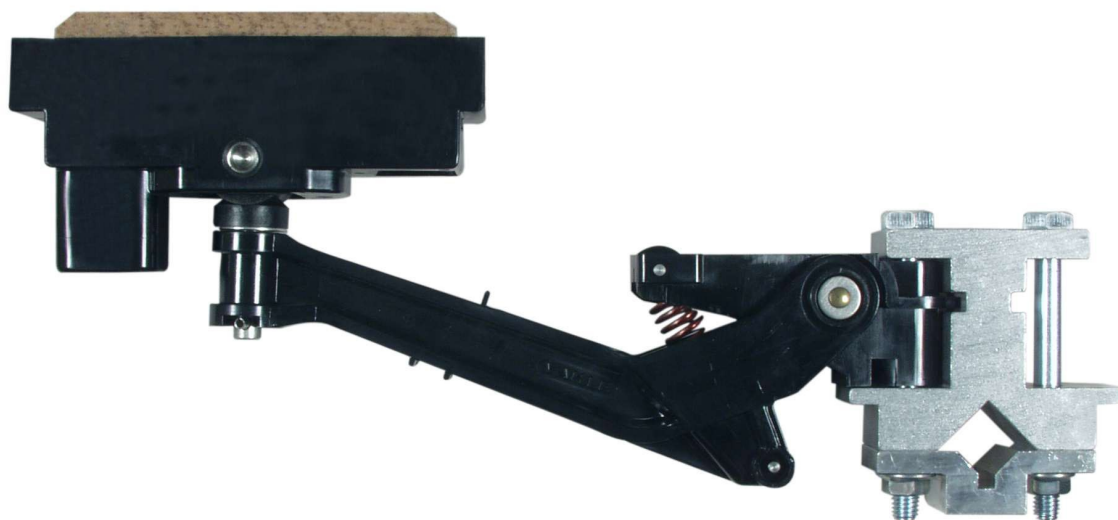


Photo 7: Cleaning element RE 140/25



Powerail cleaner for installations with transfer pieces

Photo 8: Powerail cleaner RSTLU



Photo 9: Powerail cleaner RDSTLU

Photo 10: Cleaning head RMK 60 U
Spare head for
Powerail cleaner
RSTLU – RDSTLUPhoto 11: Cleaning element RE
Spare cleaning element for
Powerail cleaner
RST – RDSTLU

5.1.2 Powerail cleaner with bronze cleaning element



Photo 12: Powerail cleaner RST - BZ



Photo 13: Powerail cleaner RSTL - BZ



Photo 14:
Cleaning head RMK 60-BZ

Spare head for
Powerail cleaner
RST – RSTL

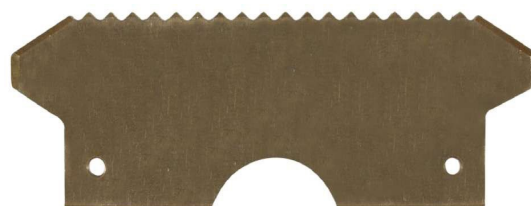


Photo 15:
Cleaning element RE - BZ

Spare cleaning element for
Powerail cleaner
RST – RSTL

5.2 Powerail cleaner U30

5.2.1 Powerail cleaner with Scotch-Brite cleaning element

Photo 6: Powerail cleaner RST 140/30

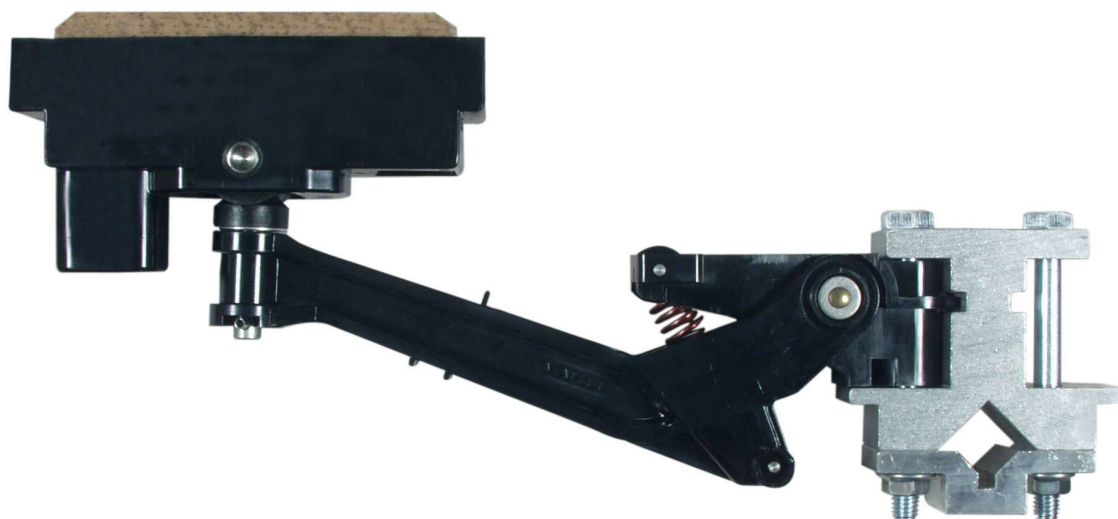


Photo 7: Cleaning element RE 140/30



5.2.2 Powerail cleaner with brass cleaning element

Photo 16: Powerail cleaner RST 140/30 MS

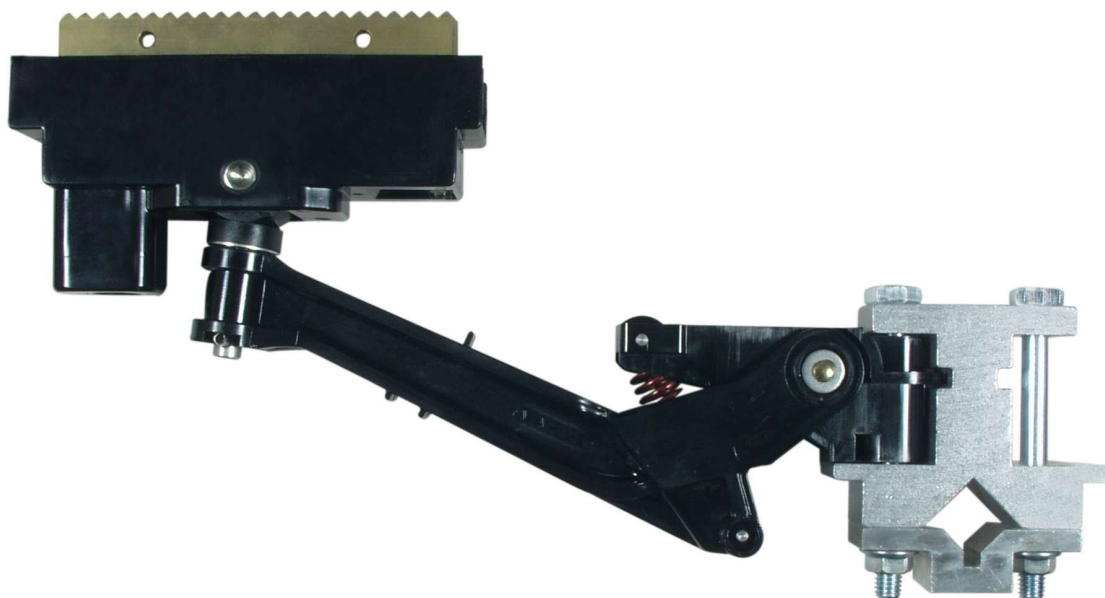
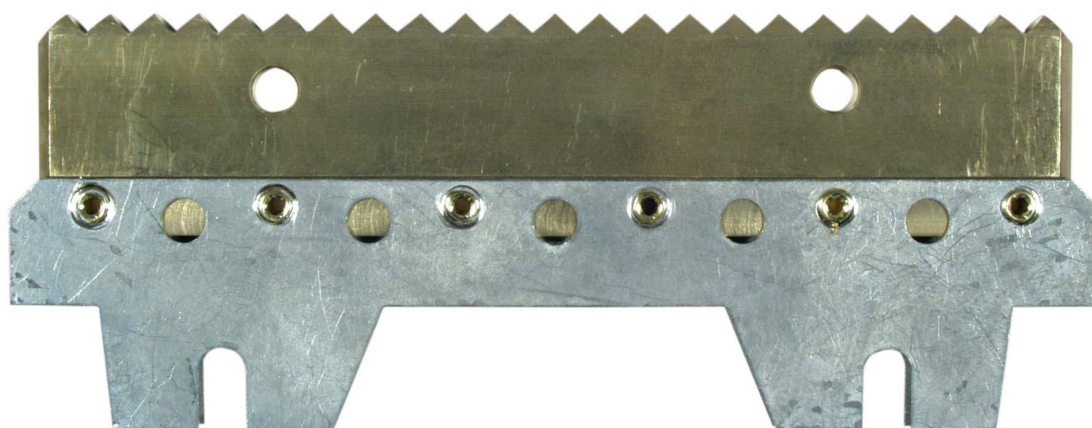


Photo 17: Cleaning element RE 140/30 MS



5.3 Powerail cleaner U35

5.3.1 Powerail cleaner with Scotch-Brite cleaning element

Photo 18: Powerail cleaner RUST 200/35

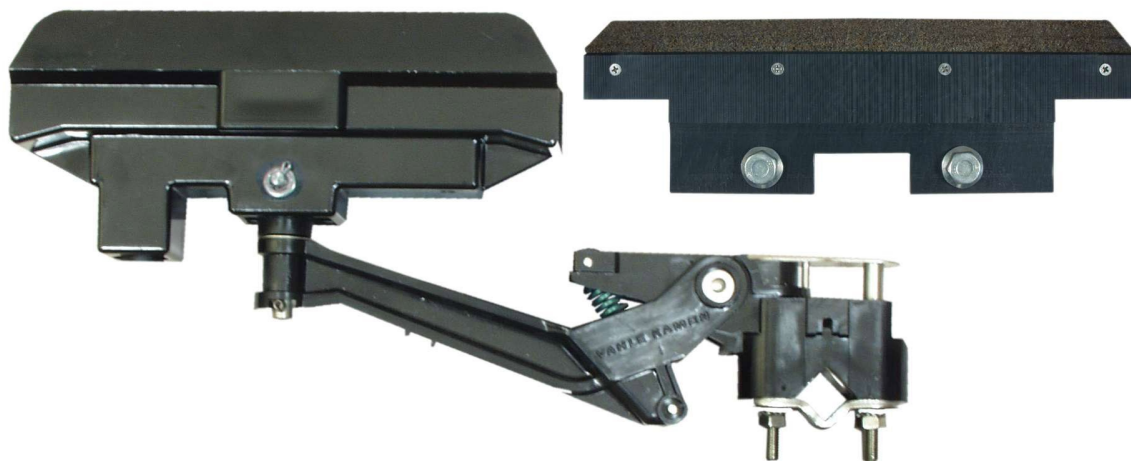


Photo 19: Cleaning element RE 200/35b)



5.3.2 Powerail cleaner with brass cleaning element

Photo 20: Powerail cleaner RUST 200/35 MS

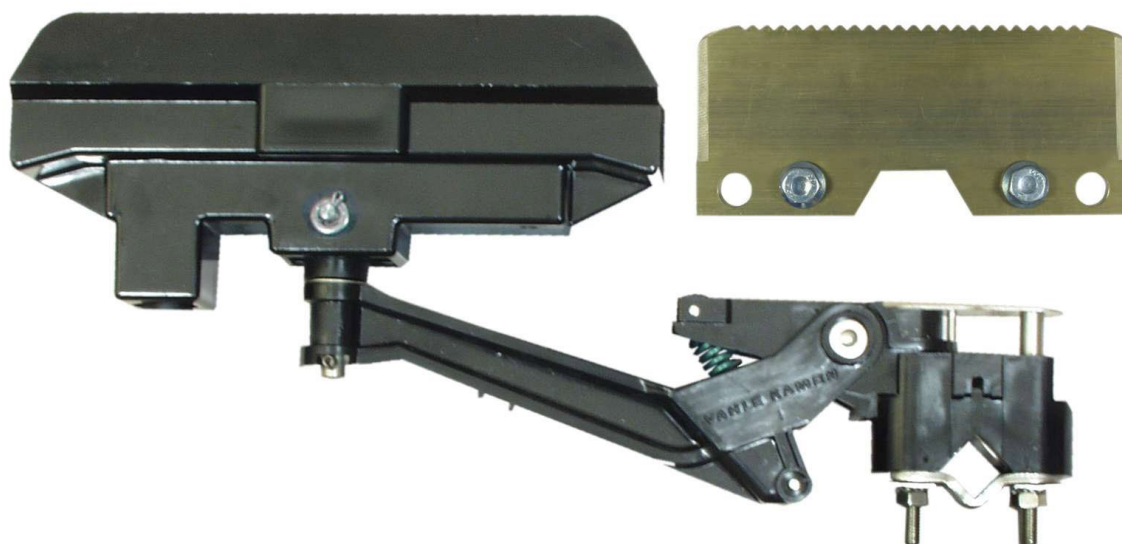
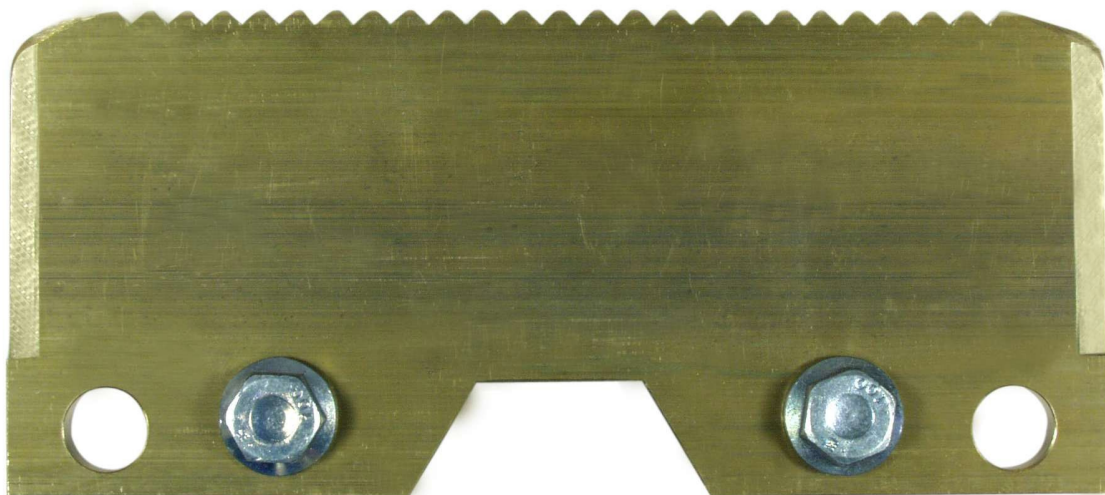


Photo 21: Cleaning element RE 200/35 MS



5.4 Powerail cleaner U40

5.4.1 Powerail cleaner with bronze cleaning element

Photo 22: Powerail cleaner RUST 200/40 BZ

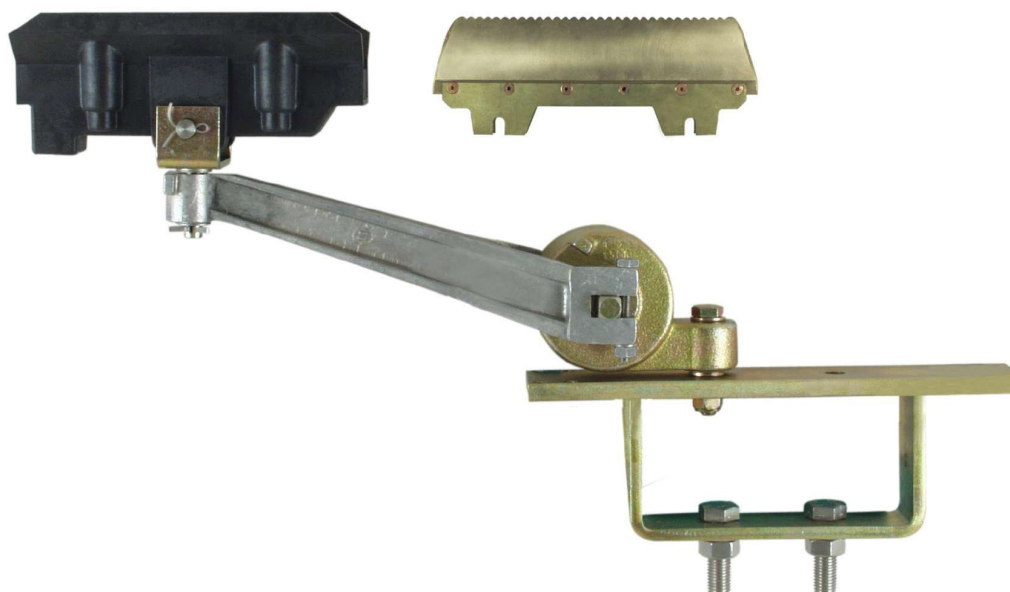


Photo 23: Cleaning element RE 200/40 BZ

