

### **"ONE BRAND "ONE SOURCE "ONE SYSTEM**



#SERVICE #MATERIAL PROCESSING #SURFACE PROTECTION #AUTOMOTIVE

## REMACLEAN

Belt cleaning systems



### **REMATIP TOP**

### **CONTENT**

We have been an expert partner you can rely on for over 50 years. REMA TIP TOP offers you sophisticated technical and economical solutions to problems in the areas of:

- Conveyor and Processing Systems
- Surface Protection
- OTR/EMTyre Repair and Service.

We specialize in ensuring your industrial systems are always ready and operating to their maximum.

### For you, this means:

- longer service life
- reduced downtime
- optimized operational safety
- increased production capacity and higher profits.

### We advise. We deliver. We install. We support.

The brand name REMA TIP TOP stands for a comprehensive network of expert knowledge and skills:

- You benefit from a differentiated range of products that are constantly setting new standards when it comes to quality.
- You can rely on the optimum all-round service provided by our team of highly qualified specialists
- And you can access our unique global sales and service network of experienced, established partners. Anytime.

## Subsidiary companies from REMA TIP TOP AG Agencies from REMA TIP TOP AG

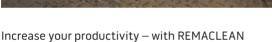


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### REMATIP TOP -

### Your capable partner for conveyor belt cleaning





conveyor belt cleaning systems from REMATIP TOP!

The cleaning of conveyor belts is a subject that is often neglected by many plant operators. Optimal cleaning, however, contributes to the economic operation of the plant, because interruptions to production process caused by contamination can lead to inefficiency and even to the entire conveying systemcoming to a halt. In addition, inadequate cleaning of the belt brings additional cost, for example through increased wear on pulleys or belt, loss of bulk material and expenses for manual cleaning-up work.

## Reductions in plant availability and maintenance costs that can be avoided are no longer acceptable to operators.

The demands placed on the manufacturers of conveyor belt cleaning systems are therefore clearly formulated:

- Optimum cleaning results while at the same time protecting the belt
- Efficient installation and servicing
- A long service life of the belt cleaning system

Conveyor belt cleaning is a complex matter. Several factors must be simultaneously taken into





account in order to achieve good and economical cleaning results:

- Selection of a suitable belt cleaning system for the particular application
- Combination of the right systems (pre- and fine cleaning)
- Optimum position of the belt cleaners in the conveyor system
- Installation by trained technicians
- Determination and execution of regular servicing activities by trained technicians

If any one of these points is not taken into account even the best system will fail after a short time and therefore will not contribute to economic operation.

REMA TIP TOP is your competent partner for the choices, installation and servicing of belt cleaning systems — and much more. REMA TIP TOP has suitable products and services for all areas of belt conveyors. Our experienced specialists advise on, develop and optimize your conveying systems. Our dense service network guarantees the availability of trained technicians — anytime.

Our modern training center for conveyor belt systems in Nauen, near Berlin, has both seminar rooms for the teaching of theoretical knowledge and models for practical training (installation, servicing, etc.).

### SCRAPER RUBBER

### REMACLEAN 60 and 70

Due to its excellent abrasion-resistance and high elasticity, our special rubber materials REMACLEAN 60 and REMACLEAN 70 are perfectly suitable and achieve significantly longer service life compared to conventional rubber materials. The scraper rubber is mounted on the system's existing scraper system and when new may protrude from the bracket by up to its own thickness.



| Product                                       | REMACLEAN 60  | REMACLEAN 70  | REMACLEAN 70 V*   |
|---|---|---|---|
| Hardness<br>[± 5 Shore A]                     | 60  | 62  | 60  |
| Abrasion [mm³]                                | 90  | 55  | 180   |
| Available<br>dimensions<br>[Roll length 10 m] | Thickness: 5/7/8/10/15/20/30 mm<br>Width: 100/120/150/200/250/2000 mm | Thickness: 5/7/10/15/20/30 mm<br>Width: 100/120/150/200/2000 mm | Thickness: 8/10/15/20/30 mm<br>Width: 100/120/150/200/2000 mm |

<sup>\*</sup> German underground approval: LOBA No. 18.43.21-91-4 Polish underground approval: DopuszczenieWUG Katowice No. B/1724/2007 May be used in ATEX installations.

### **REMACLEAN CAB**

REMACLEAN CAB consists of three layers with different Shore hardnesses: two hard outer layers surround a soft core. This combination allows intensive and yet protective conveyor belt cleaning. At the same pressure against the conveyor belt, the cleaning effect of REMACLEAN CAB is approximately 20 % better than standard qualities. Service life is often several times longer than that of conventional scraper rubber materials. REMACLEAN CAB is mounted on the existing scraping system of the equipment and when new can protrude from the bracket by more than one and a half times its own thickness.



| Product                                       | REMACLEAN CAB green   | REMACLEAN CAB gray  | REMACLEAN CAB V*  |
|---|---|---|---|
| Hardness<br>[± 5 Shore A]                     | 70 / 48 / 70  | 85 / 50 / 85  | 73 / 60 / 73  |
| Abrasion [mm³]                                | 90 / 190 / 90   | 140 / 130 / 140   | 120 / 130 / 120   |
| Available<br>dimensions<br>[Roll length 10 m] | Thickness: 15/20/25/30/40/50 mm<br>Width: 100/120/150/200/250/2000 mm | Thickness: 15/20/25/30/40/50 mm<br>Width: 100/120/150/200/250/2000 mm | Thickness: 15/20/25/30/40/50 mm<br>Width: 100/120/150/200/250/2000 mm |

 $<sup>^{\</sup>star}$  German underground approval: LOBA No. 18.43.21-91-4/18.43.21-30-33 Polish underground approval: DopuszczenieWUG Katowice No. B/1724/2007 May be used in ATEX installations.



### **SCRAPER BARS**

REMA TIP TOP offers a wide range of scraper bars for cleaning of conveyor belt top covers on the return side of the conveyor. Scraper barsmade of rubber, polyurethane, rubber-ceramic and rubber-metal are available.

### **REMACLEAN KWA**

### Benefits and features:

- Three scraper bars which can be used one after the other
- Belt-friendly scraper with good cleaning efficiency
- Long service life due to highly abrasion resistant rubber material
- Cost-effective due to excellent price-performance ratio
- Installation is recommended with REMA TIP TOP tension units INNOVATION, PRECISION or STANDARD
- For belt speeds up to 3.5 m/s

| Product                   | REMACLEAN KWA                | REMACLEAN KWA V*  |
|---------------------------|------------------------------|---|
| Hardness<br>[± 5 Shore A] | 64                           | 62  |
| Abrasion [mm³]            | 50                           | 130   |
| Belt width [mm]           | 500-1800                     | 500-1400  |
| Features                  | Highly abrasion<br>resistant | Self-extinguishing, anti-<br>static and moderate oil<br>resistant |

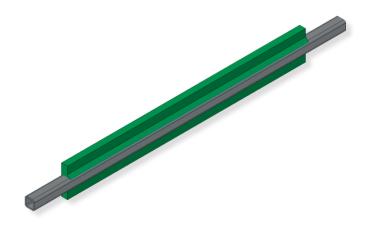


\*German underground approval: LOBA No. 18.43.21-91-24 Polish underground approval: DopuszczenieWUG Katowice No. B/1724/2007

### **REMACLEAN PUR**

### Benefits and features

- Two scraper bars which can be used one after the other
- Long service life of REMATHAN polyurethane (90 ±5 Shore A)
- Oil and grease resistant
- For belt widths 500 1600 mm
- Installation is recommended with REMA TIP TOP tension units INNOVATION, PRECISION or STANDARD
- Suitable for use with mechanical fasteners
- Suitable for shuttle belt operation in combination with tension unit INNOVATION
- For belt speeds up to 3.5 m/s



### **SCRAPER BARS**

### **REMACLEAN C**

### Benefits and features

- Highly wear resistant through AL<sub>2</sub>O<sub>3</sub> ceramic material
- Flexibility through ceramic material embedded in rubber
- Belt friendly cleaning due to rounded outer ceramic elements
- For belt widths 400 1600 mm
- Installation is recommended with REMA TIP TOP tension units INNOVATION, PRECISION or STANDARD
- Do not use with quartz-containing bulk material
- For belt speeds up to 3.5 m/s



### **REMACLEAN M**

### Benefits and features

- Highly wear-resistant through tungsten carbide insert
- Permanently vulcanised into an elastic rubber base
- Belt friendly cleaning through rounded outer tungsten carbide blades
- For belt widths 400 1600 mm
- Installation is recommended with REMA TIP TOP tension units INNOVATION, PRECISION or STANDARD
- For belt speeds up to 3.5 m/s



### **TENSION UNITS**

### **STANDARD**

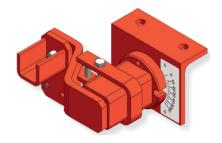
- Extremely long service life
- Vibration absorbing and flexible due to integrated rubber spring elements
- Quick and easy replacement of scraper systems
- Consistent cleaning performance due to constant contact pressure
- Can be retrofitted to all belt conveyors with minimum effort
- · Low overall height
- Maintenance-free; minimum time required for inspection and servicing
- For belt widths 400 1600 mm
- STANDARD INOX for belt widths of 400 900 mm (stainless steel version)



### **PRECISION**

Same features as STANDARD and additional:

- Protection against damage to the conveyor belt if the scraper is worn out
- Adjustable pitch of scraper blade
- Pivoting mechanism for precise 90° adjustment of scraper to belt
- Scale for setting the contact pressure
- For belt widths 400 1800 mm



### INNOVATION

Same features as PRECISION and additional:

- Contact pressure continuously adjustable by tension spindle
- Pressure adjustment by one person
- Precise micro adjustment of contact pressure
- Can be adjusted without heavy tools
- Suitable for shuttle belt operation in combination with REMACLEAN PUR and HML scrapers
- Pivoting mechanism for precise
   90° adjustment of scraper to belt
- Universal installation possibilities
- Display for adjustment of contact pressure
- For belt widths 400 1800 mm



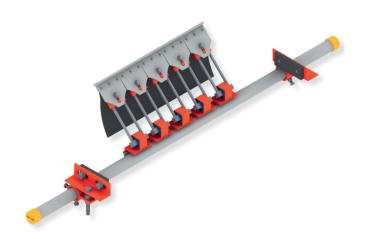
# REMACLEAN F-SERIES — for use on pulley

The belt cleaning systems of the REMA TIP TOP F Series are designed for belt cleaning at the head pulley. Systems with tungsten carbide blades or scraper blades made of polyurethane are available.

### REMACLEAN HM-F1

Belt scraper system with individual elastically supported tungsten carbide blades and a spindle-type tension unit for cleaning of conveyor belt top covers at the head pulley (pulley diameters up to 2000 mm).

- Universally applicable for many types of materials
- High cleaning efficiency due to optimum adaptability of the blades (each one elastically supported) to the conveyor belt surface
- Long service life due to highly wear resistant materials and anti-caking skirts
- Easy installation below pulley axis (outside of main material flow)
- Low maintenance tensioning by rubber spring elements
- Open design of segments to ensure material run off
- Tension unit can be mounted inside or outside the conveyor construction
- Suited for reverse operation
- For belt speeds up to 6.5 m/s



#### **REMACLEAN HM-F2**

Belt scraper system with individual elastically supported tungsten carbide blades and a spindle-type tension unit for cleaning of conveyor belt top covers at the head pulley (pulley diameters up to 1200 mm).

- High cleaning efficiency due to optimum adaptability of the blades (individual bearings) to the conveyor belt surface
- Long service life due to highly wear resistant materials
- Installation below pulley axis (outside of main material flow)
- Open design of segments to ensure material run off
- Easily adjustable, low maintenance through rubber spring elements
- Constant and ideal contact pressure; easily adjustable and display readable
- Tension unit can also be mounted outside the conveyor construction
- Suited for reverse operation
- For belt speeds up to 4.5 m/s (for belt widths 1600 and more up to 2.5 m/s)



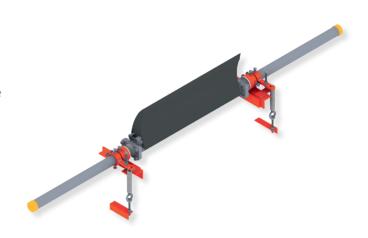


# REMACLEAN F-SERIES – for use on pulley

### REMACLEAN PUR-F3 / PUR-F4

Primary belt scraper system with a polyurethane blade and a spring lever tension unit for the cleaning of conveyor belt top covers at the head pulley (pulley diameters from 220 to 1600 mm).

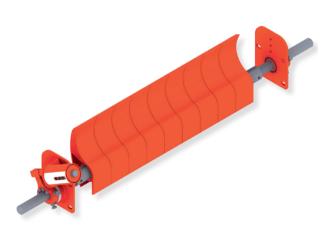
- The polyurethane blade optimally adjusts to the belt surface and guarantees effective cleaning
- Long service life is achieved by using highly wear resistant polyurethane material
- Suitable for use with mechanical fasteners
- Easy installation and adjustment, the spring lever tension unit requires minimum maintenance
- Uniform and optimal contact pressure is easily set
- Suitable for abrasive and sticky materials as a primary cleaning system
- Can be used for shuttle belt operation and crowned pulleys
- PUR-F3 for pulley diameters from 220 mm
- PUR-F4 for pulley diameters from 500 mm
- Version for underground application available (ATEX)
- For belt speeds up to 4 m/s



### **REMACLEAN PUR-F5**

Primary belt scraper system with a blade consisting of polyurethane segments and a spring lever tension unit for the cleaning of conveyor belt top covers at the head pulley (pulley diameters from 320 mm).

- The polyurethane segments optimally adjust to the belt surface and guarantee effective cleaning (each segment has its own dynamic)
- Long service life is achieved by using highly wear resistant polyurethane material
- Suitable for use with mechanical fasteners
- Easy installation and adjustment, the spring lever tension unit requires minimum maintenance
- Polyurethane segments with snap closing
- Uniform and optimal contact pressure is easily set
- Suitable for abrasive and sticky materials as a primary cleaning system
- Suited for reverse operation and crowned pulleys
- For belt speeds up to 4 m/s





The belt cleaning systems of the REMA TIP TOP U Series are designed for cleaning of conveyor belt top covers at the retun side of the conveyor. Combination with a primary scrapers system of the F Series is recommended to achieve optimal cleaning efficiency. The U Series provides various cleaning systems for almost any application. All systems utilize tungsten carbide blades for the cleaning of the belt. Systems with a single blade as well as individually supported tungsten carbide segments are available.

#### **REMACLEAN HM-U1**

REMACLEAN HM-U1 is a belt cleaning system for belt return side applications consisting of tungsten carbide segments and a torsion tension unit with spindle adjustment.

- Superior cleaning performance
- Long service life achieved by premium carbides
- Modular system consisting of support tube, carbide segments, support tube extensions and spindle-type tension units
- Constant and ideal contact pressure that is easy to adjust
- Flange connection for quick and easy installation/replacement
- Arbor kits can be mounted inside or outside the conveyor construction
- Damage of the belt edges is prevented by rounded outer carbide segments
- Can be upgraded for reverse operation
- Special version for temperatures up to 120° is optional
- For belt speeds up to 6.5 m/s

### **REMACLEAN HM-U2**

REMACLEAN HM-U2 is a belt scraper system for belt return side applications with a tungsten carbide blade and a torsion tension unit with spindle adjustment.

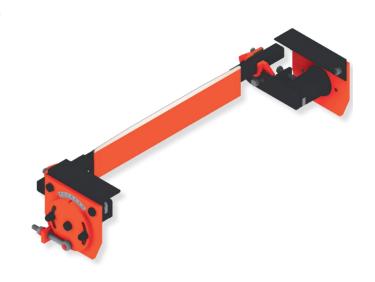
- Excellent cleaning efficiency
- Long service life by using high quality tungsten carbides
- Modular system consisting of support tube, scraper blade, support tube extension and spindle kit with torsion pressure support
- Flange connection for easy and guick installation
- Spindle kits can be mounted inside or outside the conveyor construction
- Constant and ideal contact pressure can be easily adjusted
- Anti caking coating made of highly wear resistant REMATHAN ensures smooth material run off
- Belt friendly cleaning due to rounded edges of the outer blades
- Can be upgraded for reverse operation
- For belt speeds up to 6.5 m/s



### **REMACLEAN HM-U3**

REMACLEAN HM-U3 is a belt scraper system for belt return side applications with a tungsten carbide blade featuring a low installation height and tension unit INNOVATION.

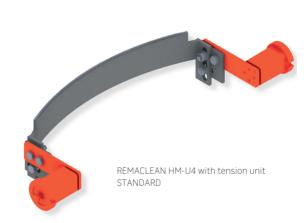
- Universally applicable for many types of materials
- Excellent cleaning efficiency
- Long service life of the tungsten carbides due to highly wear resistant materials
- Belt friendly cleaning due to rounded edges of the blade
- Easy installation and adjustment of the scraper system
- Low installation space requirement
- Automatic system adjustment
- Tension unit INNOVATION with precise micro adjustment of the contact pressure
- Integrated pitch adjustment of the scraper blade
- REMA-REPCOAT SL anti-caking coating on the tungsten carbide blade
- Applicable for temperatures from -40°C to +130°C
- For belt speeds up to 4.0 m/s



### REMACLEAN HM-U4 / HM-U5

Belt cleaning system for belt return side applications with a "CONTOUR"-tungsten carbide blade and tension unit STANDARD or INNOVATION.

- Parabolic arc design of the scraper blade
- Perfect adaptability to the conveyor belt surface
- Excellent cleaning efficiency
- Long service life of the tungsten carbides
- Shock resistant design of the tungsten carbides
- Low installation space requirement
- Easy installation and adjustment of the scraper system
- Automatic adjustment of the system
- Integrated pitch adjustment of the scraper blade
- Multi layer corrosion protection coatings of the scraper blade
- For belt speeds up to 2.5 m/s

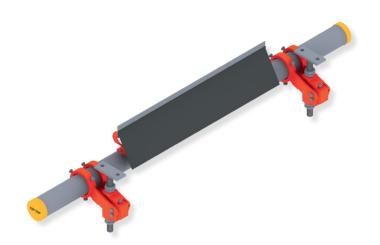




### **REMACLEAN HM-U6**

REMACLEAN HM-U6 is a belt cleaning system for return side application with elastically mounted carbide segments and a torsion tension unit with spindle adjustment.

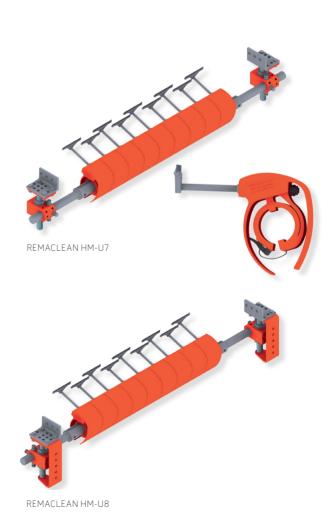
- Belt friendly cleaning produced by the sagging function of the carbide segments
- Segments are individually supported and can adjust in the moving direction of the belt
- Precise adjustement of the necessary contact pressure is achieved by the torsion tension unit
- Superior tungsten carbide blades ensure long service life
- Compact design
- Carbide segments with material run-off skirts
- Individually supported (rubber spring elements) carbide segments
- For belt speeds up to 2.5 m/s



### REMACLEAN HM-U7 / HM-U8

Belt cleaning system for belt return side applications with elastically supported tungsten carbide blades and a spindle-type tension unit.

- Belt friendly cleaning produced by the sagging function of the segment bars
- Individually supported blades that can rotate around their own axis
- Optimal adjustment to the conveyor belt surface
- Precise adjustment of the required contact pressure
- Top quality tungsten carbide blades provide long service life
- Compact design
- Tool free installation / exchange of segments
- Tungsten carbide blades in stainless steel design
- Combines the benefits of polyurethane and tungsten carbide
- Suitable for bulk material applications in all sectors of industry
- Special versions
   MF for use with Mechanical Fasterners; special,
   shock resistant design of the carbide segments
   V for use in underground applications (ATEX)
- REMACLEAN HM-U7 for belt speeds up to 2.5 m/s
- REMACLEAN HM-U8 for belt speeds up to 5,5 m/s

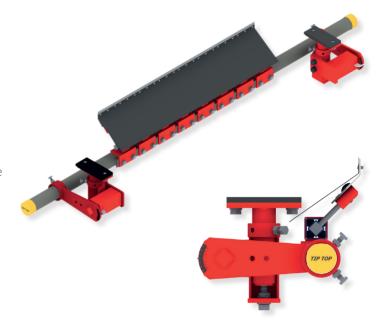


REMA TOP

### **REMACLEAN HM-U9**

Belt cleaning system for return side application with elastically mounted carbide segments and a torsion tension unit with swinging arm.

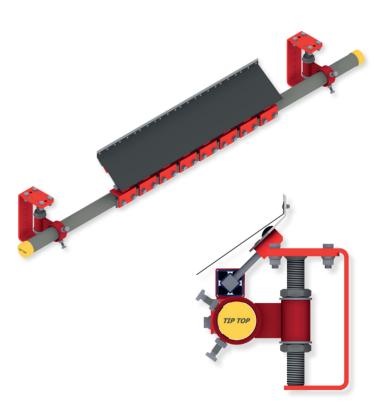
- Belt friendly cleaning produced by the sagging function of the carbide segments
- Segments are individually supported and can adjust in the moving direction of the belt
- Precise adjustement of the necessary contact pressure is achieved by the torsion tension unit
- Superior tungsten carbide blades ensure long service life
- · Compact design
- Carbide segments with material run-off skirts
- Individually supported (rubber spring elements) carbide segments
- For belt speeds up to 6.5 m/s



### REMACLEAN HM-U10

Belt cleaning system for return side application with elastically mounted carbide segments and a torsion tension unit without swinging arm.

- Belt friendly cleaning produced by the sagging function of the carbide segments
- Segments are individually supported and can adjust in the moving direction of the belt
- Precise adjustement of the necessary contact pressure is achieved by the torsion tension unit
- Superior tungsten carbide blades ensure long service life
- Very compact design
- Carbide segments with material run-off skirts
- Individually supported (rubber spring elements) carbide segments
- For belt speeds up to 6.5 m/s

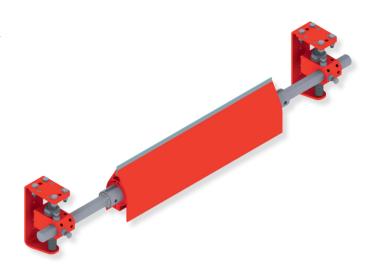


### REMACLEAN HM-U11 R

Belt cleaning system for return side application with elastically mounted carbide segments and a torsion tension unit suited for reverse operation. High cleaning efficiency and long service life through high-quality of the carbides. Good adaptability to the conveyor belt through flexible mounted blade segments.

Universally applicable to many types of materials such as sand, gravel, hard coal, lignite, ores, sinter, cement, clay, conditioned refuse and gypsum.

- Belt friendly cleaning achieved by the sagging function of the blade segments
- The tungsten carbide segments manufactured from stainless steel are individually supported, can adapt dynamically in the running direction of the belt and move 180° on its own axis
- Modular system consisting of a robust system suspension tube, carbide blades, foot made from soft Polyurethane and a spindle mounting system
- robust sliding deflectors made from polyethylene for the highest loads
- Consistent and ideal contact pressure, which is easily adjustable
- Low-maintenance
- System carrier is protected with sliding aprons of the PUR foot
- $\bullet \ \ \text{Version with PUR segment foot with screw mounting available}$
- Particularly suited for reverse operation
- For belt widths up to 2 000 mm
- Designed for service temperatures from -40 °C to +70 °C and belt speeds up to 6.5 m/s







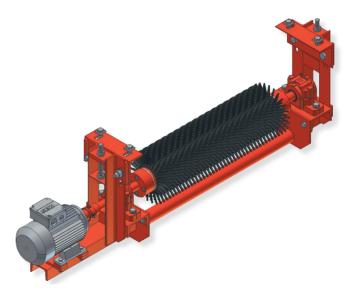
### **BELT CLEANING BRUSHES**

There are applications where static belt cleaning systems do not deliver satisfying cleaning results. Our belt cleaning brushes are the ideal solution for these special applications.

### **REMACLEAN GRB**

REMACLEAN GRB is a belt cleaning system with electrically rubber brush for the cleaning of sticky and powdery materials from conveyor belt top covers.

- Belt cleaning brush with direct drive from electric motor
- Ideal for cleaning of fine, powdery and also sticky materials
- Ideal in combination with a primary belt cleaning system (especially when having wet materials)
- High flexibility of the rubber bristles ensure belt friendly cleaning
- Self cleaning
- Available for ATEX applications
- Available for food applications as well as oil resistant version
- For belt speeds up to 2.5 m/s





### **BELT CLEANING BRUSHES**

### **REMACLEAN TMB**

REMACLEAN TMB is an electrically driven conveyor belt cleaning system with a plastic brush designed for the cleaning of belts that convey dry material at operating temperatures up to  $80^{\circ}$  C.

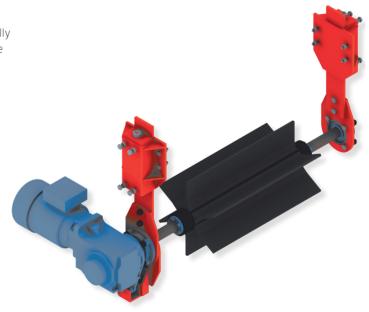
- Belt friendly cleaning
- Cleaning of dry and wettish materials
- Easy and quick adjustment with the spindle system
- Availability of various brush types for different requirements
- Compact design due to drum motor
- Pivot mechanism for optimum positioning
- For belt speeds up to 6.5 m/s



### **REMACLEAN SGB**

REMACLEAN SGB is a belt cleaning system with electrically driven rubber brush for cleaning of the top cover of incline conveyors, especially chevron belts.

- Unique cleaning of incline conveyor belts with cleats up to 24 mm
- Rotation in opposite direction to belt
- Long service life by using high quality rubber compounds (REMALINE 70)
- Motors for ATEX applications available on request
- For belt speeds up to 2.5 m/s

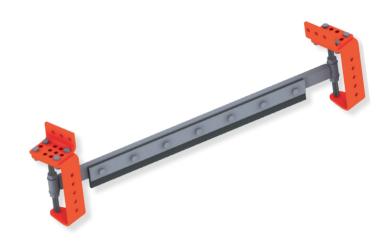


### **INNER BELT SCRAPER SYSTEMS**

Inner belt scrapers ensure that no material gets between belt and pulley and therefore prevents major damage to the belt as well as the pulley.

### REMACLEAN RB-IGD — Diagonal scraper

- Diagonal scraper for return side applications at the running side to protect the pulley from material
- A scraper rubber made of REMACLEAN CAB is mounted in the frame
- The required contact pressure is achieved by the spindle-type tension unit
- Easy installation, adjustment and maintenance of the system
- All steel parts are coated with COROPUR (red)
- Suited for reverse operation
- · Available for underground applications (ATEX).



### REMACLEAN RB-IGP – V-Plough scraper

- V-Plough scraper system for return side applications at the running side to protect the pulley from material
- Frame with integrated idlers and scraper plough (rubber bar made of REMACLEAN CAB)
- The frame construction levels off the belt and thus guarantees optimum alignment of the scraper and ensures efficient cleaning
- The required contact pressure is created by the weight of the system
- An auxiliary wheel mounted on the scraper prevents contact of the steel frame with the belt surface after the rubber bar is worn out
- All steel parts are coated with COROPUR (red)
- Available for underground applications (ATEX).



### F-Series

### REMACLEAN – belt cleaning systems for use on pulley



| Туре                                   | HM-F1    | HM-F2    | PUR-F3   | PUR-F4   | PUR-F5   |
|--|----------|----------|----------|----------|----------|
| Belt width (mm)                        | 800-2600 | 400-2000 | 400-1600 | 800-2000 | 800-1600 |
| Type of cleaning system                | V, H     | V, H     | V        | V        | V, H     |
| For belt speeds up to (m/s)            | 6.5      | 4.5      | 4        | 4        | 4        |
| Suited for reverse operation           | yes      | yes      | yes      | yes      | yes      |
| Blade type                             | S        | S        | D        | D        | S        |
| Blade material                         | НМ       | НМ       | PUR      | PUR      | PUR      |
| Max. operating temperature (°C)        | 60       | 120      | 60       | 60       | 60       |
| ATEX version available                 | no       | no       | yes      | yes      | yes      |
| Suitable for mechanical fasteners      | no       | no       | yes      | yes      | yes      |
| Available for food industry            | no       | no       | no       | no       | yes      |
| Suitable for oily and greasy materials | 3        | 3        | 2        | 2        | 2        |
| Sand/gravel (dry)                      | 1        | 1        | 1        | 1        | 1        |
| Sand/gravel (wet)                      | 1        | 1        | 1        | 1        | 1        |
| Coal (raw)                             | 1        | 1        | 1        | 1        | 1        |
| Lignite/tailing                        | 1        | 1        | 1        | 1        | 1        |
| Ore                                    | 1        | 1        | 2        | 2        | 2        |
| Sinter                                 | 1        | 1        | 2        | 2        | 2        |
| Clay                                   | 3        | 1        | 2        | 2        | 2        |
| Cement                                 | 1        | 1        | 1        | 1        | 1        |
| Gypsum                                 | 3        | 3        | 2        | 2        | 3        |
| Waste                                  | 3        | 3        | 2        | 2        | 3        |

V = Precleaner, H = Main cleaner, G = Basic cleaning, F = Fine cleaning, S = Segments, D = Seamless blade, HM = Tungsten carbide, PUR = Polyurethane 1 = recommendable, 2 = limited suitability, 3 = not recommendable

The recommendations listed as examples of the use of the products are based on experience gained in technical applications but are not an assurance of their suitability for specific application areas. These recommendations do not obviate the need for the user to check this. In individual cases, we recommend that technical application advice is taken – experienced REMA TIP TOP specialists are available for this purpose.



### **U-Series**

REMACLEAN – belt cleaning systems for use on belt



| Туре                                   | НМ-U1    | HM-U2    | HM-U3    | HM-U4/-U5 | нм-и6    |
|--|----------|----------|----------|-----------|----------|
| Belt width (mm)                        | 400-2400 | 500-1400 | 400-1200 | 500-1200  | 500-2000 |
| Type of cleaning system                | V, H     | V, H     | V, H     | V, F      | F        |
| For belt speeds up to (m/s)            | 4.5      | 4.5      | 4.0      | 2.5       | 2.5      |
| Suited for reverse operation           | yes*     | yes*     | yes*     | no        | no       |
| Blade type                             | D        | D        | D        | D         | S        |
| Blade material                         | НМ       | НМ       | НМ       | НМ        | НМ       |
| Max. operating temperature (°C)        | 120**    | 60       | 120**    | 60        | 60       |
| ATEX version available                 | no       | no       | no       | no        | no       |
| Suitable for mechanical fasteners      | no       | no       | no       | no        | no       |
| Available for food industry            | yes**    | no       | no       | no        | no       |
| Suitable for oily and greasy materials | 1        | 2        | 2        | 2         | 3        |
| Sand/gravel (dry)                      | 1        | 1        | 1        | 2-3       | 1        |
| Sand/gravel (wet)                      | 1        | 1        | 1        | 1-2       | 1        |
| Coal (raw)                             | 1        | 1        | 1        | 1-2       | 1        |
| Lignite/tailing                        | 1        | 1        | 1        | 2-3       | 1        |
| Ore                                    | 1        | 1        | 1        | 2-3       | 1        |
| Sinter                                 | 1        | 1        | 1        | 2-3       | 1-2      |
| Clay                                   | 1        | 1        | 1        | 2-3       | 1        |
| Cement                                 | 1        | 1        | 1        | 1-2       | 1        |
| Gypsum                                 | 1-2      | 1-2      | 1-2      | 2-3       | 2-3      |
| Waste                                  | 2        | 1        | 1        | 1         | 2        |

 $V = \mbox{Precleaner}, \mbox{ $H$ = Main cleaner}, \mbox{ $G$ = Basic cleaning}, \mbox{ $F$ = Fine cleaning}, \mbox{ $S$ = Segments}, \mbox{ $D$ = Seamless blade}, \mbox{ $HM$ = Tungsten carbide} \\ \star = \mbox{with reversing stop } \star \star = \mbox{ as special version } \mbox{ $1$ = recommendable}, \mbox{ $2$ = limited suitability}, \mbox{ $3$ = not recommendable} \\ \end{split}$ 

The recommendations listed as examples of the use of the products are based on experience gained in technical applications but are not an assurance of their suitability for specific application areas. These recommendations do not obviate the need for the user to check this. In individual cases, we recommend that technical application advice is taken – experienced REMA TIP TOP specialists are available for this purpose.



### **U-Series**

REMACLEAN – belt cleaning systems for use on belt



| Туре                                   | HM-U7    | HM-U8    | HM-U9    | HM-U10   | HM-U11 R |
|--|----------|----------|----------|----------|----------|
| Belt width (mm)                        | 400-1400 | 800-2000 | 650-2000 | 400-2200 | 400-2000 |
| Type of cleaning system                | F        | F        | F        | F        | F        |
| For belt speeds up to (m/s)            | 2.5      | 5.5      | 6.5      | 6.5      | 6.5      |
| Suited for reverse operation           | no       | no       | no       | no       | yes      |
| Blade type                             | S        | S        | S        | S        | S        |
| Blade material                         | НМ       | НМ       | НМ       | НМ       | НМ       |
| Max. operating temperature (°C)        | 60       | 60       | 70       | 70       | -40 +70  |
| ATEX version available                 | yes**    | yes**    | no       | no       | yes      |
| Suitable for mechanical fasteners      | yes**    | yes**    | no       | no       | no       |
| Available for food industry            | yes      | yes      | no       | no       | yes      |
| Suitable for oily and greasy materials | 2        | 2        | 3        | 3        | 2        |
| Sand/gravel (dry)                      | 1        | 1        | 2        | 2        | 1        |
| Sand/gravel (wet)                      | 1        | 1        | 1        | 1        | 1        |
| Coal (raw)                             | 1        | 1        | 2        | 2        | 1        |
| Lignite/tailing                        | 1        | 1        | 3        | 3        | 2        |
| Ore                                    | 1        | 1        | 2        | 2        | 1        |
| Sinter                                 | 1        | 1        | 2        | 2        | 1        |
| Clay                                   | 1        | 1        | 3        | 3        | 2        |
| Cement                                 | 1        | 1        | 1        | 1        | 1        |
| Gypsum                                 | 2-3      | 2-3      | 3        | 3        | 2-3      |
| Waste                                  | 2        | 2        | 3        | 3        | 2-3      |

V = Precleaner, H = Main cleaner, G = Basic cleaning, F = Fine cleaning, S = Segments, D = Seamless blade, HM = Tungsten carbide \*= with reversing stop \*\* = as special version 1 = recommendable, 2 = limited suitability, 3 = not recommendable

The recommendations listed as examples of the use of the products are based on experience gained in technical applications but are not an assurance of their suitability for specific application areas. These recommendations do not obviate the need for the user to check this. In individual cases, we recommend that technical application advice is taken – experienced REMA TIP TOP specialists are available for this purpose.

### Scraper bars

REMACLEAN – belt cleaning systems for use on belt



| Туре                                      | KWA      | М           | С             | PUR      |
|---|----------|-------------|---------------|----------|
| Belt width (mm)                           | 500-1800 | 500-1600    | 500-1600      | 500-1600 |
| Type of cleaning system                   | V, H     | V, H        | V, H          | V, H     |
| For belt speeds up to (m/s)               | 3.5      | 3.5         | 3.5           | 3.5      |
| Suited for reverse operation              | no       | yes         | yes           | yes      |
| Blade type                                | D        | D           | D             | D        |
| Blade material                            | Rubber   | Rubbermetal | Rubberceramic | PUR      |
| Max. operating temperature (°C)           | 70       | 70          | 70            | 70       |
| ATEX version available                    | yes      | no          | no            | yes      |
| Suitable for mechanical fasteners         | yes      | no          | no            | yes      |
| Available for food industry               | yes      | no          | no            | no       |
| Suitable for oily and greasy<br>materials | 1        | 3           | 3             | 2        |
| Sand/gravel (dry)                         | 3        | 2           | 3             | 3        |
| Sand/gravel (wet)                         | 2        | 2           | 3             | 2        |
| Coal (raw)                                | 2        | 2           | 2             | 2        |
| Lignite/tailing                           | 3        | 2           | 2             | 2        |
| Ore                                       | 3        | 2           | 3             | 2        |
| Sinter                                    | 3        | 2           | 3             | 3        |
| Clay                                      | 2        | 2           | 2             | 2        |
| Cement                                    | 2        | 2           | 2             | 1        |
| Gypsum                                    | 3        | 2           | 2             | 2        |
| Waste                                     | 2        | 1           | 1             | 1        |

 $V = \mbox{Precleaner}, \mbox{\bf H} = \mbox{Main cleaner}, \mbox{\bf G} = \mbox{Basic cleaning}, \mbox{\bf F} = \mbox{Fine cleaning}, \mbox{\bf S} = \mbox{ Segments}, \mbox{\bf D} = \mbox{Seamless blade}, \mbox{\bf PUR} = \mbox{Polyurethane} \\ \mbox{\bf 1} = \mbox{recommendable}, \mbox{\bf 2} = \mbox{limited suitability}, \mbox{\bf 3} = \mbox{ not recommendable}$ 

The recommendations listed as examples of the use of the products are based on experience gained in technical applications but are not an assurance of their suitability for specific application areas. These recommendations do not obviate the need for the user to check this. In individual cases, we recommend that technical application advice is taken – experienced REMATIPTOP specialists are available for this purpose.



### Belt cleaning brushes

### REMACLEAN – belt cleaning systems for use on belt

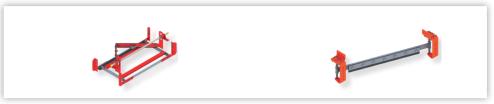


| Туре                                      | SGB      | ТМВ      | GRB      |
|---|----------|----------|----------|
| Belt width (mm)                           | 400-1400 | 400-1400 | 400-2000 |
| Type of cleaning system                   | Н        | F        | F        |
| For belt speeds up to (m/s)               | 2.5      | 6.5      | 2.5      |
| Suited for reverse operation              | yes*     | yes      | yes      |
| Brush material                            | Rubber   | Plastic  | Rubber   |
| Max. operating temperature (°C)           | 70       | 80       | 70       |
| ATEX version available                    | no       | no       | yes      |
| Suitable for mechanical fasteners         | yes      | no       | no       |
| Available for food industry               | no       | yes      | yes      |
| Suitable for oily and greasy<br>materials | 2        | 3        | 2        |
| Sand/gravel (dry)                         | 1        | 2        | 1        |
| Sand/gravel (wet)                         | 1        | 3        | 1        |
| Coal (raw)                                | 1        | 3        | 1        |
| Lignite/tailing                           | 1        | 3        | 2        |
| Ore                                       | 1        | 3        | 2        |
| Sinter                                    | 2        | 3        | 3        |
| Clay                                      | 2-3      | -        | -        |
| Cement                                    | 1        | 2        | 1        |
| Gypsum                                    | 3        | -        | -        |
| Waste                                     | 1        | 2-3      | 2        |

V = Precleaner, H = Main cleaner, G = Basic cleaning, F = Fine cleaning, S = Segments, D = Seamless blade, HM = Tungsten carbide, PUR = Polyurethane 1 = recommendable, 2 = limited suitability, 3 = not recommendable \* with rotation speed switchover EX motors are available upon request.

### Inner belt scrapers

### **REMACLEAN** – return side scrapers



| Туре                                      | RB-IGP   | RB-IGD   |
|---|----------|----------|
| Belt width (mm)                           | 500-1600 | 500-1600 |
| Type of cleaning system                   | G        | G        |
| For belt speeds up to (m/s)               | 3.5      | 3.5      |
| Suited for reverse operation              | no       | yes      |
| Blade type                                | D        | D        |
| Blade material                            | Rubber   | Rubber   |
| Max. operating temperature (°C)           | 70       | 70       |
| ATEX version available                    | yes      | yes      |
| Suitable for mechanical fasteners         | yes      | yes      |
| Available for food industry               | yes      | yes      |
| Suitable for oily and greasy<br>materials | 1        | 1        |
| Sand/gravel (dry)                         | 1        | 1        |
| Sand/gravel (wet)                         | 1        | 1        |
| Coal (raw)                                | 1        | 1        |
| Lignite/tailing                           | 1        | 1        |
| Ore                                       | 1        | 1        |
| Sinter                                    | 1        | 1        |
| Clay                                      | 1        | 1        |
| Cement                                    | 1        | 1        |
| Gypsum                                    | 1        | 1        |
| Waste                                     | 1        | 1        |

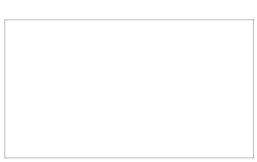
 $<sup>\</sup>label{eq:V} V = \text{Precleaner}, \ H = \text{Main cleaner}, \ G = \text{Basic cleaning}, \ F = \text{Fine cleaning}, \ S = \text{Segments}, \ D = \text{Seamless blade} \\ 1 = \text{recommendable}, \ 2 = \text{limited suitability}, \ 3 = \text{not recommendable}$ 

The recommendations listed as examples of the use of the products are based on experience gained in technical applications but are not an assurance of their suitability for specific application areas. These recommendations do not obviate the need for the user to check this. In individual cases, we recommend that technical application advice is taken – experienced REMATIPTOP specialists are available for this purpose.



### QUESTIONNAIRE: REMACLEAN Belt Cleaning System

| Information about conve   | yor equipr             | ment:                                       |                 |      |                            |                         |                 |
|---|------------------------|---|-----------------|------|----------------------------|-------------------------|-----------------|
| Belt designation:   |                        | Type/                                       | make:           |      |                            | Strenght (m             | nm):            |
| Belt width (mm):  |                        | Distance betw                               | veen pulleys (m | ):   | Belt                       | speedt (m/s             | 5):             |
| Belt surface: Shuttle belt conveyor: Belt splice: Operating time:   |                        | □ yes<br>□ col                              | d vulk.         |      | □ no<br>□ hot vulk.        | <b>□</b> mech           |                 |
| Temperature at the site w   |                        |   | em is to be use | ed:  |                            | °C                      |                 |
| Pulley diameter<br>Pulley shape::<br>Pulley lagging condition:<br>Remarks:  |                        | <ul><li>□ cylindric</li><li>□ new</li></ul> | 🗖 evenly u      | used | lagging thickne.<br>□damag |                         | □heavily damage |
| Material conveyed   |                        |   |                 |      | Lump                       | size (mm): <sub>-</sub> |                 |
| Moisture content<br>Quartz content: □yes _<br>Sticky admixture content  |                        | %   | <b>□</b> no     | -    | <b>□</b> no                |                         |                 |
|   |                        |   |                 |      |                            |                         |                 |
| Manufacturer:   |                        |   |                 |      |                            |                         |                 |
| Installed cleaning system Manufacturer:  Estimate of cleaning perfo   | ormance: _             |   |                 |      |                            |                         |                 |
| Manufacturer:  Estimate of cleaning perfo   | ormance: _             |   |                 |      |                            |                         |                 |
| Manufacturer: Estimate of cleaning performation prepared:   | ormance: _             |   |                 |      |                            |                         |                 |
| Manufacturer: Estimate of cleaning performation prepared:  Place and date   | ormance: _<br>photos): | Namı  |                 |      |                            |                         |                 |
| Manufacturer: Estimate of cleaning performation prepared:  Place and date  New REMACLEAN cleaning  Pre-cleaner:                 | ormance: _<br>photos): | Name<br>recommended:                        | e               |      | Ref. No                    | Signatuı<br>o.:         | re              |
| Manufacturer:Estimate of cleaning perfo   | photos):               | Nami<br>recommended:                        | 2               |      | Ref. No<br>Ref. No         | Signatuı<br>o.:         |                 |
| Manufacturer:  Estimate of cleaning performation prepared:  Place and date  New REMACLEAN cleaning  Pre-cleaner:  Main cleaner: | ormance: _ photos):    | Nami<br>recommended:                        | 2               |      | Ref. No<br>Ref. No         | Signatuı<br>o.:         | re              |



Your local contact



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582 0081 - XI.16 Printed in Germany



