



PRODUCT CATALOGUE

Safety through Innovation



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Product features

Flat wire



Crimped wire



PPN/PA



Flat wire MIX



Crimped Wire MIX



TecSolum

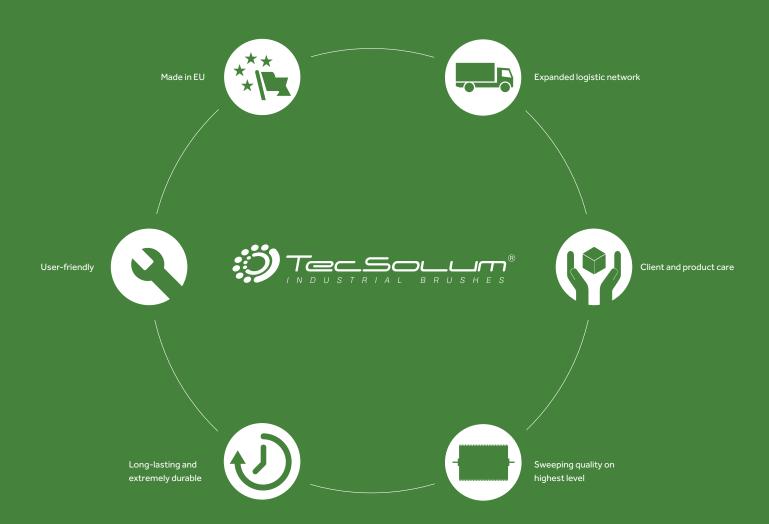
INDUSTRIAL BRUSH MANUFACTURERS LTD.

Established in 2006 by partners with over a decade of experience, TecSolum – Industrial Brush Manufacturers Ltd. is a market leader in offering snow clearing brush solutions. We are an international B2B enterprise, involved in the production of a wide range of brushes for cleaning surfaces, such as runways and roads.

We deliver innovative, high-tech, products to an established partner network spanning 15 worldwide markets. TecSolum's production plant is located in Poland in Komorniki – Lower Silesian region, within the area of the Legnica Special Economic Zone. We also have service centres in Italy, Denmark, Norway, Russia, Baltic Countries and Ukraine, Poland.

TecSolum uses leading edge technology to deliver purpose built snow and ice management solutions to the airport industry. We offer brushes for runway sweepers such as plastic and aluminium cassettes filled with PP or crimped wire. Tufted rings can also be provided.

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TecSolum Sweeper Brushes

SAFETY THROUGH INNOVATION

TecSolum street sweepers brushes are born from the knowgledge that great design is not only aesthetically pleasing but guarantee high quality of street sweeping. Every aspect and detail has been carefully considered as part of an overall design to deliver the best possible quality.









DauerTec Gutter Brooms

ADVANCED MANUFACTURING PROCESSES

TecSolum uses leading edge technology to deliver purpose built brush systems to our partners. We offer unbeatable package of machinery, software and expertise.

Our Company has comprehensive expertise in the brush systems and has been processing advanced technology solutions for a number of years now.

RESEARCH & DEVELOPEMENT

Our modern Research & Development Department cooperates very closely with our customers. We use advanced computer technologies and special software for designing, drawing and specifying our products.

MODERN MACHINE PARK

Our machine park consists of modern production lines, most of them are computer numerical controlled, and all of them operated by skilled operators. Our production planning engineers are responsible for programming and product visualisation before the before production is started, so it is possible to correct and optimize the final product.

Your assignments are performed utilizing the latest software. Our set of modern machines enables selection of optimal solutions, despite everchanging market needs. Thanks to implementation of cutting-edge technologies, we can offer some of the most innovative solutions in Europe. We constantly expand our production line in order to provide highest-quality services and products.

WE DO CARE

We are conscious of our responsibilities towards the natural environment. That is why we optimize our production processes and minimize the use of raw materials by:

- » using modern equipment to minimize power consumption
- » using cooling systems that work in closed circuits, constantly reusing coolants
- » using recycled materials wherever possible
- » using waste management system for segregating recyclable wastes.

DauerTec Gutter Brooms

STRENGTH AND DURABILITY



DauerTec Wire Gutter Broom

The main type of punched material:

- » Flat wire 3,3×0,6 mm
- » Flat wire 2,8×0,45 mm

Segments:

- » Plastic 24 30 mm
- » Waterproof plywood 24 mm

Use:

- » Street sweepers
- » Cleaning heavily-soiled areas





DauerTec PP Gutter Broom

The main type of punched material:

» Polypropylene PP from 2.0 mm to 3.0 mm

Segments:

- » Plastic 24-30 mm
- » Waterproof plywood 24 mm

Use:

- » Street sweepers
- » Cleaning lightly-soiled areas





DauerTec MIX Gutter Broom

The main type of punched material:

- » Polypropylene PP from 2.0 mm to 3.0 mm
- » Flat wire 3.3 x 0.6 mm
- » Flat wire 2.8 x 0.45 mm (MIX)

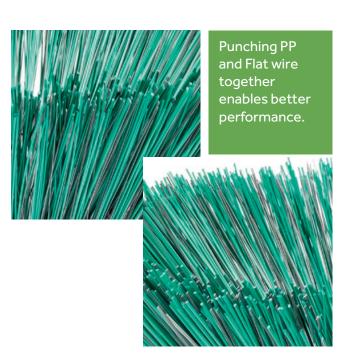
Segments:

- » Plastic 24-30 mm
- » Waterproof plywood 24 mm

Use:

- » Street sweepers
- » Cleaning medium-soiled areas





Gutter Brooms Dauertec®

DauerTec Gutter Brooms

STRENGTH AND DURABILITY

Brodd, Broddway & City Cat Bundles



Flat Wire

- » 3.3×0.6 mm flat wire
- » Use: Cleaning heavily-soiled areas, street sweeping after the winter season





Polypropylene

- » Polipropylene (PP) from 2.0 mm to 3.0 mm
- » **Use:** Cleaning medium-soiled areas



Brush heads - Long-Lasting And Resilient





Gutter Broom Segments

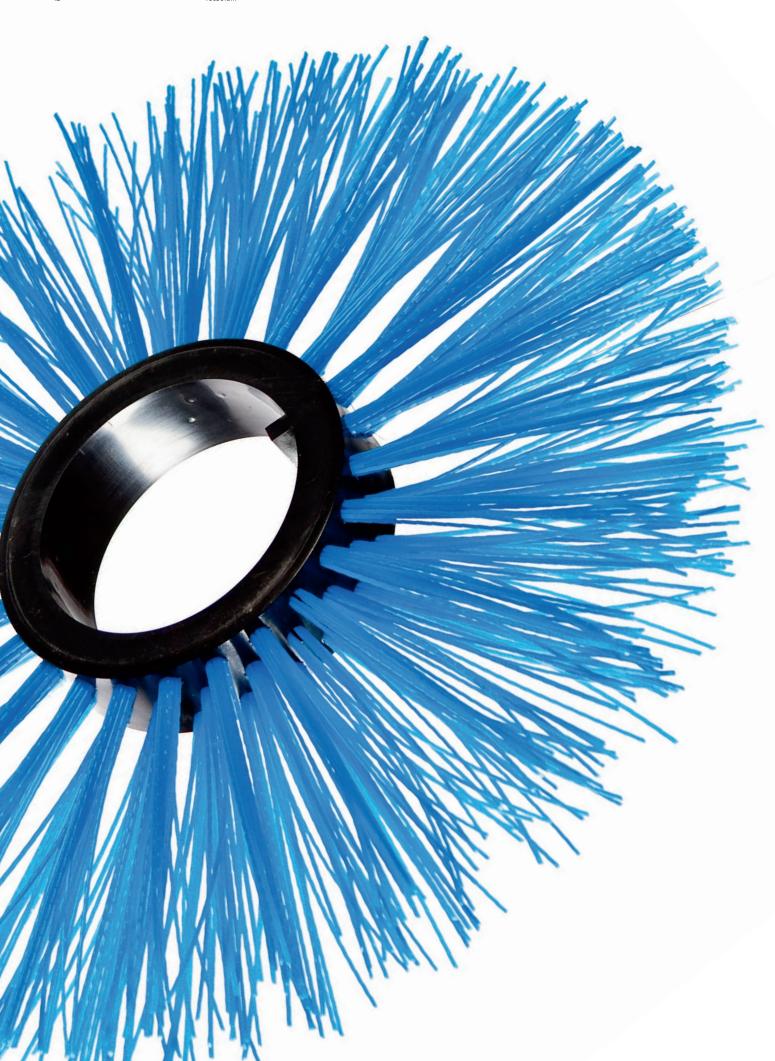
- » Plastic 24-30 mm,
- » Waterproof plywood 24 mm

The type of punched material:

- » Polipropylene (PP) from 2.0 mm to 3.0 mm + flat wire 3.3 × 0.6 mm
- » Flat wire 3.3 x 0.6 mm, 2.8×0.45 mm
- » Polypropylene (PP) 2.5 mm



TecSolum



Wide Sweep Rings

WIDE SWEEP RINGS - A PRACTICAL ALTERNATIVE

Wide sweep rings are often considered a natural alternative for traditional ring brushes



The type of filled material:

» polypropylene (PP) or polyamide (PA)

Available segment dimensions:

» 78/50 mm, 110/50 mm, 128/50 mm, 178/60 mm, 254/60 mm

Outer segment diameter:

» Max. dimension: Inner segment diameter + 700 mm

» Min. dimension: Inner segment diameter + 125 mm





The type of filled material:

» 0.5 or 0.7 mm crimped wire

Available segment dimensions:

» 78/50 mm, 110/50 mm, 128/50 mm, 178/60 mm, 254/60 mm

Outer segment diameter:

» Max. dimension: Inner segment diameter + 700 mm

» Min. dimension: Inner segment diameter + 125 mm





The type of filled material:

- » polpropylene (PP) and 3.3 × 0.6 mm flat wire
- » polypropylene and 0.5 mm crimped wire

Available segment dimensions:

» 78/50 mm, 110/50 mm, 128/50 mm, 178/60 mm, 254/60 mm

Outer segment diameter:

- » Max. dimension: Inner segment diameter + 700 mm
- » Min. dimension: Inner segment diameter + 125 mm





PurgoTec® Ring Brushes



PurgoTec Ring Brushes

DURABILITY AND EFFICIENCY

Ring Brushes (Rings) can be an alternative to traditional roller brushes – they are often used in hitching sweeping modules or other road or construction site cleaning vehicles.

PurgoTec®

Efficient everyday street sweeping is the essential use of this product series. The name PurgoTec® derives from Latin word *Purgo* and from the English word Technology. PurgoTec® series owns its outstanding efficiency to the unique combination of the latest TecSolum® technologies and use of the ring brush. Extremely durable combination of strands with the inner ring increases the strength of the brush, which allows you to perform extreme work without any loss of strands. The product is easy to install, the ring does not corrode and is less susceptible to external conditions.

MATERIAL & TECHNOLOGY

The fill materials most commonly used are Polypropylene (PP) or crimped steel wire in different sizes/diameters.

Our machine park onsists of modern production lines, most of them are computer numerical controlled, and all of them operated by skilled operators.

Our production planning engineers are responsible for programming and product visualisation before the before production is started, so it is possible to correct and optimize the final product.

APPLICATION

The entire product range is tailored to the technological requirements of the most popular street sweepers on the road today as well as individual needs of our clients and end users.

PurgoTec Ring Brushes

DURABILITY AND EFFICINECY

Ring Brushes (Rings) can be an alternative to traditional roller brushes – they are often used in hitching sweeping modules or other road or construction site cleaning vehicles.



PurgoTec WIRE by TecSolum

The type of the filled material

» Zinced 0.7 mm crimped wire

Ring Brush inner diameters:

» 77 mm, 110 mm, 120mm, 128 mm, 162 mm, 178 mm, 205mm, 220mm, 254mm, 300mm

Ring Brush outer diameters:

» 300 mm – 900 mm





PurgoTec PP by TecSolum

The type of the filled material

» Polyproplene (PP) from 1.3 mm to 3 mm diameter

Ring Brush inner diameters:

» 77 mm, 110 mm, 120mm, 128 mm, 162 mm, 178 mm, 205mm, 220mm, 254mm, 300mm

Ring Brush outer diameters:

» 300 mm – 900 mm





PurgoTec STARR by TecSolum

The type of the filled material

» Polypropylene (PP) from 1.3 mm to 3 mm diameter

Ring Brush inner diameters:

» 77 mm, 110 mm, 120mm, 128 mm, 162 mm, 178 mm, 205mm, 220mm, 254mm, 300mm

Ring Brush outer diameters:

» 300 mm – 900 mm

No. 1 in Europe in snow





The type of the filled material:

» Zinced 0.7 mm crimped wire

Ring Brush inner diameters:

» 77 mm, 128 mm, 162 mm, 178 mm, 205mm, 220mm, 254mm, 300mm

Ring Brush type

» Bent Ring (zig zag)





The type of the filled material:

» Crimped polypropylene (PP)1.3 mm, 2.0 mm, 2.2 mm, 2.5 mm

Ring Brush inner diameters:

» 77 mm, 128 mm, 162 mm, 178 mm, 205mm, 220mm, 254mm, 300mm

Ring Brush type

» Bent Ring (zig zag)





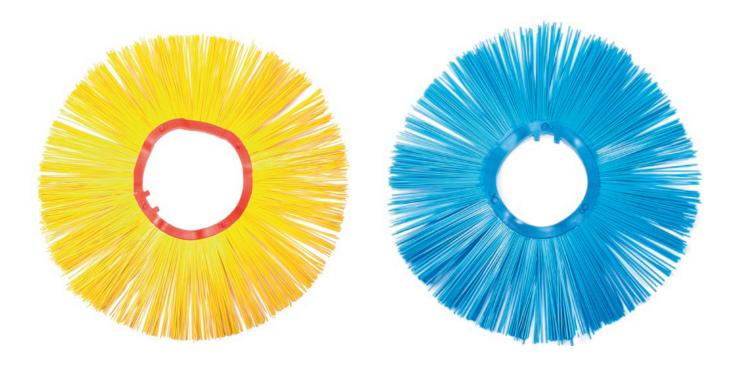
Ring Brush Spacers

» Inner diameter: 77 mm, 110 mm, 128 mm, 178 mm, 205 mm, 220 mm, 254 mm and 300 mm
Width: from 15 mm to 30 mm for all diameters.

PurgoTec® Ring Brushes 17

New Generation of PurgoTec ECO Brushes

OUR MOST ENVIRONMENTALLY FRIENDLY PRODUCT

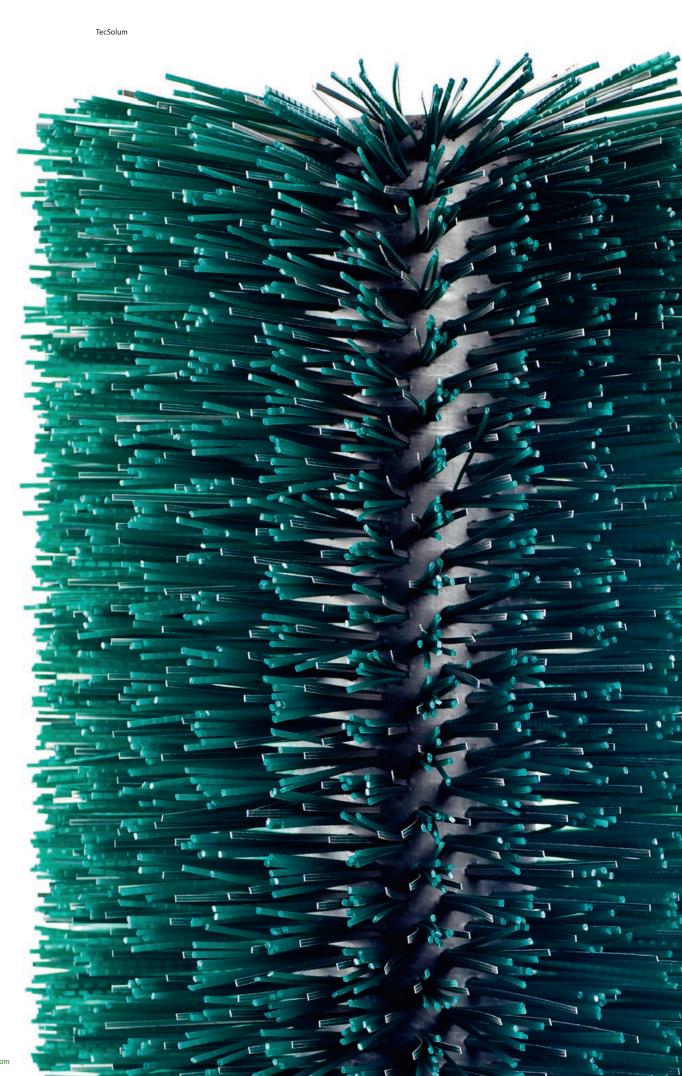


What is so unique about the new ECO line?

It provides even better operation, increased durability and performance in daily work. PurgoTec ECO Line is fully recyclable.

It is the most-ecologically friendly solution on the market today. \\





VolviTec® Roller Brushes



VolviTec Roller Brushes

DURABILITY AND PERFORMANCE

Roller brushes – TecSolum offers wide range of roller brushes compatible with the most popular street sweepers on the road today. Roller Brushes with TecSolum VolviTec® technology offer an ideal solution for even the toughest conditions, wherever it is necessary to wash, grind, clean, remove the sand, icy mud or rubbish.

VolviTec®

VolviTec® product series has been designed, produced and tested in accordance to the global standards of quality by team of trained professionals. We know that our partners value products that are durable, practical and easy to use. We are proud to introduce the VolviTec® series that meets this demand allowing easy maintenance and servicing. We can also customize range of these products to meet the various needs of our clients and end users.

MATERIAL & TECHNOLOGY

The fill materials most commonly used are Polypropylene (PP), Polyamide (PA) and flat or crimped steel wire (MIX) in different sizes/diameters.

Our machine park consists of modern production lines, most of them are computer numerical controlled, and all of them operated by skilled operators.

Our production planning engineers are responsible for programming and product visualisation before the before production is started, so it is possible to correct and optimize the final product.

APPLICATION

The entire product range is tailored to the technological requirements of the most popular street sweepers on the road today as well as individual needs of our clients and end users.

VolviTec Roller Brushes

DURABILITY AND PERFORMANCE



Roller Brush VolviTec Starr by TecSolum

Type of the filled material:

Polypropylene (PP) and flat wire (MIX)

Embedding:

Wide range of plastic sleeves including: dimensions (external/internal): 125/85 mm, 200/163 mm

Mounting:

Square profile of the standard dimensions of 46×46 mm, 51×51 mm, or other shapes according to the needs of the Client.

Application:

- » Sweepers and the individual needs of the customer
- $\ \ \, \text{Cleaning of the heavily soiled surfaces}$





Roller Brush VolviTec MIX by TecSolum

Type of the filled material:

Polypropylene (PP) and crimped wire (MIX)

Embedding:

Wide range of plastic sleeves including: dimensions (external/internal): 125/85 mm, 200/163 mm

Mounting:

Square profile of the standard dimensions of 46×46 mm, 51×51 mm or other shapes according to the needs of the Client.

Application:

- » Sweepers and the individual needs of the customer,
- » Cleaning of the medium and heavily soiled surfaces.





Roller Brush VolviTec PP by TecSolum

Type of the filled material:

Polypropylene (PP)

Embedding:

Wide range of plastic sleeves including: dimensions (external/internal): 125/85 mm, 200/163 mm

Mounting

Square profile of the standard dimensions of 34×34 mm, 41×41 mm, 46×46 mm, 51×51 mm or other shapes according to the needs of the Client.

Application:

- » Sweepers and the individual needs of the customer.
- » Cleaning of the medium and lightly soiled surfaces.





Roller Brush VolviTec PA by TecSolum

Type of the filled material:

Polyamide (PA)

Embedding:

Wide range of plastic sleeves including: dimensions (external/internal): 60/40 mm, 125/85 mm, 200/163 mm

Mounting

Square profile of the standard dimensions of 34×34 mm, 41×41 mm, 46×46 mm, 51×51 mm, or other shapes according to the needs of the Client.

Application

- » Sweepers and the individual needs of the customer.
- » Cleaning of the medium and lightly soiled surfaces.

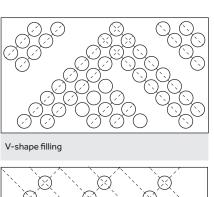


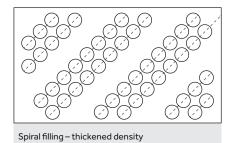
VolviTec® Roller Brushes

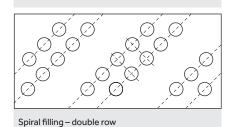
Types of filling

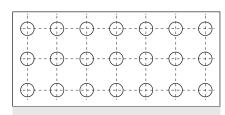
SMALL THINGS LEAD TO BIG CHANGES

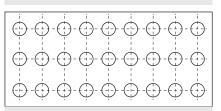
Filling

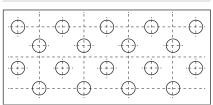


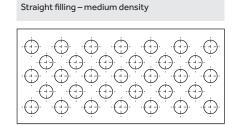












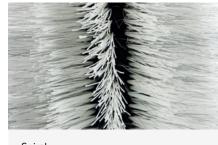
Straight filling – thickened density

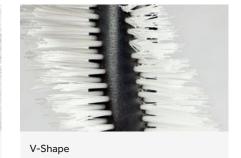
Spiral filling – single row

Full filling – medium density

Full filling - thickened density







Full/Straight

Spiral

Square profiles for Roller Brushes



» The standard dimensions of 34×34 mm, 41×41 mm, 46×46 mm, 51×51 mm, 61×61 mm, hexagonal or according to the needs of the Client



StormiTec® Stip Brushes 23

StormiTec Strip Brushes

FLEXIBILITY AND FUNCTIONALITY

Strip Brushes can be used in sweepers but also according to clients individual needs.





StormiTec Wire

The type of filled material:

» 0.5 mm crimped or flat wire

Material:

- » plywood plate
- » plastic
- » metal channel



StormiTec MIX

The type of filled material:

» polypropylene (PP) in various diameters+ 0.5 mm crimped or flat wire (MIX)

Material:

- » plywood plate
- » plastic
- » metal channel







StormiTec PP

The type of filled material:

» polypropylene (PP) in various diameters

Material:

- » plywood plate
- » plastic
- » metal channel



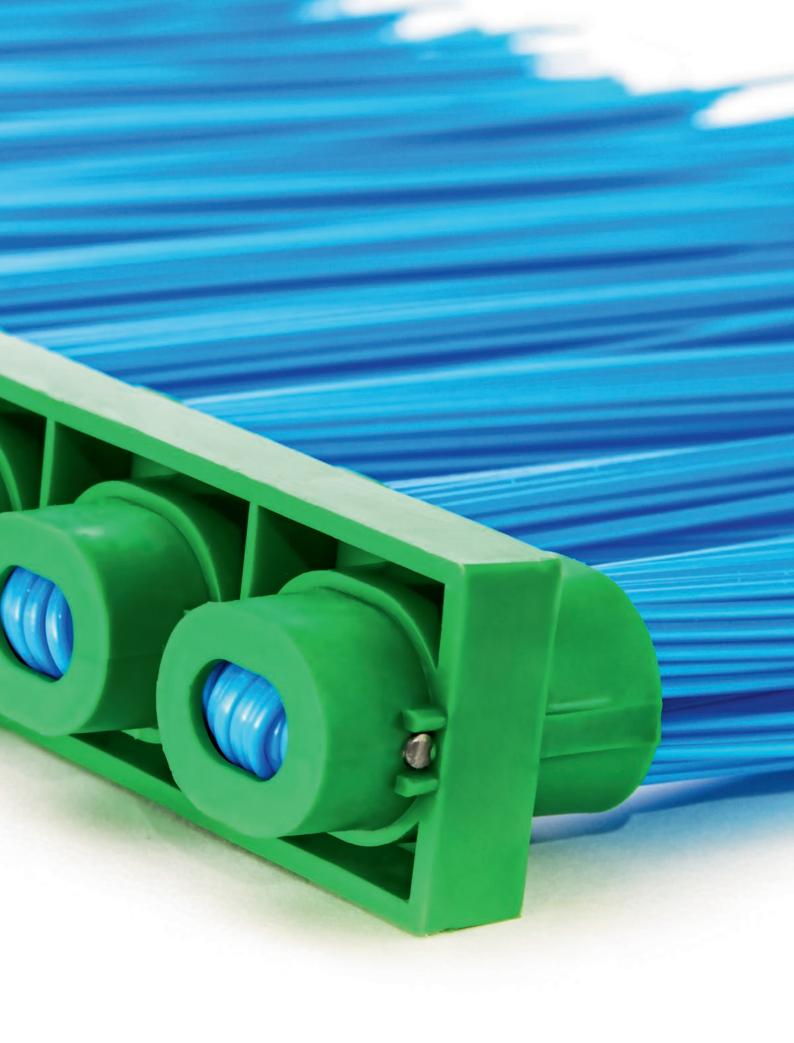
TecSolum Airport Brushes

SAFETY THROUGH INNOVATION

TecSolum Airport Brushes are born from the knowgledge that great design is not only aesthetically pleasing but guarantee safety of the passengers. Every aspect and detail has been carefully considered as part of an overall design to deliver the best possible quality.







Cassette brushes BorraTec®



SAFETY THROUGH INNOVATION

Efficient maintenance of the airport runways is important not only due to aesthetics, but most of all, safety of the passengers. BorraTec® product line has been designed to provide the most advanced cleaning solutions and thereby contribute to increased safety. In Maltese *Borra* means snow. Snowfall is often the reason why airport traffic comes to a standstill. We have find the perfect solution.

BorraTec® Airport Cassettes

Airport cassettes with TecSolum BorraTec® technology offer an ideal solution for even the toughest conditions, effectively removing snow and ice from runways. TecSolum offers the widest range of airport brushes:

Aluminum cassettes filled with crimped wire for brush cores for machines produced by \emptyset veraasen, Fresia, Bucher Schörling, Zaugg and JetBroom-Boschung.

Plastic cassettes filled with crimped wire or PP (polypropylene) for brush cores for machines manufactured by \emptyset veraasen, Schmidt, Vammas, Fresia, BucherSchörling, Zaugg and JetBroom-Boschung.

MATERIAL & TECHNOLOGY

TecSolum applies the latest production technology which protects brushes from losing individual strands and retaining wire from slipping out as a result of vibrations. TecSolum experts have developed the world's first innovative group five cups design to provide even better protection against wire breakages. This solutions offers almost 100% confidence that no more wire will be found on the airside.

APPLICATION

The entire product range is tailored to the technological requirements of all snow removal machines cleaning airport runways.

BorraTec Airport Cassettes

SAFETY THROUGH INNOVATION



BorraTec® PP Cassette on plastic profile

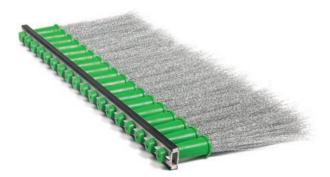
The type of filled material:

- » PP (polypropylene)
- » cups can withstand temperatures down to -35°C

Use:

Runway sweepers: Øveraasen, Bucher Schörling, Zaugg, Vammas, Schmidt, Fresia, Jetbroom by Boschung

NEW



BorraTec® Wire Eco Cassette on aluminum profile

The type of filled wal:

- » zinced 0.45 mm crimped wire
- » cups can withstand temperatures down to -35°C

Regenerating aluminum profile:

» lets you save money and protect the environment

Use:

Runway sweepers: Øveraasen, Bucher Schörling, Zaugg, Fresia, Jetbroom by Boschung



BorraTec® Wire Starr Cassette on plastic profile

The type of filled material:

- » zinced 0.45 mm crimped wire
- » cups can withstand temperatures down to -35°C

Use:

Runway sweepers: Øveraasen, Bucher Schörling, Zaugg, Vammas, Schmidt, Fresia, Jetbroom by Boschung





Main areas of innovation

SMALL THINGS LEAD TO BIG CHANGES

TecSolum applies the latest production technology BorraTec® which protects brushes from losing individual strands – wire breakages.





Airport brushes produced by TecSolumare equipped with a special locking clip for each bundle of wire, which prevents the loss of individual strands at any given stage of the operation – regardless of the length of the strand. It prevents the most serious incidents or loss of individual strands during the operation.

This has a significant impact on safety at airports.

 $Tec Solum\ experts\ have\ developed\ the\ world's\ first\ innovative\ group\ five\ cups\ design\ to\ provide\ even\ better\ protection\ against\ wire\ breakages.$

Uneven surface of the cups absorbs the pressure from the strand which is much less likely to break during the operation.



Industrial Brush Manufacturers Ltd. Polna 21a Str., Komorniki 55-300 Środa Śląska Poland

info@tesolum.com www.tecsolum.com