



TOP LINER 60

03/2023

Top Liner 60 is a combination of Trelleborg high wear resistant rubber sheeting (Blackrock+) and an innovative fixing system: SAM, Self-Attachment Method, patented by Trelleborg.

This system saves time and money on maintenance tasks (individual plug-in operation), enhances security (no chemicals required) and is more friendly to people and the environment. Gluing, cleaning, bolting, and welding is no longer needed. **Welcome to the velour rubber age.**

How does it work?

We use two separate elements, similar to the ones used in the textile industry, hook and velour.

The hook strips, Hookgrip, are fixed on a metal surface by a self-adhesive side. This fixation method is clean, simple, fast and long-lasting. Hookgrip is conceived to be reusable for multiple replacement cycles.

The rubber plates have one velour side that will grip the plate firmly to the structure once the velour side is in contact with the hooks.

Safer first installation, safer replacements

We care about installers. With Top Liner 60, the tough and hazardous tasks of removing the worn rubber and glue from the metal surface, the steel preparation and the new glue application disappear. The preliminary Hookgrip strips installation is made using its own adhesive side and no chemical treatment is required.

Replacements are done by pulling out worn plates and putting on new ones. It is as simple as that.

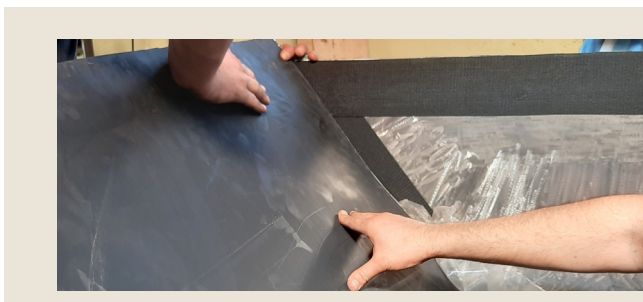
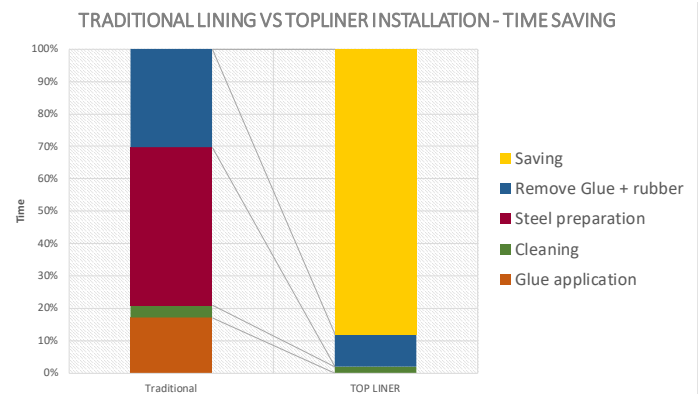
Top Liner also protects the structure life span. There is no need for blasting the metal surface or periodically treating it with aggressive chemicals to get the proper bonding.

Time and money saving

The simplicity of installation and the easy rubber plate replacement drastically decrease shutdown times.

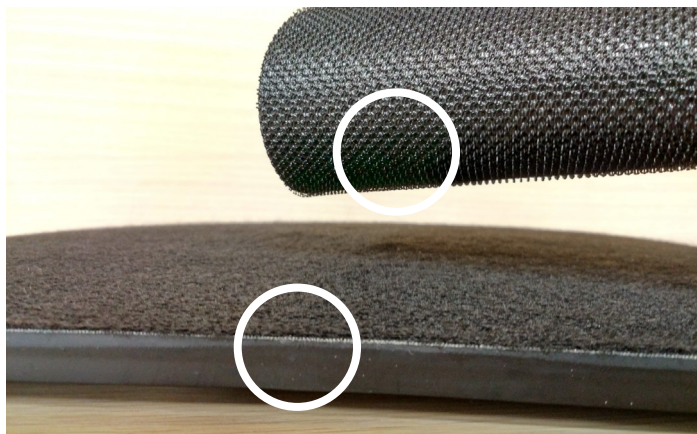
A comparison study looking at installation times for traditional lining versus Top Liner 60 concluded that the time saved over the life of a medium-sized tool could reach up to 85%.

The first installation of Top Liner 60 would save a 5% of the traditional setup time. A comparison study looking at installation times for traditional lining versus Top Liner 60 concluded that the time saved over the life of a medium-sized tool could reach up to 85%.



- Replacement through pull and push process**
- Removes difficult cleaning process**
- Free of chemical risk**
- Reduces installation time by up to 85%**

SAM, Self-Attachment Method, patented by Trelleborg

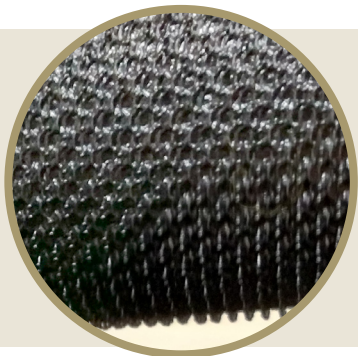


Hookgrip

Hookgrip is delivered in 100 mm rolls width with one self-adhesive side. The material is ready to be used. A film protects the self-adhesive surface.

Keep hook surface as delivered. No Chemical treatment needed.

⚠ Do not remove adhesive protection until installation.

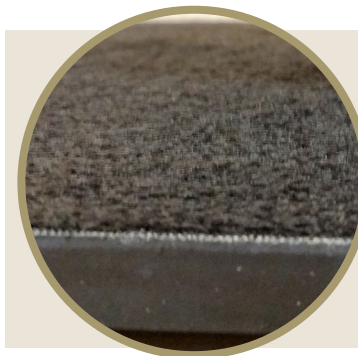


Velour backing

High wear resistant rubber, Blackrock+, is delivered with one side having a velour fabric finish. This surface is protected by a plastic layer.

Keep the velour surface as delivered. No Chemical treatment needed.

⚠ You will need the plastic cover during the installation.



	PEEL STRENGTH	SHEAR STRENGTH
Adhesion value	Average N/cm	Average N/cm ²
Hookgrip & velour backing rubber	25	70
Hookgrip adhesive side & steel surface	23	100

Temperature range: -30°C up to 80°C

Working surface, Blackrock+ rubber plates

The working surface is rubber plates made of Trelleborg Blackrock+, our black 60 Shore A natural rubber with very good abrasion resistance.

MECHANICAL, PHYSICAL & CHEMICAL PROPERTIES

Measured characteristics	Standard	Value	
MECHANICAL			
Rubber compound - black		NR R650	●
Density		1.12 ±0.05	g/cm ³
Hardness	ASTM D2240	60 ±5	Shore A
Tensile strength	ISO 37	≥20	MPa
Elongation at break	ISO 37	≥500	%
Tear resistance	ISO 34-1	≥80	N/mm
Abrasion resistance (10N)	ISO 4649	≤90	mm ³
Compression set after 22h at 70°C	ISO 815-1	≤30	%

TEMPERATURE

Working temperature	-50/+85	°C
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AGEING

Δ Hardness after 70h at 70°C	ASTM D573	≤5	Shore A
Δ Tensile strength after 70h at 70°C	ASTM D573	≤-10	%
Δ Elong. at break after 70h at 70°C	ASTM D573	≤-20	%
Ozone resistance, 50pphm, 168h, 30°C, 20%	ISO 1431-1 method A	No crack	

ELECTRICAL RESISTIVITY

Volume resistivity	ISO 14309	1.7x10 ⁴	Ω·m
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CHEMICAL RESISTANCE

Diluted acids and bases	Concentrated acids and bases	Ozone	Oils and hydrocarbons
Very good	Good	Good	Non suitable

Advantages

- Excellent shock impact, tear, and abrasion resistance
- Good heat resistance
- Good ageing resistance
- Noise and vibration propagation reduction
- Protection against corrosion
- Very high performance at low temperature

Areas of activity

Sand and gravel quarries, glassworks, construction and public works, civil engineering, building materials, mechanical engineering.

Applications

Hoppers, chutes, vibrating lines, truck boxes, etc., linings to protect equipment, especially at loading and unloading points, against products (rocks, wood, chemicals, etc.) with abrasive characteristics: density and hardness (medium to high), shape (salient and sharp-edged), and large grain size. Suitable for dry or wet processes and temperatures up to +70 °C.