W.Bosch+Co.

WB-VCI-PROTECT® by W.Bosch+Co.:
Safe storage and transportation, for protection and value retention.

Powerful anti-corrosion solutions - straight from the supplier.

Original quality, made in Germany

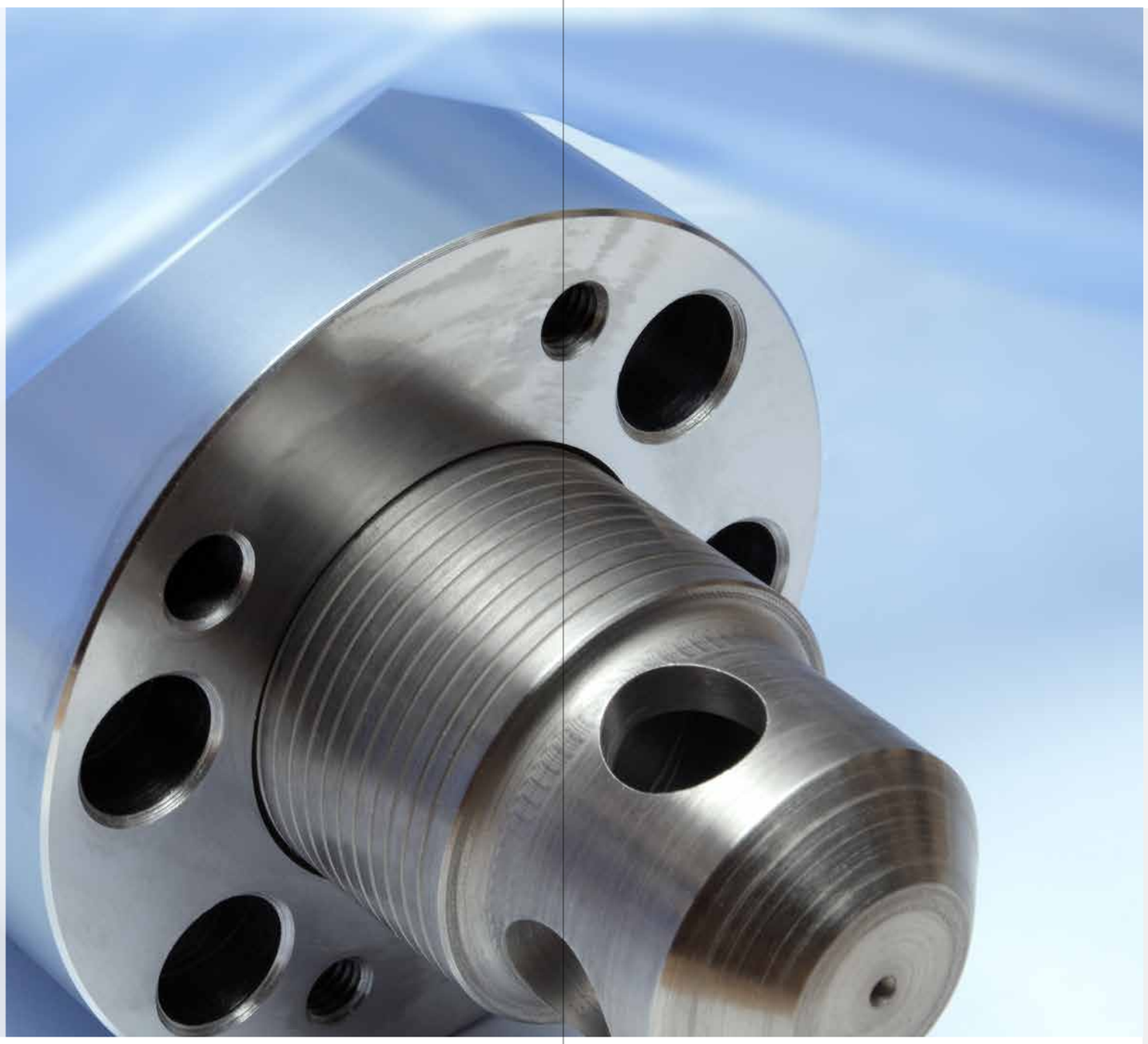
W.Bosch+Co.

W.Bosch+Co.

WB-VCI-PROTECT®
Packaging

Packaging with WB-VCI-PROTECT®: **Corrosion protection to unseen depths.**

The VCI principle is one of the most effective ways to protect metal from corrosion. These volatile corrosion inhibitors, or VCIs for short, can be used in different forms.



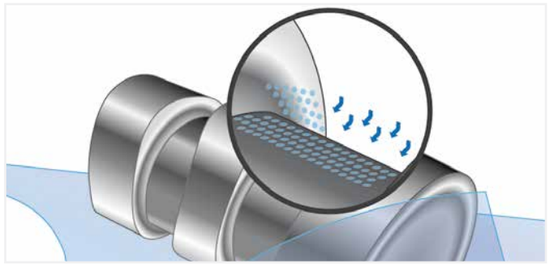
From the vapour onto the metal.

The active VCI agents continually and gradually vaporise from the carrier material as part of a self-contained chemical reaction. This produces a saturated protective atmosphere inside the packaging.

The substances (inhibitors) invisibly coat the surface of the metal, building up a protective film that prevents electrochemical corrosion reactions.

The protection extends into every little recess, including screw threads, holes, folds, etc. In other words, the valuable metallic materials will not rust - not even in highly critical areas. When the packaging is opened, the VCI active agents vaporise fully, leaving no residue. The item is then ready for immediate use.

If the packaging is subsequently reclosed properly, the anticorrosion atmosphere will be build up again after a short while.



The VCI principle

W.Bosch+Co.

WB-VCI-PROTECT®
Prime choice

NITRITE FREE

A convincing list of clear advantages:

- WB-VCI-PROTECT® are supplied by W.Bosch+Co. using formulas matched to the metal and the area of application. For secure protection in the shortest time.
- WB-VCI-PROTECT® by W.Bosch+Co. allow immediate deployment of components, modules and machines in manufacturing processes.
- WB-VCI-PROTECT® made by W.Bosch+Co are good for the environment - no need to apply oil or grease, no need for post-process washing and none of the associated costs.
- VCI film and VCI paper supplied by W.Bosch+Co. come with clear cost benefits - corrosion protection is part of the packaging, and no additional measures are required.
- WB-VCI-PROTECT® made by W.Bosch+Co. are completely safe when handled in the proper manner and comply with EU standards.
- WB-VCI-PROTECT® by W.Bosch+Co. can be recycled. The products can also be disposed of with household refuse or in waste incineration plants.
- VCI films made by W.Bosch+Co. are coloured and transparent. This allows customs officials to clear goods without the need to disturb the packaging, for example.

Prime choice for VCI-based protection.

W.Bosch+Co. was one of the first companies in the world to manufacture anti-corrosion packaging. Based on experience and expertise, we developed our own anti-corrosion solutions which afford optimum protection for metal materials.

Thanks to our policy of continued optimisation and product development, W.Bosch+Co. is now one of the leading manufacturers on the VCI market with its comprehensive range of effective anti-corrosion solutions.

WB-VCI-PROTECT® films and papers developed by W.Bosch+Co. have distinct advantages which provide the metal industry with increased security and value retention.

W.Bosch+Co.

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WB-VCI-PROTECT® film
Perfect protection

WB-VCI-PROTECT® films by W.Bosch+Co.: **perfect protection with clarity.**

WB-VCI-PROTECT® films made by W.Bosch+Co. are always the best solution when it comes to providing safe and effective protection for large machines, metal workpieces, metal tools and also bulk goods from corrosion and environmental influences, pollutants, contamination and pests.

UNI FI-1xxx SR

Mono-extruded VCI film, thickness-reduced with integrated UNI-VCI inhibitors, effective on both sides, 25% more tensile strength compared with standard film.

UNI FI-2xxx SR

Co-extruded VCI film, thickness-reduced with integrated UNI-VCI inhibitors, effective on one side, 25 % more tensile strength compared with standard film.

UNI FI-1xxx

Mono-extruded VCI film with integrated UNI-VCI inhibitors, effective on both sides.

UNI FI-2xxx

Co-extruded VCI film with integrated UNI-VCI inhibitors, effective on one side.

UNI FI-Sxxx

Co-extruded VCI stretch film with integrated UNI-VCI inhibitors, effective on one side.

W.Bosch+Co.

WB-VCI-PROTECT® film and paper
Prime choice

Perfect protection with WB-VCI-PROTECT®

Iron and steel:
Full protection, through the vapour phase and through direct contact.

Zinc-coated parts:
Full protection, through the vapour phase and through direct contact.

Brass:
Full protection, through the vapour phase and through direct contact.

Bronze:
Full protection, through the vapour phase and through direct contact.

Aluminium:
Full protection, through the vapour phase and through direct contact.

Copper:
Full protection, through the vapour phase and through direct contact with special VCI type.

A good combination for various applications.

WB-VCI-PROTECT® films developed by W.Bosch+Co incorporate special combinations of VCI inhibitors, making them ideal for the widest range of protection requirements:

5 to 8 m² WB-VCI-PROTECT® films made of UNI FI can, depending on the surface in question, provide sufficient protection for a packed volume of 1 m³ for a maximum period of up to two years. This period can be extended up to 10 years by adding additional VCI emitters like VCI chips or VCI powder bags. In the case of special requirements or custom alloys, we test and examine the effective protection in our own laboratory or have tests performed in external institutes. For example, W.Bosch+Co commissions bodies like the BFSV Institute (Institute for Consulting, Research, System Planning, Packaging Development and Testing), which is recognised Europe-wide, to perform regular and independent audits to confirm the quality of its products.

Secure packaging for all shapes and sizes.

WB-VCI-PROTECT® film made by W.Bosch+Co.is available in a variety of thicknesses and finishes Mono-extruded VCI film is effective in both directions and is particularly suitable for interim storage. Co-extruded VCI film is effective in one direction only. This prevents gas emission and provides significantly longer protection. Customers can select the delivery format to match their requirements - on reels as individual sheets, tubular, semi-tubular, tubular with side folds, flat pouches or side fold bags with tear-off perforations, individual cut-outs, flat pouches, side fold bags, covers and crate inlays.

Easy to use on all equipment.

The WB-VCI-PROTECT® film provided from W.Bosch+Co. can be handled in the same way as commercially available PE film and is ideal for use in automatic packing processes. The film can also be easily sealed, and it can be manually or automatically wrapped and stretched on all conventional standard machines.

A convincing list of good points:

- A wide range of thicknesses, base weights and designs
- Up to several years of protection
- Fully compatible with plastics and paints
- Environmentally friendly as WB-VCI-PROTECT® contain no secondary amines and are nitrite-free.
- Recyclable

W.Bosch+Co.

W.Bosch+Co.

WB-VCI-PROTECT® paper
Perfect protection

WB-VCI-PROTECT® paper: **Perfect protection for every component.**

VCI paper developed by W.Bosch+Co. is always the best solution when it comes to providing safe and effective protection for components, small metal workpieces and tools from corrosion, environmental influences and pollutants.

A good combination for a range of applications.

WB-VCI-PROTECT® by W.Bosch+Co. comes with special combinations of VCI inhibitors, making it ideal for the widest range of protective needs.

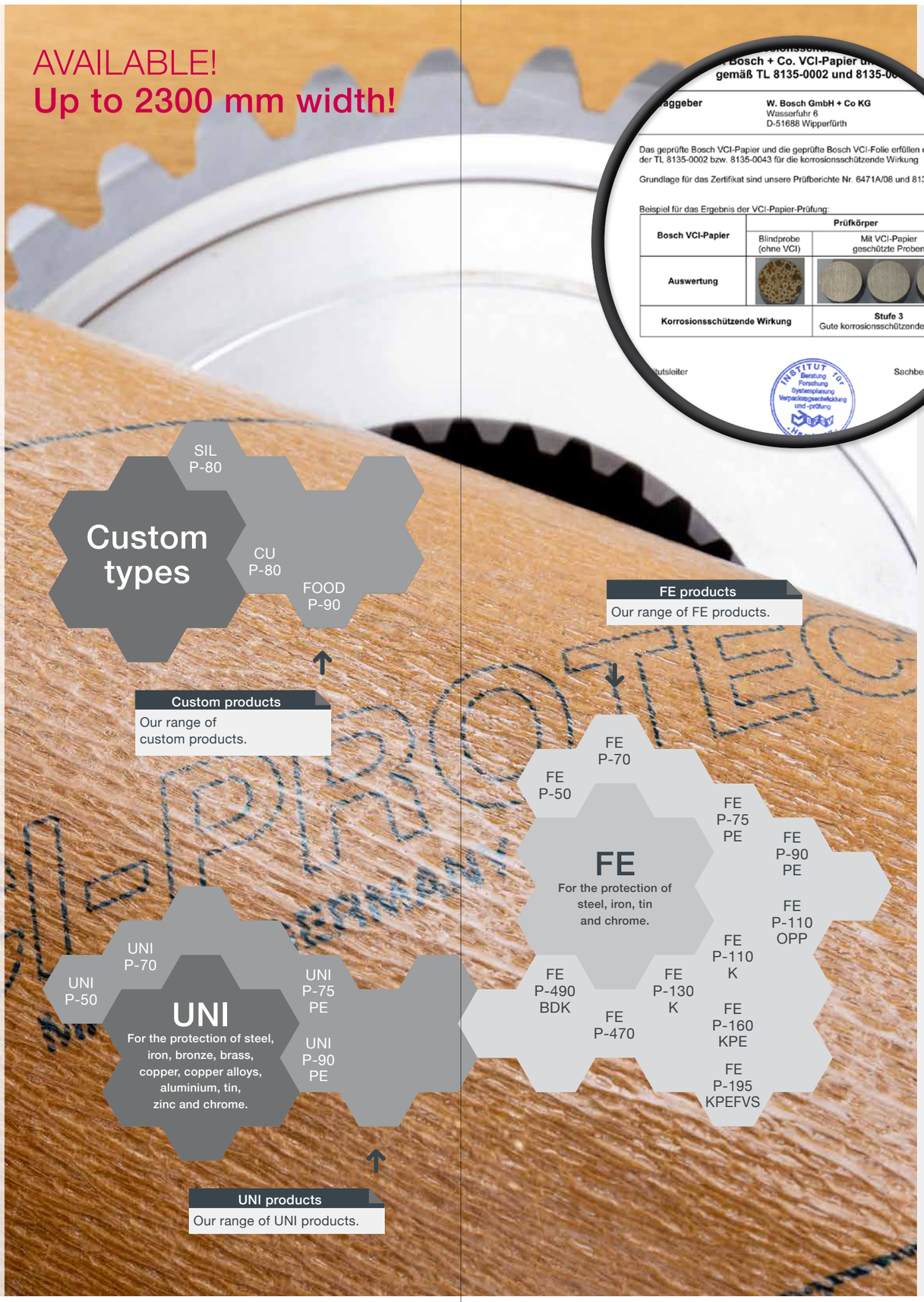
Easy to use in all equipments.

The VCI paper made by W.Bosch+Co. is available on reels or as individual pieces, can be used in the same way as commercially available packaging paper, and is ideal for automatic packaging on all conventional standard machines.

The right paper for every need.

The VCI paper by W.Bosch+Co. is available in a range of finishes depending on the type of metal requiring protection and the intended use - with or without polyethylene coating, as cardboard, with or without scrim reinforcement or as crepe paper.

AVAILABLE!
Up to 2300 mm width!



W.Bosch+Co.

VCI expertise
Perfect protection

VCI expertise: Know-how at all levels.

The standard range of VCI products developed by W.Bosch+Co. generally provides the perfect solution for most packaging requirements. But before we do anything else, we talk to our customers to make sure that they receive exactly the right packaging solution at the best price.

Our customers can also benefit from our expert help from the design stage right through to the finished packaging. We analyse the environmental influences and factor these in with the packaging period requirements and the material properties. We also perform laboratory tests if required. We therefore cover all the bases in order to provide the best protection for our customers‘ goods.

Other VCI-products made of WB-VCI-PROTECT®:

VCI powder bags
For increasing the protection period in closed packaging.

VCI chips
For increasing the protection period in closed packaging.

Puma-Folie® hermetic VCI
Sealable barrier layer material made from PE, aluminium and PET film.

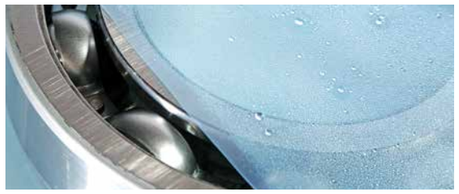
WB-VCI-PROTECT®

Product specifications

	FE P-130 K	FE P-160 KPE	FE P-195 KPEFVS	FE P-70	FE P-90 PE	UNI FI	UNI FI SR
Product benefits / features							
Paper	o	o	o	o	o		
Film						o	o
With scrim reinforcement			o				
With vapour barrier on the back		o	o		o	o	o
Increased expansion / creping	o	o	o				
Padded effect	o	o	o				
Very pleasant to touch	o	o	o				
Increased tear resistance and tensile strength			o				o
Environmentally friendly protection against corrosion	o	o	o	o	o	o	o
Low requirements in relation to workplace safety	o	o	o	o	o	o	o
No additional outer packaging required		o	o		o	o	o
Clear view of the product without opening the packaging						o	o
VCI active agents ar e prevented from evaporating from the packaging		o	o		o	o	o
Protection against harmful environmental influences, such as foreign bodies, pollutants and contamination						o	o
Protection against pests						o	o
Delivery formats:							
Printed or plain	o	o	o	o	o	o	o
On reels up to 2300 mm in width	o	o	o	o	o		
In formats	o	o	o	o	o	o	o
As strips in magazines	o	o	o				
Colour film available on request						o	o
As flat film on r eels						o	o
As tubular or semi-tubular film						o	o
As individual cut-outs in boxes or on reels with tear-off perforations						o	o
As flat pouches, loose in boxes or on reels with tear-off perforations						o	o
As side gusseted bags or covers, loose in boxes or on reels with tear-off perforations						o	o
As crate covers or crate inlays						o	o
Standards:							
Reach declaration of conformity as per EU regulation 1907/2006	o	o	o	o	o	o	o
Nitrite-free as per TRGS 615	o	o	o	o	o	o	o

Example WB-VCI-PROTECT® products from our extensive range.

WB-VCI-PROTECT®

Type:	Application:	Illustration of application:	Original samples:
VCI crepe FE P-130 K Standard finish	**Flexible extensible packaging material for the protection of iron, steel, tin and chrome from corrosion.**		
VCI crepe FE P-160 KPE With PE coating	**Flexible extensible, PE-coated packaging material for the protection of iron, steel, tin and chrome from corrosion and moisture.**		
VCI crepe FE P-195 KPEFVS With PE coating, scrim-reinforced	**PE-coated, scrim-reinforced packaging material for the protection of iron, steel, tin and chrome from moisture and corrosion.**		
VCI paper FE P-70 Standard finish	**Packaging material for the protection of iron, steel, tin and chrome from corrosion.**		
VCI paper FE P-90 PE With PE coating	**Packaging material with PE coating for the protection of iron, steel, tin and chrome from corrosion.**		
VCI film UNI FI UNI FI-2120 Standard finish	**Special transparent packaging for the protection of iron, cast iron, steel, copper, aluminium, tin, zinc, chrome, cadmium, brass, bronze, copper alloys and other metals from corrosion.**		
VCI film UNI FI SR UNI FI-2080 SR Reduced thickness. with increased tensile strength	**Special transparent packaging with reduced thickness and increased tensile strength for the protection of iron, cast iron, steel, copper, aluminium, tin, zinc, chrome, cadmium, brass, bronze, copper alloys and other metals from corrosion.**		

Proof of quality

VCI crepe FE P-130 K

VCI crepe FE P-160 KPE

VCI crepe FE P-195 KPEFVS

VCI paper FE P-70

VCI paper FE P-90 PE

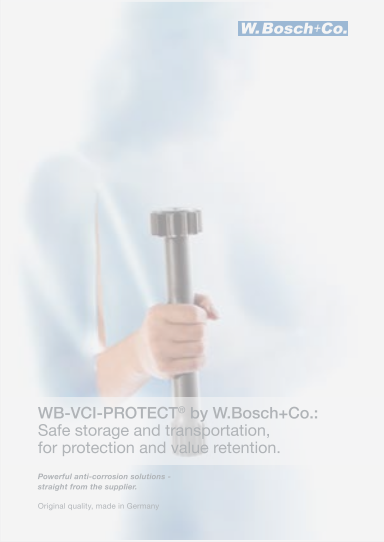
VCI film UNI FI-2120

VCI film UNI FI-2080 SR

More than WB-VCI-PROTECT®.
Other successful products by W.Bosch+Co.

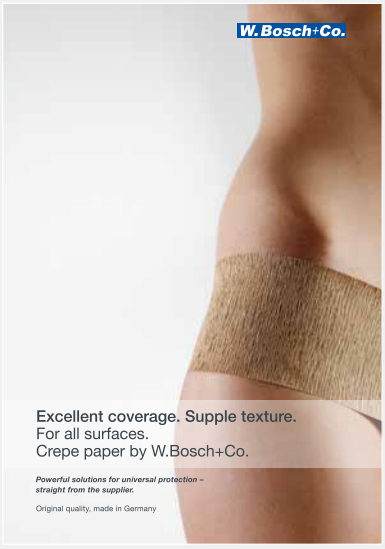
Puma-Folien®

WB-VCI-PROTECT®

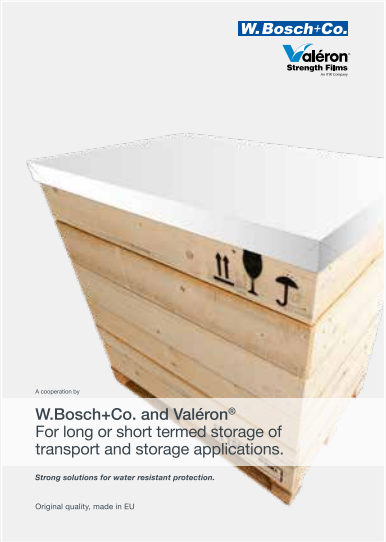


PE and oil paper

Crepe paper



Valéron® films



Company brochure

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