

# STRAPPING SOLUTIONS

As unique as your product.

PET

The image features two large rolls of strapping tape. The roll on the left is green and labeled 'PET'. The roll on the right is white and labeled 'PP'. Both rolls are shown from a three-quarter perspective, revealing their thickness and the cardboard core. The background is a solid blue color, accented with white geometric lines that form a series of nested, slanted rectangles, creating a modern, architectural feel.

PP

# We are TEUFELBERGER.

TOGETHER WE KEEP THE WORLD MOVING SAFELY.



TEUFELBERGER Group  
CEO: Florian Teufelberger

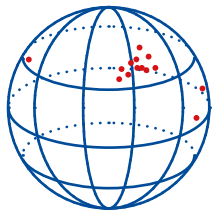


Family-owned for 7 generations



1500

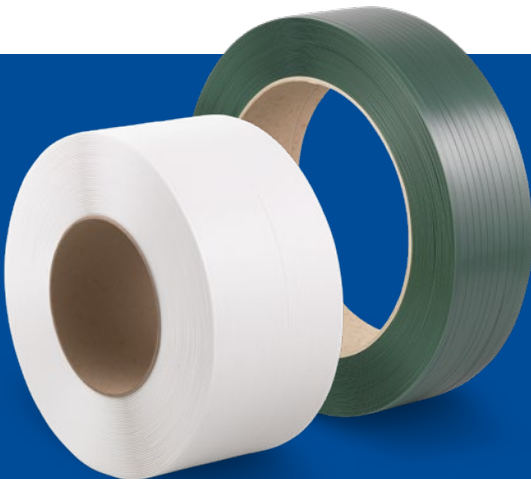
employees



14

locations around the globe

What began back in 1790 with plain hemp ropes has since evolved into a globally successful group of enterprises. We cooperate with our customers in the spirit of mutual respect and equality in order to develop tailor-made solutions for fiber ropes, steel wire ropes, and strapping. The continuity and stability of our family-owned group make us a reliable partner that will support you in tackling your day-to-day challenges.



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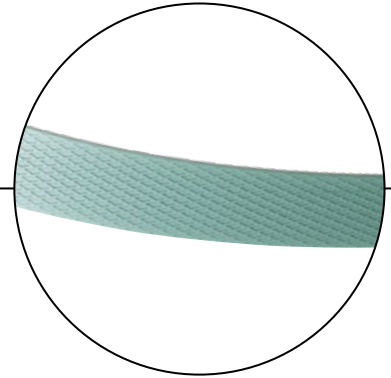
## Fiber Rope

Industrial FiberRopes  
Life Safety Ropes  
Paper Carrier  
Treecare  
Yachting Ropes



## Wire Rope

Cableway Ropes  
Crane & Industrial Ropes  
Mining Ropes  
Offshore Ropes  
S&S / Teci  
Tensostructures



## Strapping Solutions

PET Strapping  
PP Strapping

### Global network and market proximity

Our global network and our presence at 14 locations around the world, including manufacturing sites in Austria, Italy, Poland, Thailand, the Czech Republic, and the U.S., enable us to collaborate closely with our customers and address the specific requirements of the various markets.

### Innovative products of outstanding quality

Our expertise in a wide range of technologies has generated numerous synergies between our various divisions, much to the benefit of our customers. By assigning five percent of our employees to research and development, we make sure that our customers keep benefitting from cutting-edge technologies. In addition to upholding social and environmental standards, we also pay close attention to delivering consistently high quality and make sure that all our products comply with our quality standards.

In its Strapping Solutions division, TEUFELBERGER manufactures products from PP & PET at two locations: since 1978 in Austria, and since 2022 also in Poland.



# better.safe

THE CENTRAL IDEA THAT  
INSPIRES US.

Our goal is to manufacture high-performance strapping from plastic materials to create high-quality packaging solutions. In this endeavor, we focus on ensuring manufacturing safety, safety in use, and load safety, as well as promoting our performance, efficiency and innovative power, while at the same time always embracing responsibility toward people, the environment, and society.

Each of our actions reflects our three  
core principles of Performance, Safety,  
and Sustainability.



## PERFORMANCE you can count on

In order to best cater to the needs of our customers, we deliver the highest quality products, always keeping tomorrow's requirements in mind. To achieve this, we focus on continuous product development, the constant improvement of internal workflows and processes, and strict quality controls. Because our customers' success is our success.

Performance.

Safety.

Sustainability.



## SAFETY

for people and products

To us, ensuring the safety of our employees and customers as well as the users of TEUFELBERGER strapping is just as much our top priority as is optimizing the load unitizing safety of your packaged goods. This aspect becomes apparent in the entire product development process, in our ergonomic packaging design, and in our internal and external training and upskilling programs.



## SUSTAINABILITY

to safeguard the future of our environment

We always act responsibly, day after day, in our product development activities, but also in our interactions with employees, and in our use of raw materials and resources. We are firmly committed to reuse and recycling and focus on the continuous development of our sustainable product portfolio. And we do this always with the goal in mind to convert as many recyclable resources as possible into high-quality strapping (designed-to-recycle) and to use virgin material with care.



# Performance

FOR DEMANDING SOLUTIONS.

As a strong partner, we set standards and trends for the development and production of PET and PP strapping and offer our customers a wide-ranging product portfolio for worry-free solutions.

1.

## Highest standards

- » careful selection of raw materials
- » high quality of PP granules and PET flakes used
- » constant incoming goods inspections and in-production inspections
- » strict raw material and product specifications

2.

## On the pulse of time

- » in-house test laboratory with state-of-the-art strapping machines and handheld strapping tools
- » internal research and development team focused on innovation and sustainability
- » analytics-driven product selection process that guarantees technically and commercially optimal solutions

3.

## Strong partner

- » regular technical training for our customers
- » support in finding the right product provided by our employees who possess the relevant market insights and expertise
- » technical support and live analyses at your site

TYCOON®

PET strapping



## PET vs. PP strapping

Being a system-independent manufacturer of strapping, TEUFELBERGER offers the right tailor-made solution for any specific application. Make your choice from a vast variety of PET and PP strapping solutions that cover all requirements in terms of function, load and type of implementation of optimized packaging and transport load safety.



### Polyester (PET) strapping

Polyester (PET) strapping is wider than PP strapping and offers greater breaking strength. Used for demanding, heavy-duty applications that require high tension, it is mostly only available in green.



### Polypropylene (PP) strapping

Polypropylene (PP) strapping is used for light-duty applications. It is narrower than PET strapping and comes in many colors (e.g., white, blue, black, etc.).

Please do not hesitate to contact our product experts to help you select the best strapping for your individual purpose and application.



# TYCOON® PET and TEWE® PP

KEEP THE WORLD IN MOTION.

TYCOON® PET and TEWE® PP strapping products cover a wide spectrum of possible uses to secure your transport from a to b. In their many diverse product variants, they keep goods from getting displaced, tilting, or being opened without permission. They also facilitate bundling up certain products in defined quantities and compressing them. In this way, strapping ensures tidiness and clarity, and provides for stability, protection, and safety.

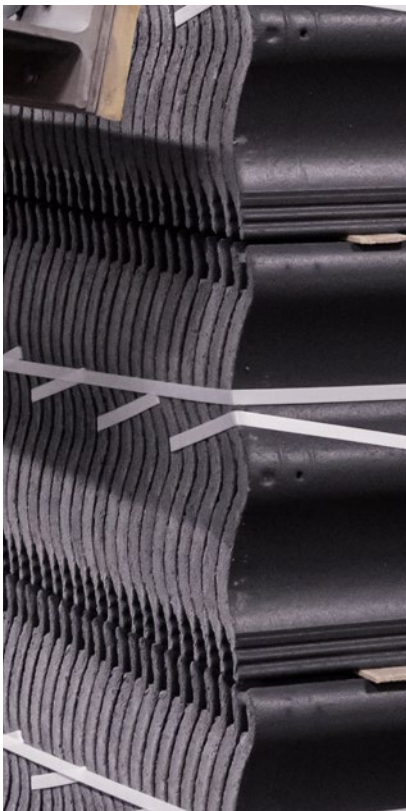
Securing.

Closing.

Bundling.

Compressing.

Holding together.



Building  
materials










Corrugated  
board




Bales



## TYCOON® PET strapping

							
TYCOON® Speed		•			•		
TYCOON® GreenPerformance	•	•		•		•	•
TYCOON® TeraStrap®		•		•		•	•
TYCOON® HighTension	•	•		•	•	•	
TYCOON® XTend		•	•	•		•	
TYCOON® XTend Sigma		•	•	•		•	

## TEWE® PP strapping

							
TEWE® S		•					•
TEWE® SoPRIM®		•					•
TEWE® A	•	•		•	•		•
TEWE® TeraStrap®	•	•		•	•		•
TEWE® Special	•	•		•	•		•



Wood &  
timber



Cans &  
bottles



Metals



Logistics

## Overview of applications



### Building materials

The building materials sector includes many demanding areas of use for strapping where constant retained tension, high splitting resistance, and high strap tension are required. These attributes ensure the compactness and safety of the strapped, packaged goods.

- » high strap tension
- » constant retained tension
- » no shock splitting thanks to splitting inhibitor
- » high weld strength



### Bales

When it comes to packaging bales and securing them for transport, the joint strength of the strapping is what matters most. Minimal elongation and high stiffness ensure that strapped goods retain their desired dimensions even over extended periods in storage.

- » high weld strength
- » high retained tension
- » minimal elongation during transport & storage



### Corrugated board

Strapping intended for the corrugated board industry must be of the highest quality to guarantee trouble-free and safe packaging processes for small and large packaging units and to achieve a high number of processing cycles.

- » high number of cycles possible thanks to consistently high quality
- » high strap tension
- » minimal edge deformation
- » high strap stiffness



### Wood & timber

In the wood & timber sector, strapping is mainly needed to bundle up the goods and hold them together as a unit. Here, strap tension and weld strength play a key role, depending on the size and weight of the packaged goods.

- » consistently high strap tension
- » high weld strength
- » minimal edge deformation - minimal shock splitting



### Cans & bottles

In the cans & bottles sector, the challenge when securing load consists in palletizing large production and package units. Here, it is necessary to always obtain a consistently high strap tension without causing damage to product packaging.

- » consistently high strap tension
- » consistent stiffness of the strapping
- » minimal tension loss



For all standard

strapping machines.



## Metals

Weld strength and retained tension are crucial parameters for heavy products. This is why they are of particular importance for the metal industry.

- » high retained tension
- » high stiffness of the strapping
- » high weld strength



## Logistics

Quick and easy handling is the most important requirement for strapping used in (intra)logistics. Whether used to close boxes, bundle up small goods, or secure pallets - what matters in each of these cases are reliable quality and consistent performance.

- » consistently high quality
- » constant retained tension

# TYCOON® PET

HIGH PERFORMANCE STRAPPING  
MADE FROM POLYESTER.

In order to meet the numerous requirements for securing and transporting load and withstanding external influences such as temperature fluctuations and changing sunlight conditions, we developed a broad range of various polyester (PET) strapping types of widths from 8 to 32 mm.

## The advantages of TYCOON® PET:

- » sustainable packaging solutions thanks to recycled material recovered from used PET bottles
- » made for the circular economy, 100 % recyclable
- » trouble-free and low-maintenance strapping
- » reliable protection for your packaged goods
- » easy coil changes thanks to 1-2 Strap technology

Sustainable packaging solution.

100% recyclable.

Reliable.



## TYCOON® Speed

TYCOON® Speed strapping packages your products in a permanently stable manner and constitutes a suitable alternative to PP strapping in high speed applications with high throughput. Compared to polypropylene strapping, this type of polyester strapping features a constantly high retained tension and better quality combined with higher cost-efficiency.

### TIME EFFICIENCY

- » developed for fully automatic high-throughput strapping machines
- » fewer coil changes due to up to 40% more strapping length per coil
- » faster coil changes thanks to 1-2 Strap technology

### QUALITY as compared to PP strapping

- » 60% higher retained tension
- » increased UV stability

### COST-EFFICIENCY

- » more cost-effective and of a higher quality than PP
- » more stable surface and thus less abrasion



### TYCOON® Speed comes in the following dimensions\*:

TYCOON® Speed	Width		Thickness		Core		Breaking strength		Surface
	mm	inch	mm	inch	mm	inch	kg	lbs	
	8-12	1/3-1/2"	0.36-0.60	0.014-0.024	200 x 190	8 x 8"	85-220	187-485	embossed
					280 x 190	11 x 8"			
					406 x 152	16 x 6"			
					406 x 185	16 x 7.5"			

\* other strapping parameters available on request

## TYCOON® GreenPerformance (GP)

With TYCOON® GreenPerformance, you will be making an important contribution to protecting our environment whilst also benefiting from lower costs. As compared to conventional PET strapping, TYCOON® GreenPerformance achieves a CO<sub>2</sub> reduction of 6.1% per coil. For you, this means not only a better carbon footprint, but also less waste and thus lower disposal costs.

### GREAT EASE OF HANDLING

- » low coil weight

### SUSTAINABILITY

- » produced from recycled raw materials and 100% recyclable
- » higher transport efficiency and less CO<sub>2</sub> emitted thanks to more meters per coil and pallet
- » less waste per meter of strapping

### COST-EFFICIENCY

- » lower disposal costs due to lower amounts of waste
- » optimized utilization of cargo and storage space due to optimized strapping length per coil
- » possible savings on plastic tax



### TYCOON® GreenPerformance comes in the following dimensions\*:

TYCOON® GreenPerformance	Width		Thickness		Core		Breaking strength		Surface
	mm	inch	mm	inch	mm	inch	kg	lbs	
	12-19	1/2-3/4"	0.60-1.27	0.024-0.050"	406 x 152	16 x 6"	260-930	573-2,050	embossed
					406 x 185	16 x 7.5"			

\* other strapping parameters available on request

## TYCOON® TeraStrap®

TYCOON® TeraStrap® is a type of PET strapping suited for manual use. In order to protect our environment, this strapping product is delivered without carton packaging. Not only does this minimize the amount of packaging waste generated, but it also helps achieve greater transport efficiency and reduces CO<sub>2</sub> emissions considerably.

- » deliberate avoidance of packaging materials
- » ideal for manual strapping applications



**TYCOON®TeraStrap® comes in the following dimensions\*:**

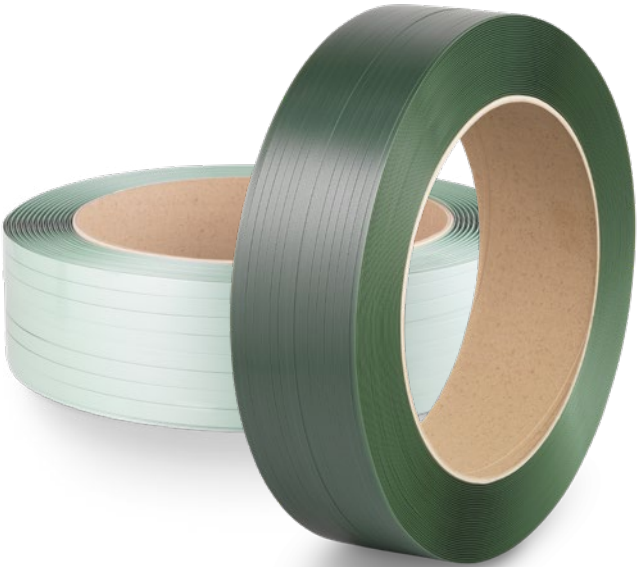
TYCOON® TeraStrap®	Width		Thickness		Core		Breaking strength		Surface
	mm	inch	mm	inch	mm	inch	kg	lbs	
	12-19	573-2,050"	0.60-1.27	0.024-0.050"	406 x 152	16 x 6"	260-930	573 - 2,050	embossed
					406 x 185	16 x 7.5"			

\* other strapping parameters available on request

## TYCOON® HighTension (HT)

TYCOON® HighTension is suited for applications that require high strap tension and involve an elevated risk of shock splitting (e.g. use in the wood & timber industry). Furthermore, it lends itself to use with sharp-edged products encountered, for example, in the metal or building supplies industries. Its product characteristics make it a reliable choice on fully automatic strapping machines.

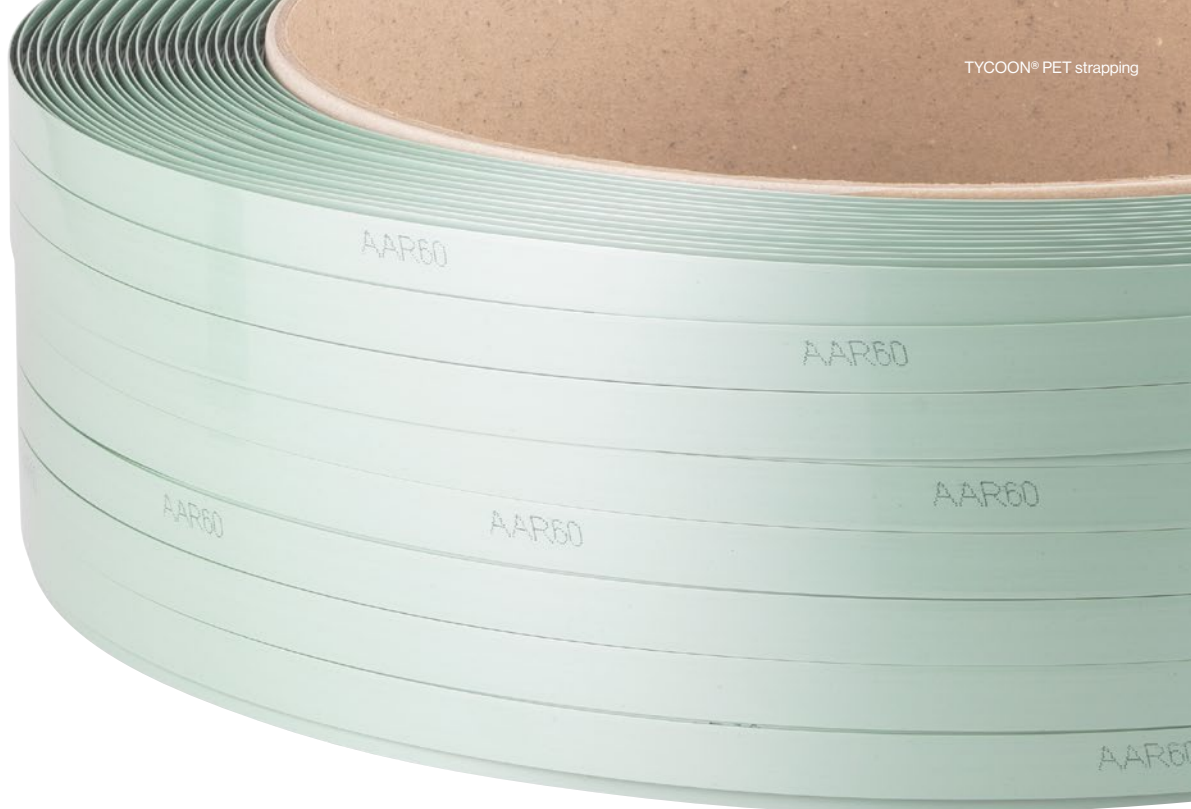
- » suited for demanding applications
- » compact packaging of products thanks to high strap tension
- » reliable strapping of pallets due to constantly high retained tension



**TYCOON® HighTension comes in the following dimensions\*:**

TYCOON® HighTension	Width		Thickness		Core		Breaking strength		Surface
	mm	inch	mm	inch	mm	inch	kg	lbs	
	8-25	1/3-1"	0.51-1.27	0.020-0.050"	406 x 152	16 x 6"	180-1170	397-2,579	embossed/
					406 x 185	16 x 7.5"			smooth

\* other strapping parameters available on request



## TYCOON® HQ Inkjet

The HQ Inkjet printing technology makes it possible to print black or white text or numbers on PET strapping and is particularly suitable for large quantities of strapping.

- » allows the individualization of strapping
- » marking packaged goods is made easy
- » anti-theft protection
- » sequential numbering is possible

### AAR certification

TYCOON® XTend PET strapping has been certified and approved for open top loading by the AAR (Association of American Railroads). This customizable printed and extremely tear-resistant strapping is a prerequisite when transporting and securing load with strapping on railroad cars in the NAFTA area.



**TYCOON® HQ Inkjet comes in the following dimensions\*:**

TYCOON® HQ Inkjet	Width		Core		Strapping colors	Printing colors	Printing length	Use of printing plate	Features
	mm	inch	mm	inch					
	12-32	½-1 ¼"	406 x 152	16 x 6"	opaque green carbon black	black white	unlimited	not required	text serial number

\* other strapping parameters available on request





## TYCOON® XTend (XT)

### XTend

TYCOON® XTend comes in where standard TYCOON® strapping is no longer sufficient. Its upgraded and refined functionality offers users superior quality for particularly challenging areas of use and demanding solutions.

- » particularly high retained tension
- » increased edge strength
- » improved characteristics with regard to shock splitting, even at low ambient temperatures

### XTend Sigma

TYCOON® XTend Sigma strapping offers you all the advantages of XTend strapping, in combination with a smooth surface. This product lends itself to extremely demanding applications, e.g., in the building materials, wood & timber, metal, and baling industries. Its smooth surface makes it suited for use on standard Signode® brand strapping machines and handheld strapping tools without requiring any modifications.



**TYCOON® XTend comes in the following dimensions:**

TYCOON® XTend	Width		Thickness		Core		Breaking strength		Surface
	mm	inch	mm	inch	mm	inch	kg	lbs	
XTend	16–32	5/8–1 1/4"	0.80–1.27	0.030–0.050"	406 x 152	16 x 6"	600–1900	1,322–4,188	embossed
					406 x 185	16 x 7.5"			
XTend Sigma	9–32	3/8–1 1/4"	0.80–1.50	0.030–0.060"	406 x 250	16 x 10"			smooth
					406 x 300	16 x 12"			

\* other strapping parameters available on request



PET strapping  
as replacement  
for steel strapping.

## TYCOON® PET – a sustainable alternative to steel

In many areas of use, TYCOON® polyester strapping is suited to take the place of steel strapping. Featuring small manufacturing tolerances, a consistently high quality and high breaking strength, our PET strapping guarantees smooth processing workflows on both fully automatic strapping machines and handheld strapping tools.

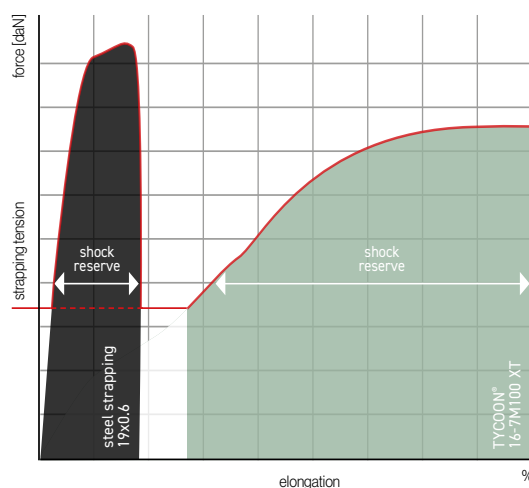
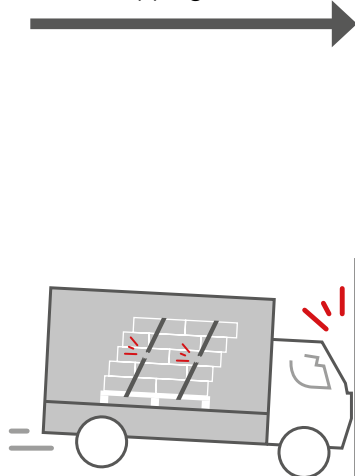
- » constantly high retained tension
- » easier and safe to handle
- » enhanced safety at work for users
- » buckle-free closure
- » no damaging of packaged goods
- » no discoloration on goods caused by rust

TYCOON® PET boasts a compellingly high shock reserve.

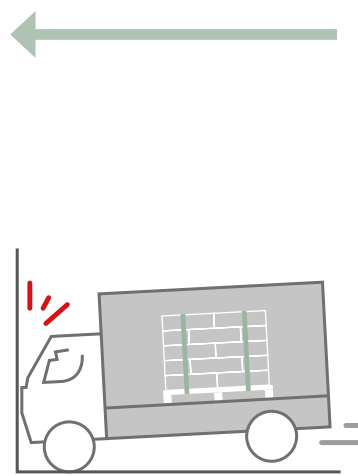
Dynamic stresses caused, for example, by vibrations or by moving and reloading pallets several times have a substantial impact on the stability of the packaged goods. Due to the high shock reserve, which is the product of elongation and breaking strength, TYCOON® polyester strapping offers significant advantages over steel and provides compact protection and long-term safety for strapped-up products.

### Steel strapping vs. TYCOON® PET strapping

steel strapping



TYCOON® PET strapping



## TYCOON® Jumbo Make-Up

Various jumbo versions (eye to the sky or eye to the side) of TYCOON® PET adapted to your specific use case are available on request.

### COST-EFFICIENCY

- » helps save cost and time due to fewer coil changes
- » longer machine availability per coil

### SUSTAINABILITY

- » lower CO<sub>2</sub> emissions due to reduction of transport mileage and packaging

### SAFETY

- » high weight makes changing coils manually impossible



Jumbo - H (JH)

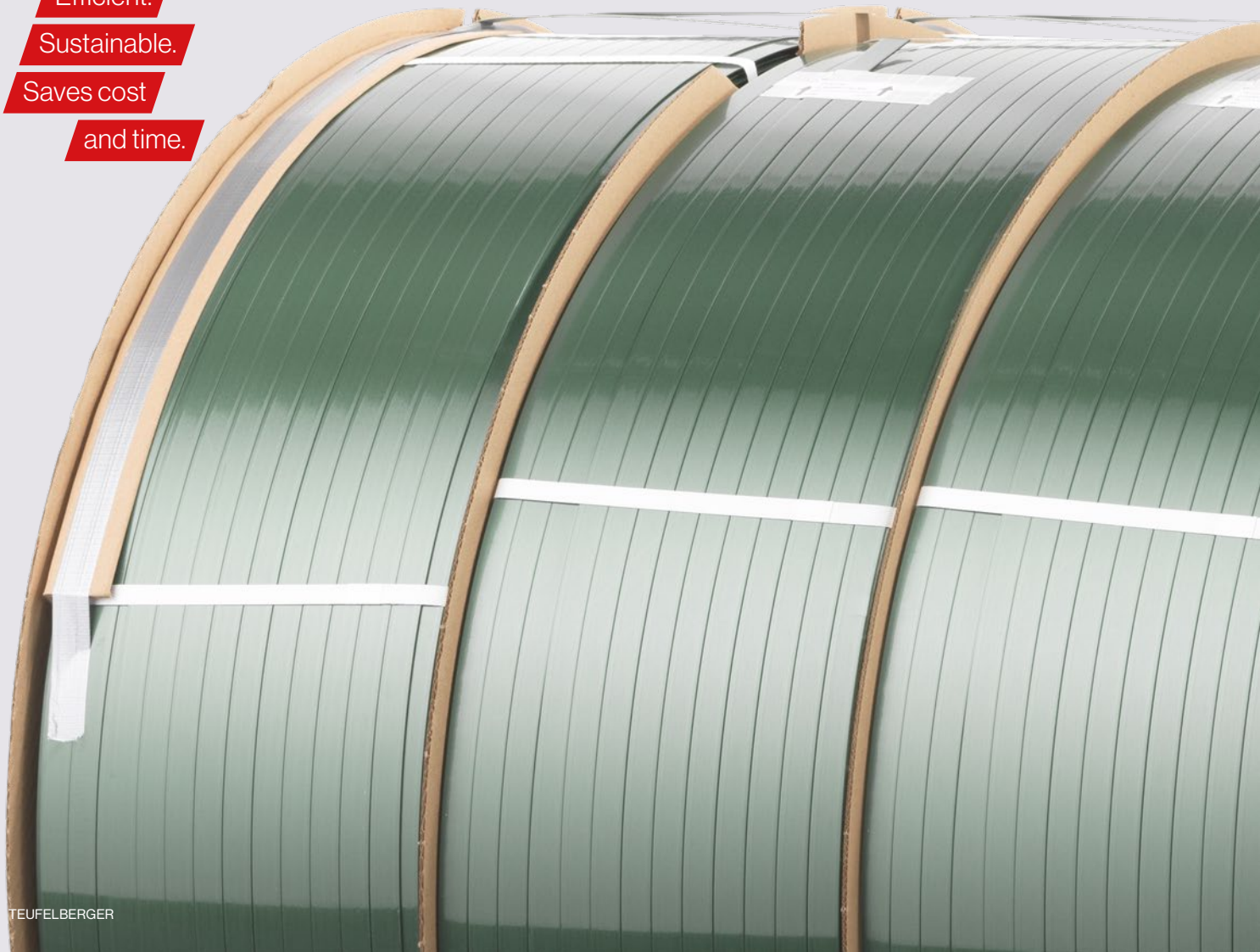
70 kg/coil



Jumbo - V (JV)

70 kg/coil

Efficient.  
Sustainable.  
Saves cost  
and time.





Super Jumbo - V (SJV)

110 kg/coil



MEGA Jumbo - V (MJV)

150 kg/coil



ULTRA Jumbo - H (UJH)

330 kg/coil

## TYCOON® T-Roll

The TYCOON® T-Roll jumbo dispenser is an automatic dispenser system which makes using strapping on jumbo pallets easier, more efficient, and safer.

### EASE OF HANDLING

- » easy to operate thanks to automatic strap feeding
- » strapping can be dispensed in both clockwise and counterclockwise directions

### COST-EFFICIENCY

- » fewer coil changes mean less costly downtime
- » increased machine availability and fault-free processes
- » modular structure permits use with existing systems

### SAFETY

- » requires no manual handling of the coils
- » reduction of injury risk





# TEWE® PP

## VERSATILE STRAPPING MADE OF POLYPROPYLENE.

In our TEWE® PP product line, we offer you all standard polypropylene strapping types, but also solutions tailor-made to specific requirements. These strapping products excel in use due to their consistently high quality, stable breaking strength, and small manufacturing tolerances. High processing speeds and optimized cycle times are ensured by the excellent stiffness of the strapping, its perfect running characteristics, and its abrasion strength achieved through special embossing techniques.

### Advantages of TEWE® PP

- » low-maintenance and trouble-free strapping procedures
- » reliable protection of your packaged goods
- » commercially and technically optimized strapping solutions
- » low dust residues of the strap

High quality

Tailor-made solutions.

Easy to use.





## TEWE® S

### Narrow high-quality strapping.

Thanks to its consistently high quality, TEWE® S strapping is ideal for use in the printing, corrugated board and logistics sectors.

- » suited for fully automated applications
- » optimum running characteristics
- » trouble-free processing without machine downtimes
- » high speed feeding possible



### TEWE® S comes in the following dimensions\*:

TEWE® S	Width		Thickness		Strapping colors	Core		Breaking strength		Elongation %	Surface
	mm	inch	mm	inch		kg	lbs	kg	lbs		
	4-6	1/8-1/4"	0.32-0.66	0.013-0.026"	white	150 x 160	6 x 7"	44-99	97-218	up to 18 %	embossed
					black	184 x 150	7.5 x 6"				
					blue	200 x 190	8 x 8"				
					yellow	280 x 190	11 x 8"				

\* other strapping parameters available on request

## TEWE® SoPRIM®

### Efficient and environmentally friendly strapping.

The main benefits of TEWE® SoPRIM®, the new generation of TEWE® strapping, are that it helps save resources and achieves a better sustainability footprint because it reduces material usage while maintaining quality at a consistently high level.

- » saves resources and protects the environment through the efficient use of materials
- » great ease of use
- » easy-to-handle packaging units



### TEWE® SoPRIM® comes in the following dimensions\*:

TEWE® SoPRIM®	Width		Thickness		Strapping colors	Core		Breaking strength		Elongation %	Surface
	mm	inch	mm	inch		kg	lbs	kg	lbs		
	4-6	1/8-1/4"	0.42-0.55	0.017-0.022"	white	150 x 160	6 x 7"	44-99	97-218	up to 20 %	embossed
					black	200 x 190	8 x 8"				

\* other strapping parameters available on request

## TEWE® A

The TEWE® A line includes a broad selection of high-quality strapping variants of various dimensions, colors, and packaging units. These strapping variants are suited for use on any type of strapping machine.

- » suited for all semi-automatic and fully automatic strapping machines
- » ideal for all types of transport packaging
- » trouble-free strapping thanks to perfect running characteristics



**TEWE® A comes in the following dimensions\*:**

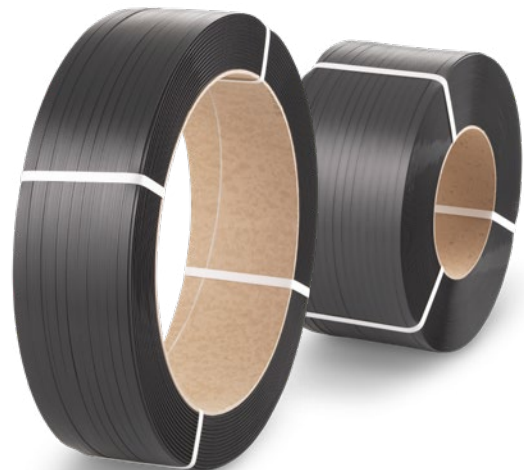
TEWE® A	Width		Thickness		Strapping colors	Core		Breaking strength		Elongation %	Surface
	mm	inch	mm	inch		mm	inch	kg	lbs		
	7-19	0.26-¾"	0.30-0.95	0.012-0.037"	white	150 x 160	6 x 6"	72-360	159-793	up to 18 %	embossed
					black	200 x 190	8 x 8"				
					blue	406 x 145	16 x 6"				
					yellow	406 x 185	16 x 7.5"				
					green						
					red						
					orange						
					transparent						

\* other strapping parameters available on request

## TEWE® TeraStrap®

TEWE® TeraStrap® strapping is ideally suited to close packages and secure lightweight load by hand.

- » suited for manual strapping procedures
- » ideal for lightweight packaged goods
- » easy to use



**TEWE® TeraStrap® comes in the following dimensions\*:**

TEWE® TeraStrap®	Width		Thickness		Strapping colors	Core		Breaking strength		Elongation %	Surface
	mm	inch	mm	inch		mm	inch	kg	lbs		
	8-19	⅓-¾"	0.45-0.90	0.018-0.035"	black	200 x 190	8 x 8"	60-250	132-551"	18 %	embossed
					white	406 x 145	16 x 6"				
					blue	280 x 190	11 x 8"				
						200 x 150	8 x 6"				

\* other strapping parameters available on request

## TEWE® Special

Our TEWE® Special strapping line includes a broad selection of series-manufactured products for special applications.

### TEWE® UV

PP strapping which offers particularly high UV stability, thanks to special additives.

### TEWE® HQ Mono

PP strapping with single-colored printing to serve as proof of origin and protect the strapped-up goods. Furthermore, it is possible to print other types of information such as advertising messages onto the strapping.

### TEWE® LCE

PP strapping with minimal elongation, used primarily for compression-packaged goods.

### TEWE® SHE / HE

PP strapping with high elongation (up to 28%) or very high elongation (up to 40%). Particularly suited for small packaging units and also for applications with shrinking packaging volumes or sharp edges.



**TEWE® Special comes in the following dimensions\*:**

TEWE® Special	Width		Thickness		Strapping colors	Core		Breaking strength		Elongation	Surface
	mm	inch	mm	inch		mm	inch	kg	lbs		
TEWE® UV	8–12.7	⅓–⅝″	0.63–0.90	0.025–0.035″	white blue	200 x 190 280 x 190 406 x 145	8 x 8″ 11 x 8″ 16 x 6″	120–370	264–815″	up to 18 %	embossed
TEWE® SHE / HE	6–15	¼–⅞″	0.45–1.25	0.018–0.050″	white black	150 x 160 200 x 190 395 x 145 406 x 145 406 x 185	6 x 6″ 8 x 8″ 15,5 x 6″ 16 x 6″ 16 x 7.5″	55–460	121–1,014″	20–40 %	embossed
TEWE® LCE	12.7	½″	0.80–0.90	0.030–0.035″	black green	406 x 145 406 x 185	16 x 6″ 16 x 7.5″	330–370	727–815″	up to 10 %	embossed
TEWE® HQ Mono	Width		Thickness		Strapping colors	Printing color(s)	Printing length		Use of printing plate	Features	
	mm	inch	mm	inch			mm	inch			
	9–16	⅜–⅝″	200 x 190 280 x 190 406 x 145	8 x 8″ 11 x 8″ 16 x 6″	white black blue yellow	single-colored (acc. to list)	385	15.6″	required	text logos serial number	

\* other strapping parameters available on request



# Safety

FOR PEOPLE AND TRANSPORTED GOODS.

As a responsible and reliable partner, we ensure that our products can be used safely. Additionally, we provide support for complying with legal requirements and standards.

Safe.

Reliable.

Trouble-free.



At TEUFELBERGER, safety is our number one priority

For trouble-free packaging and a safe transport of goods, we offer you a wide range of strapping products, but also access to our strapping specialists and their comprehensive expertise. In this way, the level of transport safety can

be checked, inspected, and improved. This will not only keep all people involved safe and protected, but also your goods during packaging and in transit.



## METIS

The METIS measuring method allows to measure on site the applied holding force and strength of your strapping. Strap tension and weld strength of the strapping are measured by means of two different measuring methods. Following an in-depth analysis, we provide valuable data in a clearly comprehensible format and suggest options for improvement that directly influence the safety of your goods.

For enhanced safety that can be measured

- » increase packaging stability
- » reduce the CO<sub>2</sub> footprint
- » save packaging material
- » save costs by reducing downtime



## T-Shark®

### Lightweight and robust handheld strapping tools.

For the easy and safe utilization of our strapping products, we offer you the following range of T-Shark® hand-tools, designed for your specific needs.

- » uniform welds
- » consistently high strap tension
- » lightweight and balanced
- » guaranteed automatic shutdown
- » acknowledged as the tool with the best ergonomic design in the market

### T-Shark® GP

The starter model for light to medium-weight applications. Suited for lightweight PET strapping such as TYCOON® Green Performance and used mainly in the corrugated board or logistics sectors.

### T-Shark® HT

The standard model is ideal for daily use and employed mainly in the can & bottle, building materials, and wood & timber industries.

### T-Shark® HD

The ideal model for demanding applications and high strapping cycles. Suited for the trouble-free handling of heavy packaging units and thus predominantly used in the building materials, metal, and wood & timber industries.

### T-Shark® XTend

This model is suitable for demanding applications with heavy packaged goods. It differs from T-Shark® HD in its significantly higher tension force and the heavier and longer-lived battery.





## Creating added value for employees and the region

As a family enterprise with a long-standing tradition, we have firm regional roots and assume responsibility in the regions in which we operate. We make an important contribution to creating secure jobs, offer forward-looking training programs, and support society through individual, but also institutional sponsorships.



## Protecting our resources

The careful handling of all available raw materials is a matter of particular importance to us. We aim to make our manufacturing processes as resource-efficient as possible, manufacture recyclable products, and use renewable raw materials. This is why we rely on recycled materials, give recyclables a second life, minimize wastage, and make reusability a top priority.



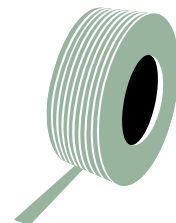
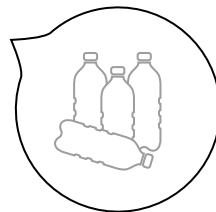
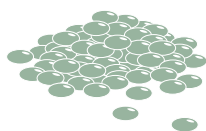
## Using energy sustainably

Since energy constitutes an important sustainability marker for us as a manufacturing company, we rely on renewable energy sources and on curbing our energy consumption through the use of energy-efficient state-of-the-art lighting, cooling, and heating technologies. In addition, we contribute to the generation of green electricity through providing TEUFELBERGER steel and fiber ropes for use in wind farms.

# Sustainability

FOR A LIVABLE ENVIRONMENT.

Embracing responsibility is deeply ingrained in our history and our set of values. To this end, we leverage not only the contributions of every one of us as individuals, but also build on our organization's commitment toward our planet, our employees, customers, and partners, and toward society as a whole.





## Enhancing safety

For us, ensuring the health and safety of our employees is always our number one priority. This is why we focus particularly on occupational safety throughout the production process and guarantee that our products are free from health-threatening substances. Furthermore, through our product portfolio, we contribute to making our environment safer.



## Progress through innovation and cutting-edge technologies

For us, innovation means to think holistically. Whether the aim is achieving longer product lifetimes, improved handling, or more sustainable materials - almost 5% of our workforce is continuously working on new or optimized products and processes in order to offer our customers technically and commercially optimized solutions.



### OUR GOALS UNTIL 2030:

Climate-neutral product portfolio.

Strapping to contain 90% recycled materials.

20% less manufacturing waste.

Collection of used strapping.



## Circular economy for strapping - How it works

### Recyclable design

The product is designed in a way that it can be recycled. We prefer monomaterials over composites, and the various packaging materials are clearly visible and easy to separate.

### Efficient recycling

In addition to the technical feasibility of recycling after use, it is important to provide an efficient material recycling system. One example of such a system is our Strap-to-Strap collection program.

### Close the Loop

The idea of a closed cycle is that the material can be reused for the same product instead of being downcycled to be used for a lower-grade product. At present, however, strapping often ends up in thermal disposal systems.

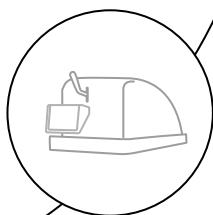
### Use of recycled material

The reclaimed material is used for the production of new strapping. "Strap to strap".

## Strap-to-Strap material collection program

Used strapping is often difficult to dispose of in everyday life, it is bulky, occupies valuable storage space, and in part also poses an increased accident risk in the form of trip hazards. A large part of the disposed strapping ends up in waste incineration plants instead of an environmentally friendly recycling process.

This problem is solved by our Strap-to-Strap material collection program under which used strapping is collected, shredded and, after cleaning and reprocessing, made into new strapping.



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