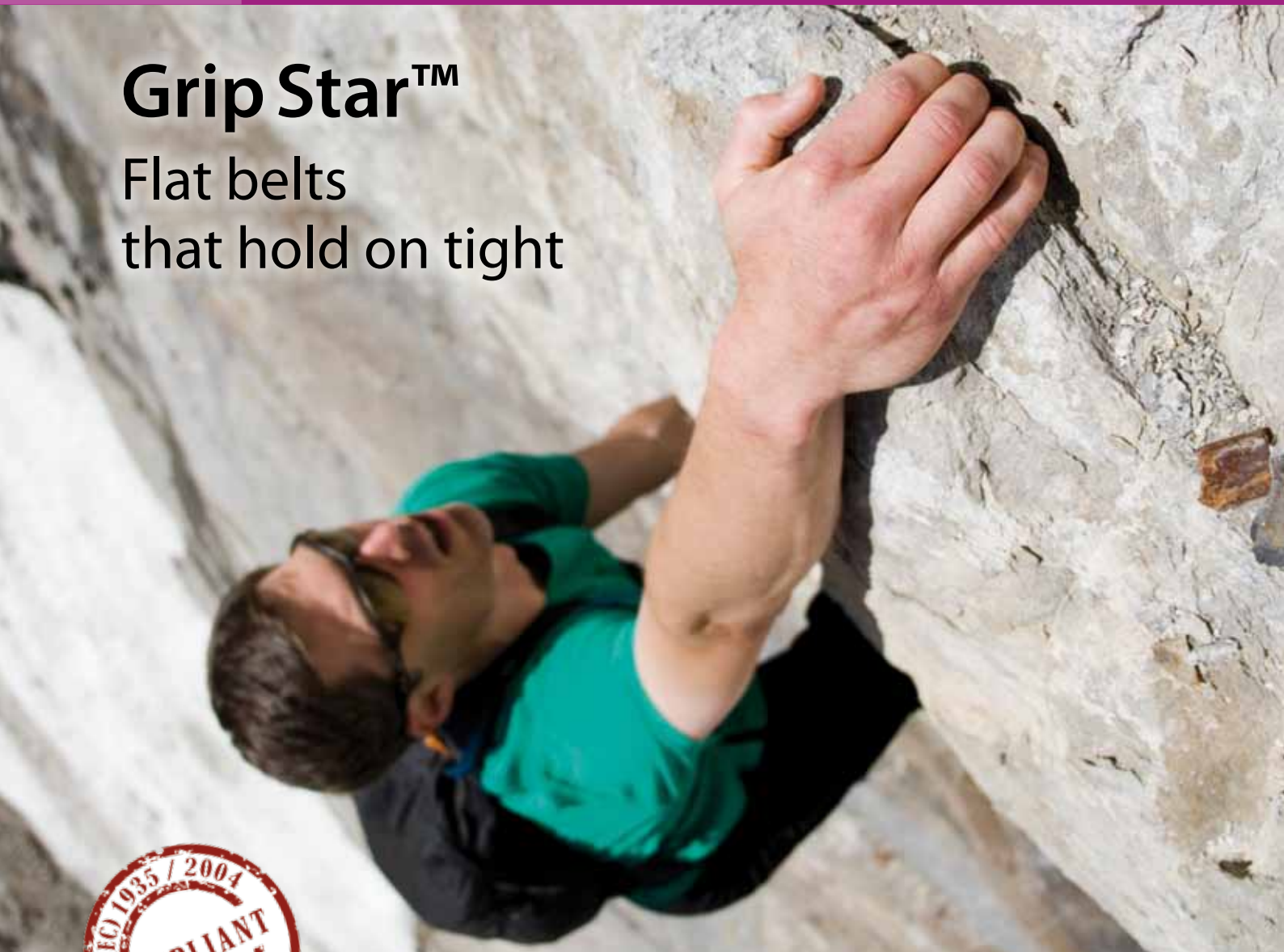


siegling extremultus

flat belts

Grip Star™

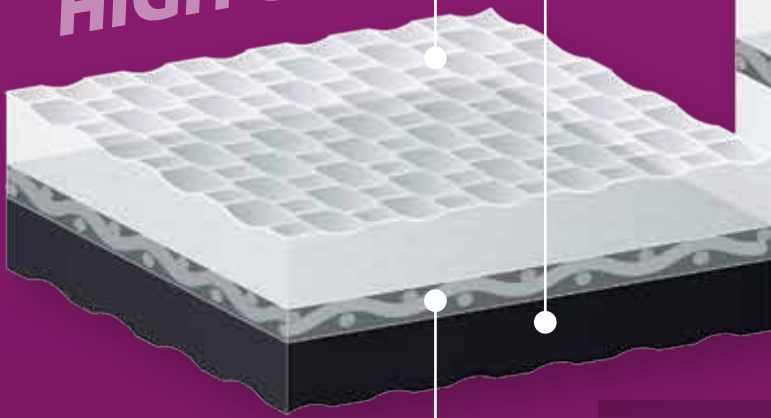
Flat belts
that hold on tight



Patterned polyurethane coating or fabric on the underside

Innovative High Grip coating on one side with tried-and-tested patterns on the top face

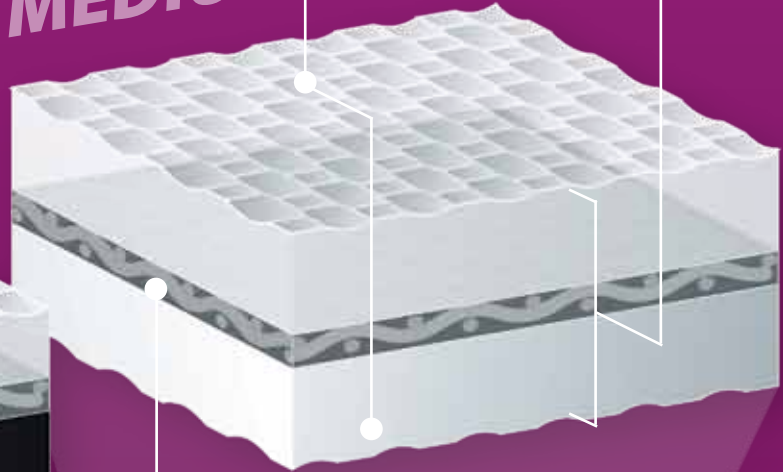
HIGH GRIP



Tension member made of polyester fabric or elastic polyurethane

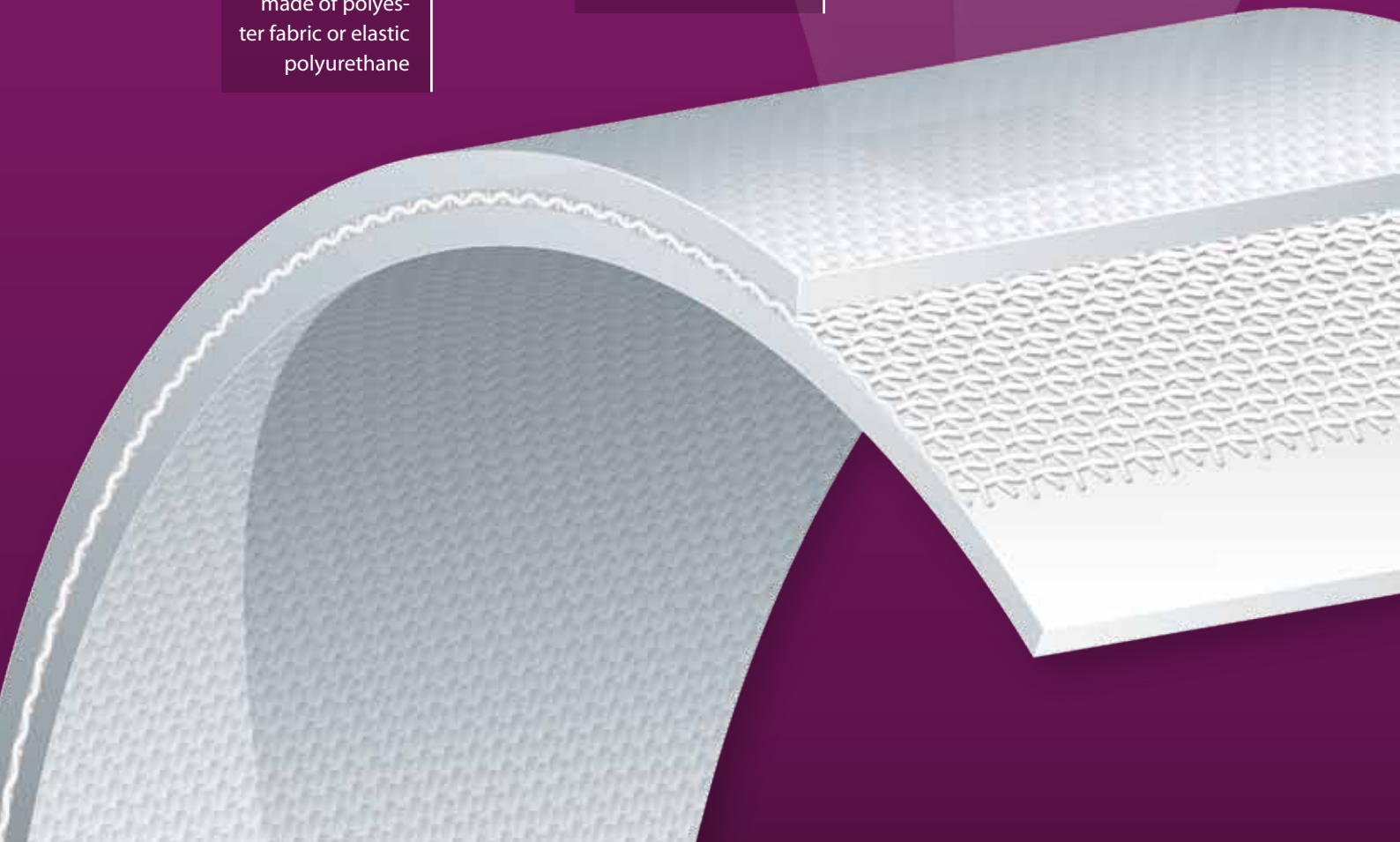
Innovative Medium Grip coating on both sides with tried-and-tested patterns

MEDIUM GRIP



Symmetrical layer structure up to 6 mm thick for long service lives

Tension member made of polyester fabric or highly oriented polyamide sheet



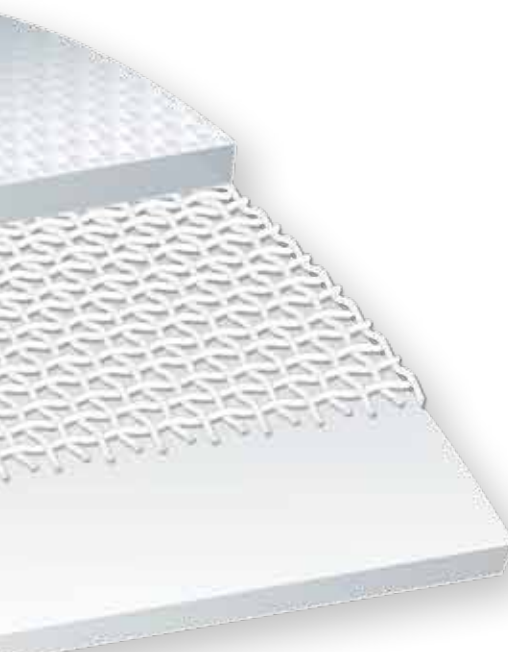
Grip Star™ – Flat belts that hold on tight

Grip Star™ flat belts are gentle with products, but still convey reliably. They take hold of and release products at precisely the right times. Grip Star™ flat belts can process paper, boxes, corrugated cardboard and tissue-based products dependably and efficiently.

Grip Star™ leaves no marks and has all the benefits of rubber. However, it doesn't include the typical disadvantages of rubber such as brittleness and cross-cracking. Due to its excellent characteristics and good value, Grip Star™ is the better alternative to rubber. This is particularly the case when good grip, precise positioning, high levels of acceleration and high-performance braking are required.

Customised grip

Grip Star™ is produced in High Grip or Medium Grip versions in different thickness and with specific surface patterns. As folder gluer belts, drag belts, live roller belts and machine tapes, the range's belts fulfil exacting demands and offer a wide range of uses. The majority of the Grip Star™ belts comply with the (EC) regulations 1935/2004, (EU) 10/2011, as well as the FDA's 21 CFR for conveying unpackaged foodstuff.



The properties

age-resistant coating with virtually constant grip

available in Medium Grip or High Grip

coating in neutral grey

EU- and FDA-compliant

mechanically durable, highly abrasion resistant, edges on P types are especially strong

maintains tension

The advantages

▶ application-driven grip over the entire service life

▶ a wide range of applications

▶ non-marking

▶ ideal for hygiene-critical areas

▶ long service life

▶ no retensioning necessary



MOVEMENT SYSTEMS

Grip Star™ – Better than rubber

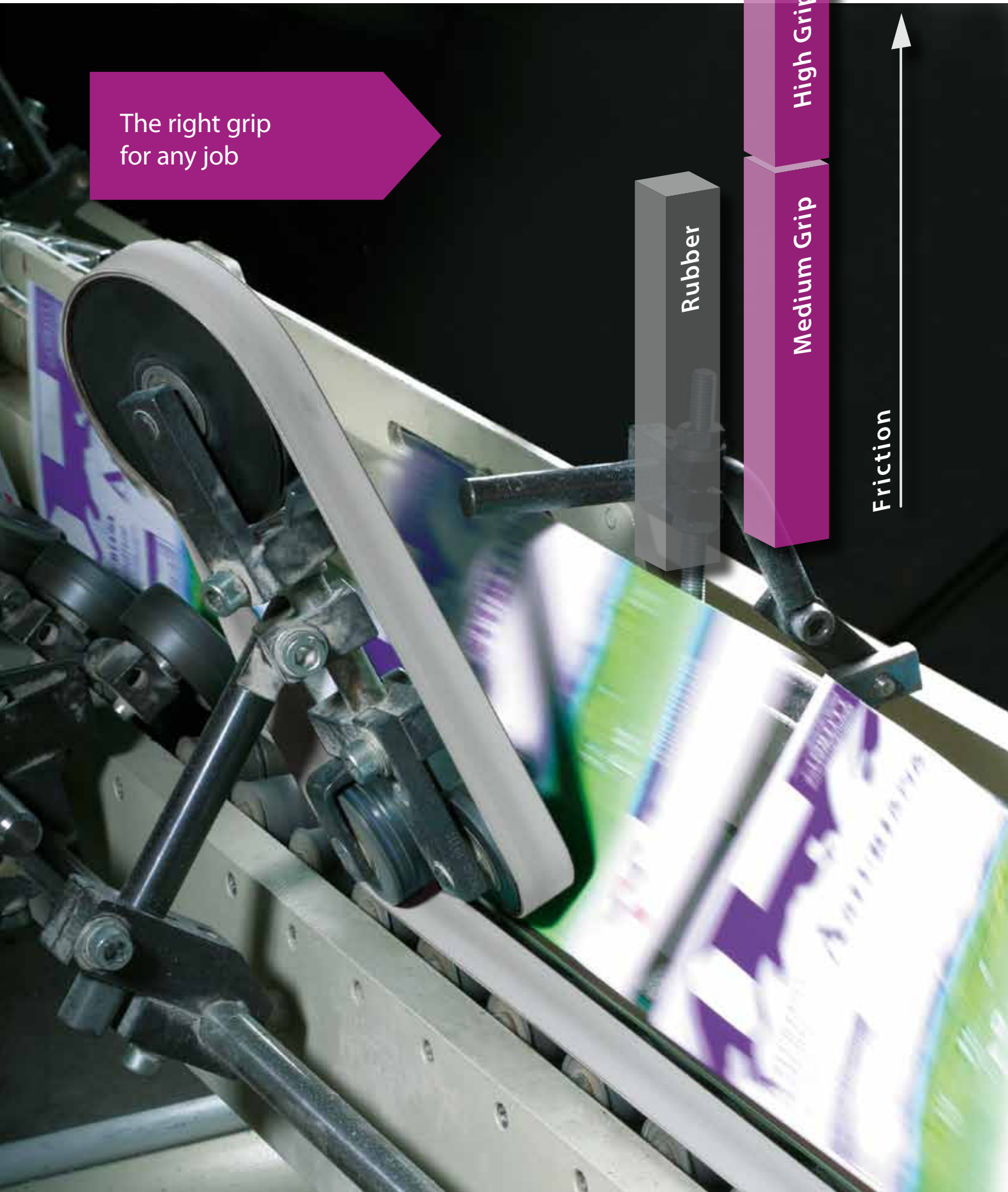
The right grip
for any job

Rubber

Medium Grip

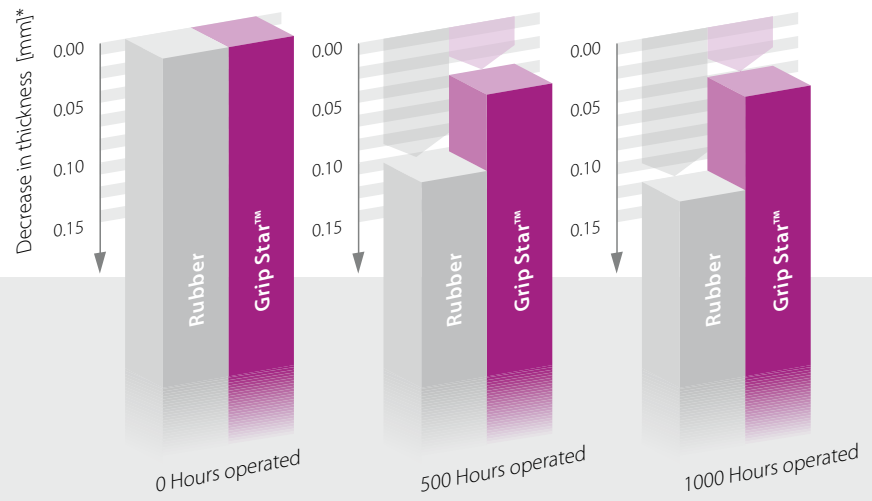
High Grip

Friction



Very robust

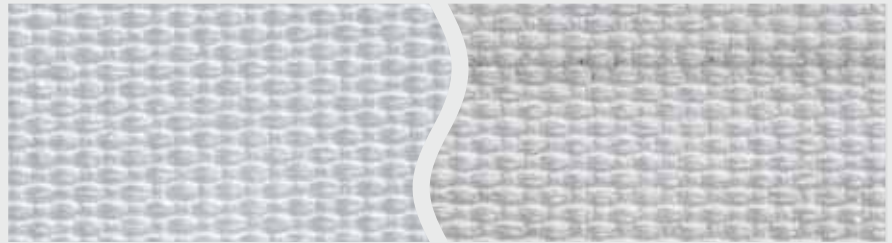
* Established in standardised testing conditions.



The decrease in thickness of the Medium Grip coating is significantly lower than that of rubber.

Long service lives, no cross tears

** Established under standardised testing conditions.



A new Grip Star™ belt

Grip Star™ after running 1000 hours**

The pattern on the Medium Grip coating doesn't wear off and the surface characteristics virtually don't change. In contrast to rubber, the surface doesn't tear.



Rubber after running 1000 hours**

Perfect splicing

Sophisticated Forbo tools and processes ensure Grip Star™ belts are given perfect splices:

- fast and reliable splicing
- short dwell times due to appropriate pressure applied
- almost invisible splices without any faults



Grip Star™ – Typical applications

Printing industry

- in compensating stackers and bundlers
- in feeding and discharging
- in foil sealing

Postal/letter sorting

- as reversing belts
- as carrier belts

Offices

- in franking machines

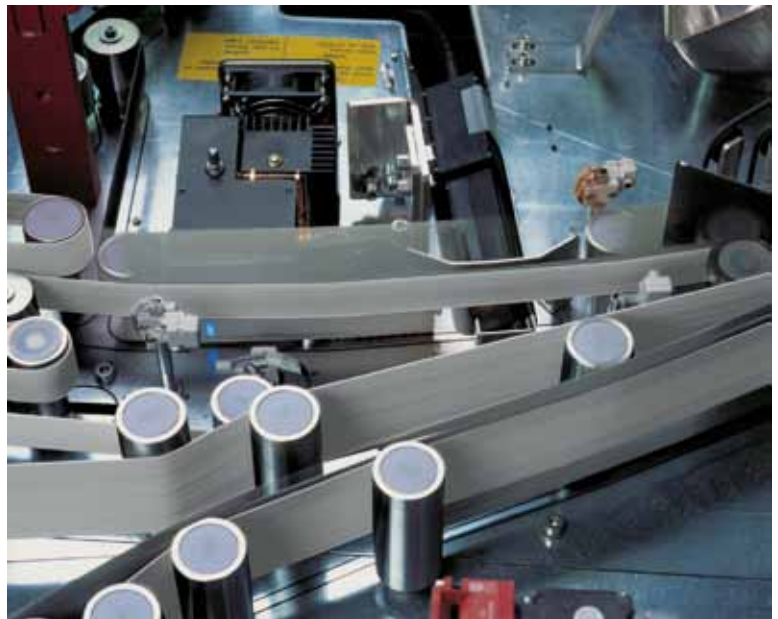
Paper processing

- in enveloping machines
- in tissue processing
- in packaging machinery
- in winding cardboard tubes

Industrial production

- in the solar industry for wafer conveying

Almost all Grip Star™ Medium Grip products are EU- and FDA-compliant. They can be used during the manufacture of packaging and in the process of packaging foodstuffs.

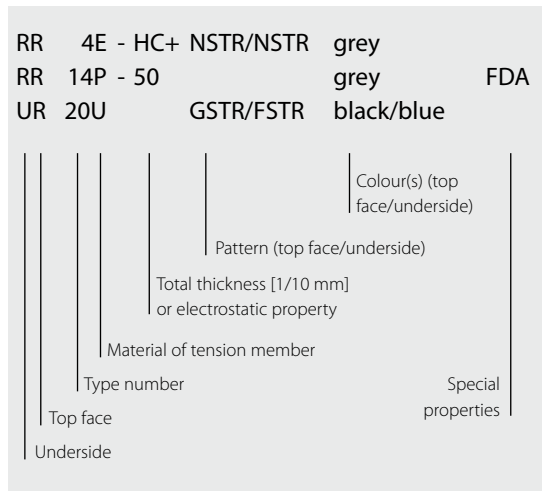


The Grip Star™ range

		Article number	Total thickness approx. [mm]	d _{min} [mm]*	specific shaft load ** [N/mm belt width]	Elongation at fitting [% of belt length]	Weight approx. [kg/m ²]	Permissible operating temperature Td [°C] (constant temperature)	Special characteristics and applications						
									EU-/FDA-compliant	Folder gluer belts	Machine tapes	Drag belts	Live roller belts		
Medium Grip	E line (with polyester tension member)														
	RR 4E-HC+ FSTR/FSTR grey	822151	1.35	14 ¹⁾	4	0.3–2.0	1.40	–20/+70		●	●				
	RR 4E-HC+ NSTR/NSTR grey	822154	1.35	14 ¹⁾	4	0.3–2.0	1.40	–20/+70			●				
	RR 20E-20 grey FDA	822157	2.0	24	23	0.3–2.0	2.10	–20/+70	●	●				●	
	RR 20E-30 grey FDA	822148	3.0	30	23	0.3–2.0	3.40	–20/+70	●	●				●	
	RR 20E-40 grey FDA	822149	4.0	40	23	0.3–2.0	4.30	–20/+70	●	●					
	RR 20E-50 grey FDA	822152	5.0	50	23	0.5–2.0	5.55	–20/+70	●	●					
	RR 20E-60 grey FDA	822155	6.0	60	23	0.5–2.0	6.65	–20/+70	●	●					
	P line (with polyamide tension member)														
	RR 10P-30 grey FDA	855638	3.0	30	10	1.5–3.0	3.30	–20/+80	●	●					
RR 10P-40 grey FDA	855639	4.0	40	10	1.5–3.0	4.30	–20/+80	●	●						
RR 14P-50 grey FDA	855640	5.0	50	14	1.5–3.0	5.80	–20/+80	●	●						
RR 14P-60 grey FDA	855641	6.0	60	14	1.5–3.0	6.80	–20/+80	●	●						
High Grip	E line (with polyester tension member)														
	TR 10E black/grey	822120	1.45	20	10	0.3–2.0	1.40	–20/+70		●	●			●	
	UR 8E-HC+ FSTR/FSTR green/grey	822132	1.50	14	8	0.3–2.0	1.60	–20/+70			●	●			
	Elastic line (with urethane tension member)														
UR 20U GSTR/FSTR black/blue	855624	1.50	10	0.4	0.5–8.0	1.60	–20/+60			●					
UR 40U-HC+ GSTR/NSTR black/grey	855636	1.45	14	0.8	0.5–8.0	1.45	–20/+60		●	●	●				

Please note: the values stated are nominal and can fluctuate in a belt whose width is a result of production processes. Our products are constantly adapted to market requirements. Consequently, changes in technical parameters can occasionally occur. **Therefore, please see the current product data sheets for specific information on designs and calculations.**

Type code



Legend

The values stated were identified in standard ambient conditions (23 °C, 50% rel. humidity)

* Lower temperatures require larger diameters. This also applies to the P line when humidity is particularly low

** F_w' value: states the specific shaft load at 1% elongation at fitting and a 180° arc of contact in N/mm belt width

1) 10 mm to 2.8 m/s max

- E** = Polyester
- P** = Polyamide
- R** = High or Medium Grip
- T** = Blended or polyamide fabric
- U** = Polyurethane

- FDA** = FDA-compliant
- HC+** = Highly conductive plus

- GSTR** = Coarse pattern
- FSTR** = Fine pattern
- NSTR** = Normal pattern



MOVEMENT SYSTEMS

Siegling – total belting solutions

Committed staff, quality-orientated organisation and production processes ensure the constantly high standards of our products and services. The Forbo Siegling Quality Management System is certified in accordance with ISO 9001.

In addition to product quality, environmental protection is an important corporate goal. Early on we also introduced an environmental management system, certified in accordance with ISO 14001.



Forbo Siegling service – anytime, anywhere

The Forbo Siegling Group employs more than 2,000 people. Our products are manufactured in nine production facilities across the world. You can find companies and agencies with warehouses and workshops in over 80 countries. Forbo Siegling service points are located in more than 300 places worldwide.