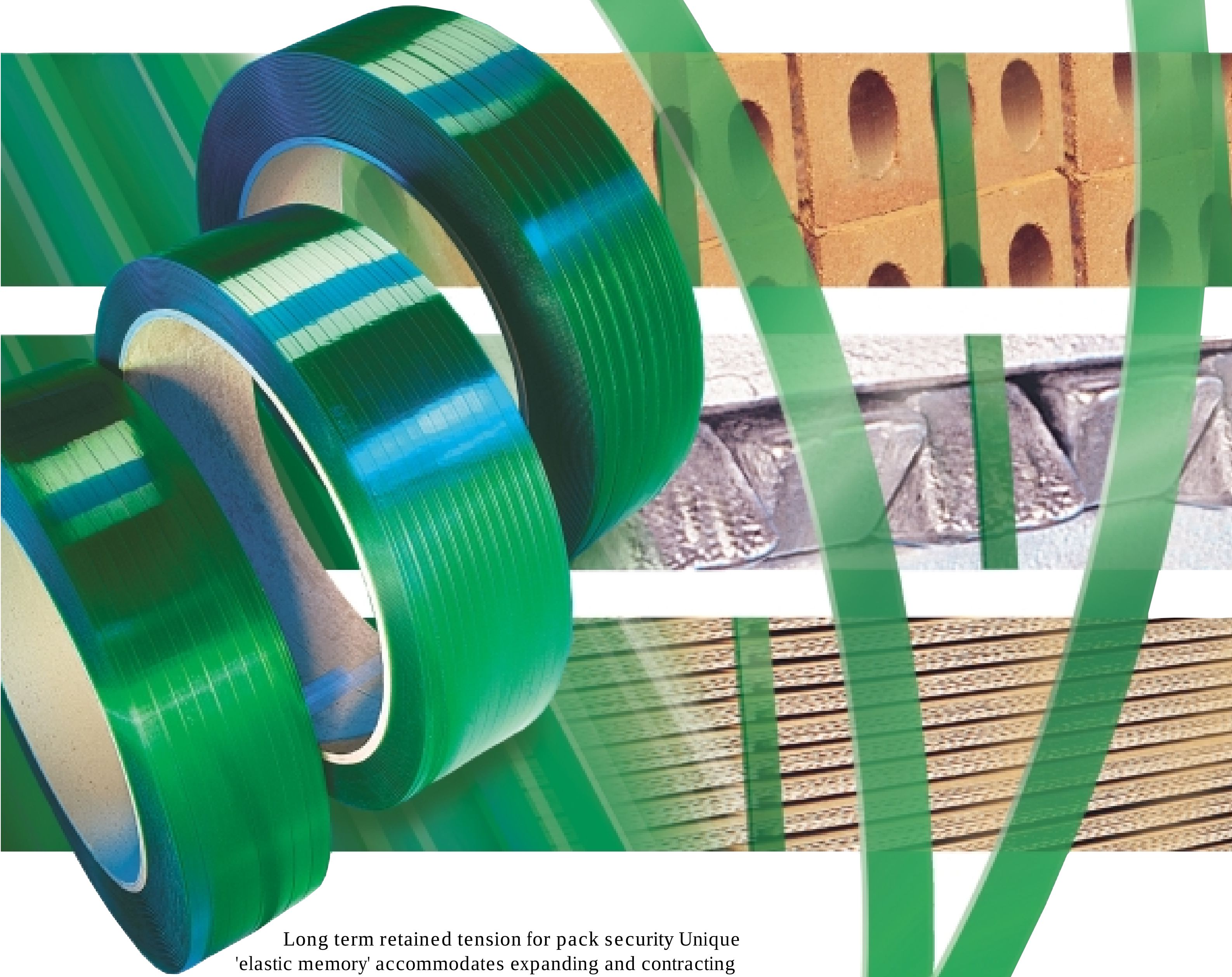
SIGNODE TENAX®

High Performance Polyester Strapping



Long term retained tension for pack security Unique 'elastic memory' accommodates expanding and contracting loads for total pack security.

Excellent product protection
Tenax® total pack security - with no scratching or indenting of the product.

Non rusting, UV resistant
Tenax® is resistant to UV light and impervious to water so eliminates product damage due to corrosion staining.

Safe to work with
With no sharp edges, Tenax® is safer and more pleasant to work with.

Environmentally friendly recyclable strap
As an inert material, the strap can be either recycled, safely buried or incinerated

---

CE

SIGNODE®
www.signode.com

STRAPPING
POLYESTER

TENAX® Polyester Strapping

High Performance Strapping

Signode Tenax® is a heavy-duty polyester strap that has been specially engineered to provide an extremely tough and strong alternative to steel.

Ideal for both medium and heavy-duty loads, Tenax® provides outstanding pack security for a wide variety of applications, including aluminium, corrugated products, metal, construction materials, timber, textiles and unitised cans/bottles. Not surprisingly it is rapidly becoming the preferred packaging material for the many industries that demand high performance and excellent product presentation.

Tenax® can be used with a complete range of Signode strapping equipment, from simple hand tools to fully automatic compression strapping systems. It can be sealed with conventional metal seals or Signode's patented Friction Weld system.

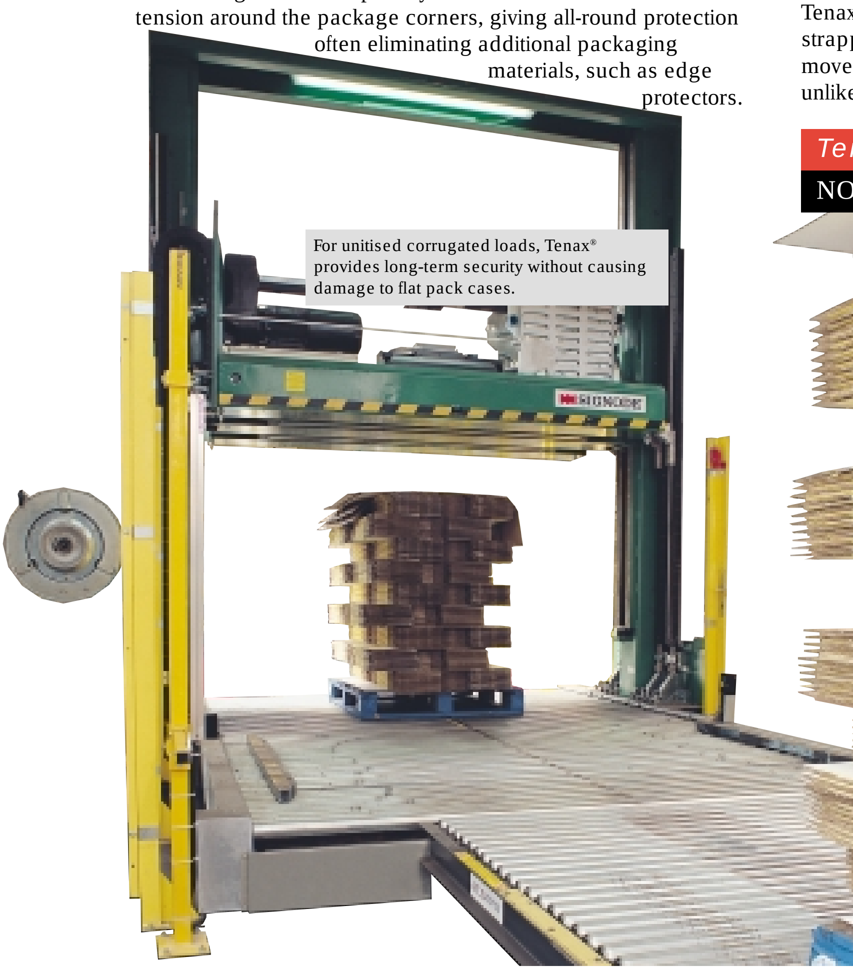
Tenax® compensates for any cooling down or settlement during the handling and transit of brick packs - and eliminates the risk of product staining damage due to storage in yards.

Tenax® improves pack security

ELASTIC MEMORY RETAINS TENSION

The secret of Tenax® lies in an 'elastic memory' that enables it to accommodate an expanding pack or contract with a shrinking pack, ensuring long-term retained tension. This unique combination of strength and elasticity enables it to withstand shock forces during handling and transport.

No loss of performance is experienced even when the strap is applied to surfaces of up to 90°C. The low friction surface also ensures high tension capability and efficient transmission of tension around the package corners, giving all-round protection often eliminating additional packaging materials, such as edge protectors.



For unitised corrugated loads, Tenax® provides long-term security without causing damage to flat pack cases.

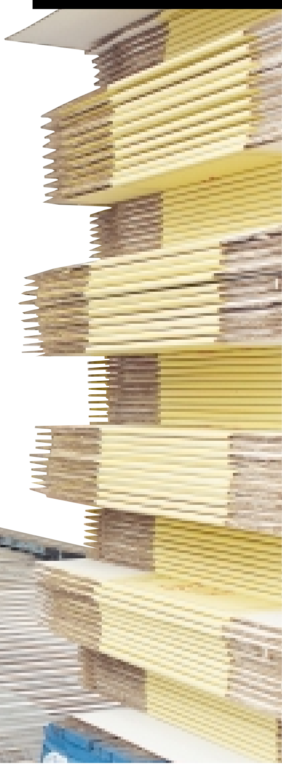
Tenax® reduces transit damage

HIGHER TENSION REDUCES MOVEMENT

Tenax® can be tensioned up to 50% more than polypropylene strapping of equivalent size. This stabilises the load, prevents movement and greatly reduces the risk of transit damage - and unlike polypropylene, Tenax® won't relax or elongate.

Tenax® improves surface protection

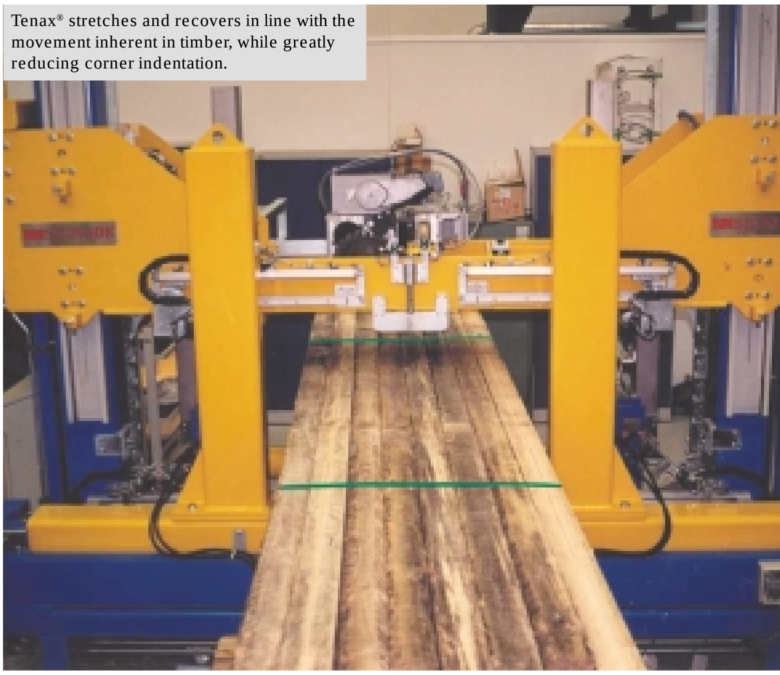
NO STAINING, SCRATCHING OR CUTTING



Unlike steel, Tenax® does not scratch, indent or cause staining due to corrosion. The strap is UV resistant and impervious to water, making it ideal for packs that need to be stored in the open. Even at the highest ambient temperatures, it retains its high applied tension.

With its high strength and controlled elongation, Tenax® ensures excellent bale conformation and resistance to bursting.

No loss of performance is experienced with Tenax® even when applied to surfaces of up to 90°C. As the pack cools, Tenax® maintains its high tension and the stability of the unit. Strapped Ingot packs can also be loaded directly into the furnace without risk of contamination.



Tenax® stretches and recovers in line with the movement inherent in timber, while greatly reducing corner indentation.

Tenax® makes strap handling safer

LESS 'SPRING BACK', NO SHARP EDGES

Tenax® is safer and more pleasant to work with than steel strap. There are no sharp edges to cut or damage the load and the strap does not spring back as violently as steel when a tensioned strap is cut, reducing the risk of personal injury.

Lightweight *Tenax*® improves cost efficiency

EASY HANDLING, EASY STORAGE

80% lighter than steel, Tenax® reduces freight and storage costs and enables standard coils to be safely handled by manual means. Since each coil holds up to four times more strap than steel, fewer coil changes are required during production, improving machine availability and productivity.

Tenax® is environmentally friendly

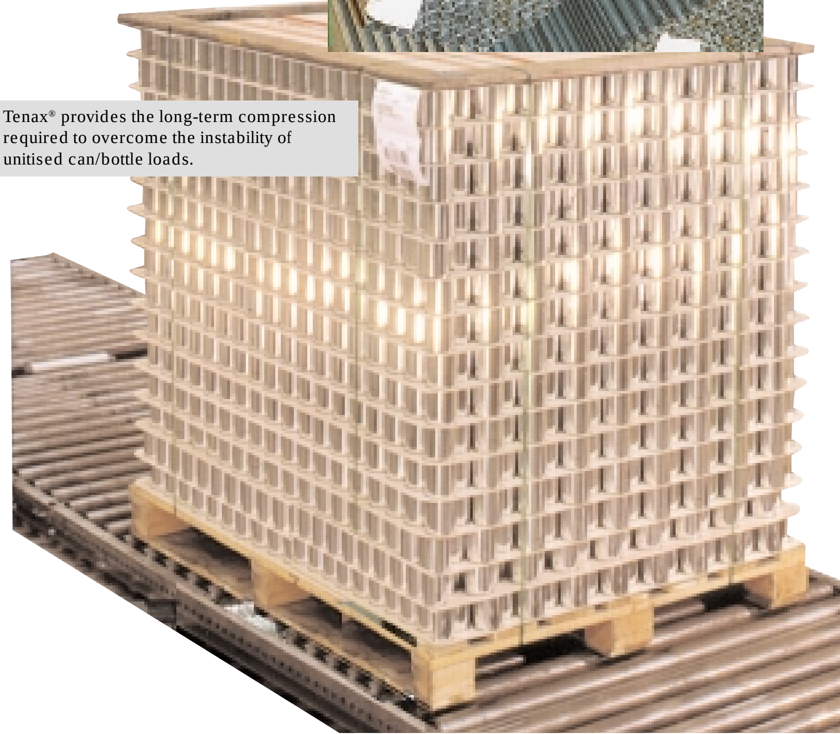
A RECYCLABLE PACKAGING SOLUTION

Tenax® is an inert material and so does not leach chemicals into the ground if buried. It is as safe to incinerate as with other common packaging materials such as paper and wood and produces only 0.03% ash of its own weight. As a clean, neutral product, it is also suitable for recycling and can be easily cut up for easy storage and handling.

Ideal for ferrous and non-ferrous tubes, Tenax® strapping maintains the bundle shape and eliminates staining or scratching.

Tenax® eliminates the possibility of surface damage in aluminimum, brass or stainless rod coil prior to drawing down.

Tenax® provides the long-term compression required to overcome the instability of unitised can/bottle loads.



SIGNODE *TENAX*® Polyester Strapping

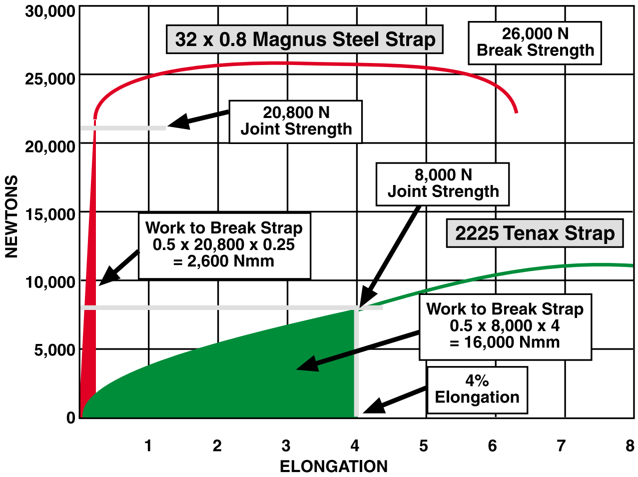
Applications, Tools and Equipment

Specifications

Type	Width mm	Thickness mm	Break Newtons	Coil m	Jumbo Coils m
1616	9.2	0.52	2000	3810	
1616 LC	11.1	0.49	1900	4048	
1716	11.1	0.52	2220	3200	
1716 LC	11.1	0.49	2100	3355	
1718	11.1	0.6	2670	2743	
1816	12.7	0.44	2220	3200	
1818	12.7	0.52	2670	2743	
1822	12.7	0.71	3560	1981	
1830	12.7	0.84	3800	1733	
2022	15.88	0.75	4000	1500	
2030	15.62	0.76	5000	1400	4200
2040	15.62	0.89	6000	1220	3810
2080	15.62	1.00	7000	1066	3353
2215	19.05	0.76	6425	1165	3495
2220	19.05	0.89	7500	1000	3075
2225	19.05	1.27	11120	731	2194
2480	25.00	1.00	11450	690	2072

SIGNODE *TENAX*® Polyester Strapping

Load / Elongation Curves



Tenax® has an impact resistance five times greater than steel strapping, as indicated by the shaded area on the graph opposite. Tenax® can therefore absorb much greater impact, compared with steel strapping – without breaking.

Tools and Equipment Compatibility

Tool/Head	STD/DY	AST	AMT	AMPT	VXL	VXM	VT	BHC	BHC-2000	BHC-2300	BHC-2500	MD	AK 200	MHT 80
Operation	M	M	M	P	P	P	P	B	B	B	B	E	E	E
Seal	50DY	50AD	AMT	AMT 50AD	Friction Weld									
Tension (N)	1000	1000	3500	1000	400	625	3600	1200	2000	2300	2500	2000	6000	4500
1616					●			●				●		
1616 LC												●		
1716					●	●		●	●			●		
1716 LC												●		
1718				●	●	●		●	●	●		●		
1816	●	●		●	●	●		●	●	●				
1818	●	●		●	●	●		●	●	●	●	●		
1822	●	●	●			●		●	●	●	●	●		
1830			●											
2022												●		
2030			●				●	●	●	●	●		●	
2040			●				●	●		●	●		●	●
2080							●	●			●			●
2215							●	●			●		●	
2220							●				●		●	●
2225							●						●	●
2480							●						●	

SIGNODE *TENAX*® Polyester Strapping

KEY
M = Manual
B = Battery
E = Electrical
P = Pneumatic

SIGNODE®

www.signode.com

An ITW Company

P210/E 04/03
Printed in the U.K.

Designed and Produced by **SEL Ltd.** England.