



LUMBER INDUSTRY



**Transit Packaging
Solutions for the
Lumber Industry**

LUMBER INDUSTRY GROWTH CONTINUES

- **1-4% Volume Growth per Annum depending upon segment**
- **Drive to reduce CO₂, energy usage and encourage use of recyclable materials**
- **Increased Automation for end-of-line packaging**

New lumber processing plants are replacing older and smaller units, investments in higher speed lines and minimisation of waste from the trunks continues to improve productivity.

Automation in all areas reduces the need for operators, but requires higher skilled personnel. Some areas are experiencing a rapid growth for 1/4 packs for the DIY segment for use as POS/POD units.

Signode has more than 100 years of technical, engineering and material interaction experience that continues to meet the evolving needs of the lumber industry across Europe.



FOUR LUMBER TRENDS IMPACTING TRANSIT PACKAGING



TREND 1: **PRODUCT PROTECTION** **IS BRAND PROTECTION**

Today loads are protected with manually applied plastic shrouds in 95% of plants interviewed. Automatic systems for plastic hooding are fast but expensive, large and most plants have no space for the equipment. Product image on arrival at end users is often not optimal due to variations in current manual wrapping.

- **95%** of plants manually apply the shrouds to the lumber packs.
- **80%** of major plants would like to automate wrapping but have no space for the equipment in their current plants.
- **40%** of plants see increased demand for quarter packs for DIY & POS locations, requiring more loads to be packed.



TREND 2: **SUSTAINABILITY**

- **25%** of major groups want to reduce energy needs and CO₂ output further by the same amount again, in the next 10 years.
- **98%** of process waste targeted to be re-used. Target to also replace fossil-based materials in packaging to circular bio-economy materials.
- **85%** of major Groups have UN Sustainable Development Goals such as SDG 15 on responsible production/consumption, and minimalization of packaging materials for disposal at end user.

A recent survey indicated **30%** of plants had already or were in the process of replacing hydraulic systems with alternatives.



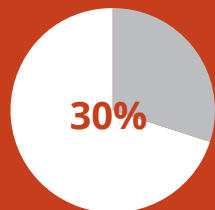
TREND 3: AUTOMATION

Automation and use of robotics requires increased packaging equipment safety systems. This needs **100%** guarded systems.



Systems safety

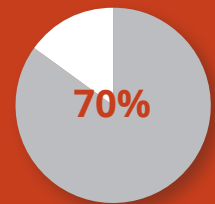
Changing from open, easy-access to fully-guarded equipment increases the time needed for access by at least **30%**.



More time required

Higher machine uptime, less packaging materials changes or re-loading and operator intervention are thus becoming increasingly more important.

70% of lumber plants lie in remote areas making immediate and/or timely support more difficult for service needs. Access to online, remote support is increasingly important for end users.

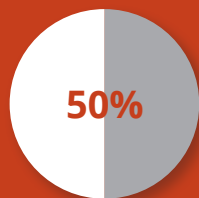


Remote support



TREND 4: PERSONNEL AVAILABILITY

Automation across the mills is reducing the number of personnel but also the availability of suitable personnel is becoming more complex.



Struggling with
personnel recruiting

50% of mills are struggling with personnel recruitment issues, working in the packaging area is not popular due to the nature of the tasks. Mills look to automate load wrapping, strapping and labelling to improve finish and product image.



**YOU
SAWED,
PLANED,
TREATED.**

**WE'LL
PROTECT IT
FROM HERE.**

Let our packaging machines and materials drive your productivity and support your environmental targets.



Our integrated, fully automatic packaging solutions help make your sawing and planing production lines more efficient than ever!

A complete Signode selection of tools, machines, strap, parts & service, provide the lowest overall cost for our customers.

SGP 4330 / 4400

Strappers for inline bundling with 5, 9 & 12 mm PP strap



RCM

Retracting chute strapper for up to 20 bundles a minute with 2-4 units and 2-4 straps



VSM-Z20

Fixes the plastic cover to reduce damage and improve pack arrival condition



SPE-Z20

All electric soft press for high value millwork, planed products etc all needing special protective packaging



LPE-Z20

Heavy duty, all electric press, uses less power and reduced CO2 for lowest TCO



300kg PET strap coils

ORA dispenser for more uptime, less coil changes and workload with increased safety



BXT3 Handtool

Portable battery tool for mobile strapping around the plant



**WE'LL
PROTECT
IT FROM
HERE.**

FEATURED SOLUTIONS

The evolving challenges of the lumber industry require partner companies with end-to-end transport knowledge; our global business continuously interacts with our customers to achieve optimised and customer and product-specific packaging solutions.

These featured technologies, as part of a total solution, are just representative of some of Signodes integrated lumber solutions.



Battery Powered Plastic Strapping Tool

A combination of the BXT3 tool, strap dispenser and our PET strapping provide the optimum low cost, mobile but high performance solution for small to medium sized plants, but also stock yard pack re-strapping.



Power Strap-Feeder and hand tool

A simple power strap feeder with BXT tool enables one person to easily complete the packaging in one location. Creates stable loads for handling, storage and shipping, at a lower cost with improved productivity.



BSA/BSB vertical film wrapper

Construction wood or laminated beams in single or complete packs need to be well protected from dust and moisture as well as protection from UV damage. From the basic semi-automatic to the large Meister range there is a solution for most customers needs, for up to 60m/min. process speeds.



Retracting Chute SIG-RCM for Cross Index-Strapping

Integrated into existing or new lines the RCM with retracting chute has a 3 - 4 second cycle time. It applies our 5, 9 or 12 mm PP strap. Fast, self-safe and durable the RCM delivers customers the lowest TCO in the harshest of environments.



LPE-Z20 All-Electric Lumber Press

The LPE improves productivity, makes very compact stable loads. The press has 92% reduced energy usage and 27 tons of CO₂ p.a. versus conventional presses. Our PET strap provides maximum load stability for optimum pack arrival condition at end-users.



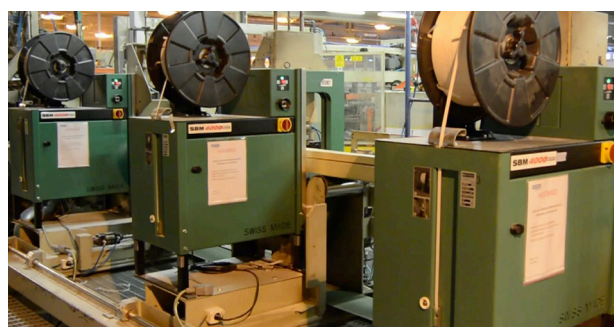
SPE-Z20 Softpress for Millwork

The SPE soft press has lighter levels of compaction for sensitive products. Optional top/bottom batten applicators and LITEC edge-protection in combination with our PET polyester strapping create the optimum packaging solution.



SENIOR High-Speed Bundle Protection Wrappers

The SENIOR range in combination with our high-performance Mima Films provide excellent load protection for 4 or 6 sides of the load. The high performance film is applied at exact levels to create a stable, unitized load and gives maximum surface protection.



Inline High Speed SGP Bundle strapping machines

For maximum productivity - multiple SGP machines applying our light-weight, durable and fully recyclable, economic PP strap to bundles. Makes stable bundles with minimal materials used for easier bulk unitising.

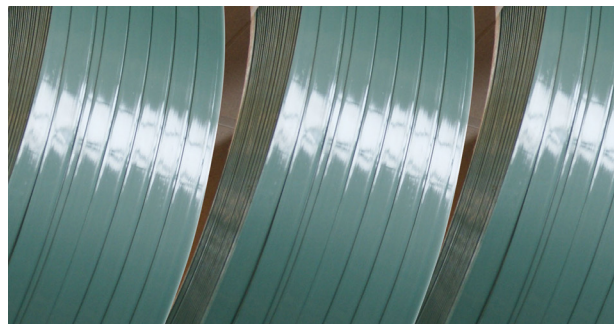
FEATURED SOLUTIONS

Providing customers with packaging materials in larger sized SKUs, automating loading activities and the use of robotic solutions are ways Signode can help improve uptime and safety. Productivity increase potential ranges from 3-5 %.



Options on strap coil sizes for more machine uptime

Tenax is available in coils from 25 kg to 300 kg, depending upon strap type and application. Single operator coil loading, fast coil changes and easy strap thread-up with high strap meterage per coil ensure maximum productivity.



High-Performance Tenax® PET strapping

Manufactured to high tolerances from recycled PET, Tenax is highly split-resistant and ensures high retained strap tension on the packs. Highly sustainable, heavy-duty, available in flat or embossed finishes.



Tchipguard® and Litec® Edge-protection

Tchipguard and Litec moisture-resistant edge-protection is applied under the strapping to protect sensitive product corners. The recycled material can be supplied in various sizes and finishes and with text/logos etc.



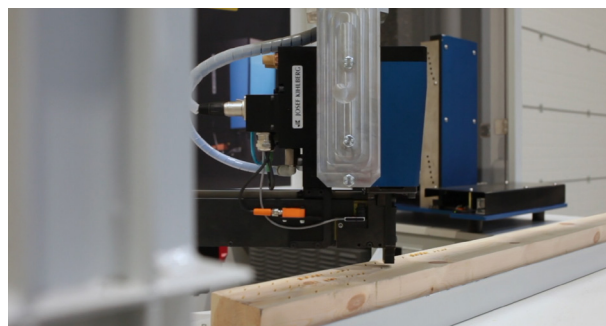
Dylastic® PP strapping for cost-effective bundling

For use in SBM & SIG-RCM bundle strapping machines the high-performance PP materials in 5,9 mm and 12 mm have high meterage and high elongation for fast and efficient bundle packing.



Protective films

The vast range of standard and speciality films from Mima can be used for demanding protective surface packaging and bundling applications. High performance technical films enable machine productivity gains and packaging cost-savings to be achieved compared to basic films.



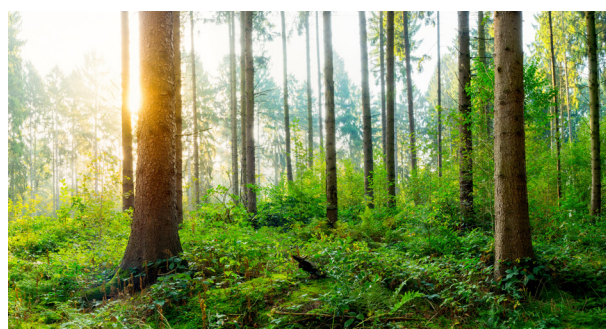
Staples

The lightweight, ergonomic JK stapler range with automatic, simultaneous cap and staple pad application, has single or bump shot application. The adjustable depth drive gives optimum cover securement, is faster, reduces operator work-load and enhances productivity.



After-sales Service

With over 160 internal and external field service engineers we keep customers packaging solutions running efficiently across Europe. Supported by regional specialists, with centralized as well as local spare parts service hubs we can ensure timely support.



Sustainability

Using recycled /recyclable PET raw materials for strap production in Europe saves 85% of the energy needs in the process and over 50 000 Tons CO² annually. Tchipguard and Litec edge-protection materials are also manufactured from recycled materials saving energy and natural resources.

Sources:
Signode Europe Outside-In Customer Study
conducted 2020



WE'LL PROTECT IT FROM HERE.

Signode is the multi-billion-dollar global Transit Packaging Division of Crown Holdings, with 80 manufacturing facilities, 33 within Europe where we have over 2000 employees. The breadth and depth of Signode's experience and product portfolio allows the company to offer the resources, reach, and vision to provide transit packaging solutions, from the smallest to largest of customers.