



# Technical Guide

**Sustainable Solutions for  
Safe Logistics**

**Visit our website  
[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)**



**0114 257 4470  
[nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)**

**2 Cowley Way, Smithy Wood  
Business Park, Sheffield S35 1QP**



# About Us

## Our Mission

At Samson Pallet Stability, our mission is to help customers choose the right strapping, wrapping, tools, and machinery to ensure their goods arrive safely and securely at their destination.

With over 135 years of history, our incredible team of people are passionate about offering sustainable stability solutions with innovation, honesty and integrity.

Sustainability is at the heart of our business. By using Slingshot, Samson Nano and Tensile testing with our clients, we can guarantee how a load will arrive at its end destination whether it's a Type A, B or C pallet configuration.

With scientific load testing, we can ensure the optimum amount of film or strap system is applied to ensure there are no damages, returns, injuries or fatalities through the supply chain. We have a commitment to ensure all our products are 100% recyclable. Our product ranges include 30% or 50% recycled content films and our PET strapping contains 100% recycled content.

Having won the prestigious Queen's Award for Innovation for the Samson Nano Wrapping Machine, with its honest and open book price per wrapped pallet solution, we continued to innovate with Samson Nano Live which monitors not only film and wrapping, but every component part for preventative maintenance and zero downtime, guaranteeing your loads are always safe.

Our specialists are fully qualified EUMOS experts having studied the standard, passed the exam and been certified to hold this title.

Our tensile testing machine allows us to ascertain the break load of a strapping system with both the parent strap and joint efficiency tested, to determine overall load integrity and a safe pack solution.

With a fully equipped workshop, our amazing engineering team are able to respond to any wrapping, tooling or machinery challenge.

# Contents

## **1 About Us / Our Mission**

## **3 Sustainability**

## **5 Pallet Wrapping**

Samson Nano

Samson Nano Live

## **8 Wrapping Machines**

Low Profile

Turntable Wrapper

Notar

Robot Wrapper

Rotating Arm Machine

## **12 PaperWrap Machines**

Semi Automatic

Fully Automatic

Integrated Printing System

## **16 Fully Automatic Wrapping Machines**

Samson Vortex

Samson Extrema Plus

## **18 Machine Film**

## **20 Strapping**

Swap and Drop

Steel Strapping

Polyester Strapping

Woven Strapping

Polypropylene Strapping

## **24 Tooling**

Friction Weld Tools

Manual Tools

Pneumatic Tools

Coil-holders

Seals and Buckles

## **29 Export Products**

Ty-Gard

Dunnage Bags and Inflators

Slip Sheets

Honeycomb Boards

## **32 Pallet Stability Testing**

Samson Nano Slingshot

EUMOS

Strapping Breakload Testing

Stretch Film Analysis

## **35 Contact Info**



## Extended Producer Responsibility (EPR)

EPR for packaging shifts the financial burden of packaging waste management from local authorities to producers.

For UK registered companies that have a turnover above £1million and / or handle more than 25 tonnes of packaging.

EPR requires businesses to cover costs for collection, sorting, treatment and recycling of packaging waste.

Companies must report data on their packaging, and large producers will face enhanced fees from October 2025.

Samson Pallet Stability can help businesses comply by guiding them through reporting requirements and sustainable packaging solutions.

Samson Pallet Stability joined a Planting Day hosted by Oyster in partnership with Tree Appeal to plant diverse tree plantations - combating climate change and making a greener world.

The campaign has so far planted 10,000 trees this year, with Samuel Grant Group making a significant contribution with their collective efforts and the resources donated from their printing usage.

By getting stuck into planting trees we did our bit to help the environment!



# What is EcoVadis?

EcoVadis is a company that assesses businesses on their sustainability and corporate social responsibility (CSR) efforts using a rating system.

- **Measure Our Impact** – The rating system allows us to track our sustainability progress and benchmark ourselves against our competitors.
- **Improve Sustainability Practices** – We identify opportunities to enhance our environmental and ethical practices.
- **Enhance Transparency** – Our customers can trust that we are committed to responsible business practices.
- **Support a Greener Future** – EcoVadis aligns with our mission to promote sustainable packaging



We are dedicated to sustainability through eco-friendly packaging solutions, waste reduction initiatives, and circular economy practices—such as transforming waste into new products like Marmax benches. Additionally, we prioritise ethical sourcing by working with responsible suppliers who share our values of sustainability and fair business practices.

## EU Packaging and Packaging Waste Regulation (PPWR)

PPWR aims to reduce the environmental impact of packaging, promote a circular economy, and harmonise packaging rules across the EU, requiring all packaging to be recyclable by 2030 and setting targets for recycled content and waste reduction.



One Marmax bench uses the equivalent of 2000 recycled plastic bottles.



# Pallet Wrapping

## ✦ Samson Nano

Samson Nano improves client pallet wrapping operations with faster, safer, smarter wrapping machinery, offering added value with a transparent price-per-wrapped-pallet costing system. There is no Capex outlay for the machine, ramps or pitframes.

All servicing, maintenance, engineer call-outs, high performance stretchfilm and ongoing performance monitoring are included in a fixed price-per-wrapped-pallet, which is calculated following an in-depth analysis of clients' pallet wrapping needs. There are simply no hidden extras. With a guaranteed price per wrapped pallet, the Samson Nano is perfect for exact BOM calculations and completely risk free.



THE QUEEN'S AWARDS  
FOR ENTERPRISE  
2018

In 2018, we were honoured with the Queen's Award for Innovation for our work on the Samson Nano.



Samson Nano Live: monitoring your wrapping operation 24/7.

Your Samson Nano Live 24/7 portal enables you to see your operations in real time. You can check what's happening with your pallet wrapping machine from your desk, phone or tablet whether you're in the same building or half way round the world. Real time data is a valuable insight into your business and downtime costs money. To quote Francis Bacon: 'knowledge is power'.

How can you futureproof your wrapping operations? By using Samson Nano Live. Our team of experts can pre-empt upcoming preventative maintenance tasks by monitoring each component. When a part needs to be changed, this is identified, relayed to our team of engineers and actioned in advance to prevent any downtime and disruption to your wrapping and output.

Our machine is so clever, it automatically replenishes your film stock so you don't have to. Your pallets are always safe and your machine is always optimised. You can track the pallets wrapped each day by which program. Why settle for less?

# **Samson Nano**



## **Smarter**

### **Innovative Technology**

Latest technology machines delivering unrivalled performance

### **Accountability**

Daily usage and timeline emails

### **24/7 Login Samson Nano Live**

For 24/7 wrapping monitoring

### **Greener Solution**

Recycled content film options available



## **Better Value**

### **Free Machine**

No Capex outlay for machines, stretch film or ramps

### **No Maintenance or Servicing Costs**

Machine is our responsibility

### **Samson Nano Wrap Guarantee**

Only pay for the pallets that are successfully wrapped

### **Completely Risk Free**

Machine can be returned simply and easily if necessary



## **Faster**

### **Superior Performance**

Higher quality film allows faster wrapping

### **Full Range of Machines Available**

Fully automatic, semi-automatic, rotating arm or robots

### **Increased Productivity**

Wider carriage options available for increased throughput

### **Film Always Available**

The Samson Nano automatically re-orders film



## **Safer**

### **Slingshot > 0.8G Test**

Programmed to EUMOS 40509 standards

### **Eliminate Unstable Loads**

Protect your goods, your reputation, prevent injuries and save lives

### **Less Damage**

Fully locked-out programs – no operator fiddle factor

### **Built in Cutter as Standard**

Safely cuts film every cycle

# Low Profile

- Patented 18mm high turntable with 200mm surround ramps, perfect for use with manual pumptrucks or EPT
- Can be supplied in various mast heights from 2.4mtr up to 3.2mtr
- 1650mm or 1800mm turntable options
- SWL up to 1200kg
- Available with 500mm or 750mm wide carriage



# Turntable Wrapper

- Built in Protection Ring for FLT loading
- Can be loaded with FLT, EPT or pumptruck
- Can be supplied in various mast heights from 2.4mtr up to 3.2mtr
- 1650mm to 3000mm turntable size options
- SWL from 2000kg to 10,000kg options
- Weight Scale and Printer options
- Cold store, Freezer or ATEX Machine options
- Available with 500mm or 750mm wide carriage
- 1250mm wide ramps as standard



## New Samson Nano Model

The NOTAR features four original solutions that drastically reduce manual work and operator intervention:

- Automatic film clamping
- Automatic film cutting
- Film sealing system
- Tail elimination device

Remote control option so the operator can load and wrap without the need to get off the FLT to attach film, increasing productivity and multi tasking whilst the pallet wraps.



- Built in Protection Ring for FLT loading
- Can be loaded with FLT, EPT or pumpruck
- Can be supplied in various mast heights from 2.4mtr up to 3.5mtr
- 1650mm, 1800mm or 2000mm turntable size options
- SWL from 2000kg to 10,000kg options
- Weight Scale and Printer options
- Cold store and Freezer Machine options
- Available with 500mm or 750mm wide carriage
- 1250mm wide ramps as standard

# Robot Wrapper

- Mobile wrapper suitable for longer or larger profile pallets
- Easily moved around the warehouse
- Protection safety bumper with immediate stop
- >250 pallets per full charge
- 500mm carriage
- Multiple mast heights up to 2.8mtr
- Flashing warning light during operation option



# Rotating Arm Machine

- Ideal for unstable pallets as pallet remains stationary during wrap cycle
- Ropes film at the end of each cycle for a more secure load
- Eliminates film tails, with built in sealer bar design
- >3mtr wrapping height options
- Larger radius arm option for pallets >1200mm x 1200mm
- Remote Control Option for FLT driver to 'drop and wrap' without leaving the FLT
- Can be wall or floor mounted



Samson Pallet Stability in partnership with Paper Wrap are bringing fully recyclable kraft paper pallet wrapping technology to businesses across the UK.

- Up to 62% lower CO2 emissions than virgin plastic stretch film
- Proven performance - trusted by major brands like IKEA
- 100% recyclable kraft paper



**Recyclable** | up to 62% lower CO2 emissions



**Printing** | branding on the paper



**Patented** technology



**One-stop-shop** | machines / services / paper



**Semi-automatic and fully automated** systems



**Increase of uptime** versus plastic reels

# PaperWrap - Semi-Automatic

- Automatic wrapping process
- Manual feeding
- Minimal space requirement
- Wrapping up to 25 pallets/h
- Paper Folding Device: best stability with lowest paper consumption
- Mondi Paper: up to 62% lower carbon footprint
- Higher pallet stability during pallet transportation



# PaperWrap - Fully Automatic

- Automatic wrapping process
- Automatic feeding (in/out)
- Wrapping up to 40 pallets/h
- Option for integrated printing system
- Able to handle Jumbo Reels
- Paper Folding Device: best stability with lowest paper consumption
- Mondi Paper: up to 62% lower carbon footprint
- Higher pallet stability during pallet transportation



**Capacity (Pallets/  
hour):**  
20-40



**Max. Reel  
Weight (kg):**  
450



**Max. Reel  
Diameter (mm):**  
1200



**Paper  
Width (mm):**  
490



**Wrapping  
Operations Until  
Reel Change:**  
375-750



**Paper Loading  
System:**  
Manual Loading  
Trolley



**Max. Pallet  
Length/Width  
(mm):**  
1600/1300



**Max. Wrapping  
Height (mm):**  
2000 / 2800



**Max. Pallet  
Weight (kg):**  
2000



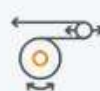
**Remote  
Maintenance  
System:**  
Yes



**Folding Device:**  
Yes



**Tilting Carriage:**  
Yes



**Electronic Tension  
Control:**  
Yes



**Automatic Gluing  
System:**  
Yes



**Integrated  
Printing System:**  
Yes

# Integrated printing system

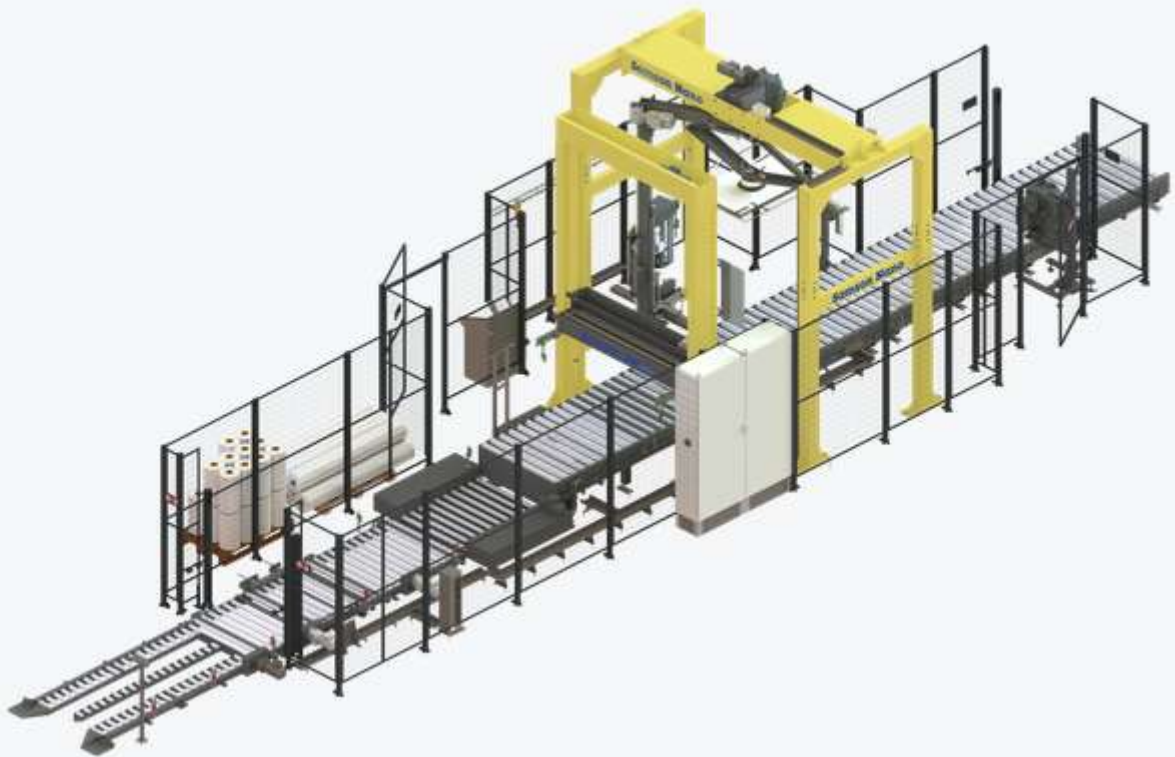
- Add-on for PaperWrap fully automatic
- For individual pallet labelling (Label, Logos, QR and Barcodes)
- Available with 1 / 2 / 3 print heads and 108 / 216 / 324 mm max. print height
- Capacity: up to 70 pallets/h
- Very process-safe piezo inkjet with ink tank recirculating ink system
- Cost savings for pallet labelling
- Very dark and intense print
- Connection to ERP system possible for exchange of pallet individual print data
- No cartridges
- Monochrome (standard) or optional bi-colour



# Samson Vortex Fully Automatic Wrapping Machine

- Reduces labour costs
- 40 rpm for 24/7 high throughput operations
- Ropes film at the end of each cycle for a more secure load
- Eliminates film tails, with built in sealer bar design
- Topsheet dispenser option
- Wrapping heights up to 3mtr
- Roller or Chain conveyor option
- Can be integrated into existing production line
- Double arm option for over 100 pallets per hour capability
- Automatic film roll changer option
- Lifter Option
- Robust design and build quality

Available to purchase or as a CAPEX-free Samson Nano system.



**Get in touch**



To discuss your needs with a strapping and transit expert, **get in touch.**

[nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)

[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)

# Samson Extrema Plus

- Reduces labour costs
- >40 pallets per hour
- Ropes film at the end of each cycle for a more secure load
- Eliminates film tails, with built in sealer bar design
- Topsheet dispenser option
- Mast heights up to 3.2mtr
- 1800mm to 3000mm turntable size options
- SWL >1700kg
- Weight Scale and Printer options
- Top press for unstable loads option
- Roller or Chain conveyor
- Can be integrated into existing production line

**Available to purchase or as a CAPEX-free Samson Nano system.**



# Machine Film

## How do I know which type of film I need – there is so much choice?

There are so many variables when choosing machine stretchfilm. It's vital to select the correct one to suit your machine. Too much film is costly and expensive. Too little you risk your goods and your reputation.

The wrong % stretch will result in unstable pallets due to insufficient holding force if unstretched film continues to stretch in transit.



### Help is on hand – Ask the experts!

Samson Pallet Stability have experts to help choose the right film for your machine.

As part of the Samuel Grant Group, with over 130 years of industry knowledge, you can be assured that we will know exactly the right solution for you.

With an unrivalled range of film available in our dedicated testing lab in Sheffield, we can show you how your pallet will perform in transit on our Slingshot. It's the only way to test how your goods will arrive.

# Machine Film cont.

Here are just a few considerations:

## Machine Type

What type of machine is it (automatic/semi-automatic)? Are the gears fixed or motorised? What are they set at?

## Virgin, PCR Films or Paper?

Virgin material (no recycled content), 30% recycled, 50% recycled content, or paper wrap?

## Transit Cycle

How far will the pallet travel until it reaches its destination?

## Thickness of Film

Microns vary from 8µm to 35µm — thin or thick — which would be best?

## Type and Unwind Speed of the Machine

How fast is the unwind? What is the RPM? Fast unwind speeds can often cause lower-grade films to snap, regardless of film thickness.

## A, B, or C Pallet

What is your pallet configuration?

## Working Parameters of the Film

From 150% stretch to over 400% stretch — each performs differently. The parameters of the film need to match the performance of your machine.

## Puncture Resistance / Load Holding Force

What products do you ship? Are they sharp or soft, heavy or light?

## Clear, Coloured, Perforated or Branded Logo?

Various film choices are available — we can advise.



# Strapping and Tooling

Samson Pallet Stability boasts a dedicated strapping specialist sales team, strapping tool and machine engineers. We have an industry leading experienced sales team offering specialist knowledge on all strapping applications. Our team of service engineers offer in-house servicing in our fully equipped workshop.

Our extensive range of strapping tools and machines are available to rent or buy. We also offer an inspection and repair service for customer owned tools. This includes a Swap and Drop service which minimises downtime and ensures effective ongoing operations in case of tool issue.

Our strapping specialists undertake a full site evaluation offering technical advice and support to improve costs and efficiency. With over 130 years' experience in the packaging industry, we will never compromise on quality. We are one of the UK's major stockists of polyester (PET), steel and polypropylene strapping plus related tools and ancillaries.





## **Samson** Pallet Stability Swap & Drop

### **Keep Production Moving**

When your strapping tool needs maintenance, simply swap it for a fully serviced replacement. No delays, no disruption and no downtime. It's the hassle-free way to keep your operations running smoothly and your equipment in top condition.



### **Nationwide Support**

Our Sheffield-based engineering team supports customers across the UK with expert repairs, preventative maintenance, operator training, and a wide stock of spare parts. Whether it's a one-off fix or ongoing support, our professional service ensures your strapping tools are always ready for action.

# Steel and Polyester Strapping



**Steel Strapping** is the strongest option for securing heavy, sharp-edged, or export-bound loads. Steel Strapping is ideal for industries like construction and timber.

All of our strapping is fully recyclable.

Samson Pallet Stability offers two grades of steel strapping: Standard and High Tensile. Each type is designed to meet the demands of specific applications, providing strength, durability and reliability.

Our steel strapping is available in a variety of widths, thicknesses and finishes to suit your exact needs.

**Polyester (PET) Strapping** is used in many medium to heavy duty applications such as palletising goods, bricks and blocks, timber, heavy machinery or automobiles.

PET strapping is 100% recyclable and is available with 100% recycled content making it a very eco-friendly and sustainable strapping solution. Used with friction weld tools or inline automatic strapping heads to form a secure and reliable joint.



Samson Pallet Stability offer both embossed and smooth PET strapping. Each type is designed to meet the demands of specific applications, providing strength, durability and reliability. Our PET strapping is available in a variety of widths, thicknesses and finishes to suit your exact needs.

**Get in touch**



To discuss your needs with a strapping and transit expert, **get in touch.**

[nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)

[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)

# Woven Strapping

Woven strapping is used to secure medium to heavy items, for storage or transit, whilst providing a high level of reliability.

Woven strapping is excellent at retaining applied tension over long periods of time and is resistant to tension relaxation caused by variations in ambient temperature. Woven straps also remain tight on loads that compact or become compressed.

We offer a range of options that include different lengths and breaking strains. Woven Polyester Strapping is a viable alternative to ratchet lashings.



## Polypropylene Strapping



Polypropylene strapping is ideal for lightweight applications and can be applied with manual combination tools and seals, with a friction weld tool, or semi-automatic and fully automatic arch machines.

PP can be offered in a variety of colours, or printed with your own custom logo. Supplied on cardboard cores for semi-automatic tabletop machines, automatic arch machines, or on cardboard cores or plastic reels for use with mobile dispensers.



Explore our range today and find the perfect solution for your storage or transit needs!

[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)

# Friction Weld Tooling



Friction weld tools are modern, battery-operated devices designed to tension, seal and cut plastic strapping - all in one efficient, handheld unit. By using high-speed friction to generate heat, these tools fuse the strap ends together without the need for metal seals or external heat sources.

They're ideal for medium to heavy-duty strapping applications across industries such as warehousing, logistics, construction and manufacturing. The result is a strong, secure and consistent seal with reduced downtime and operator effort.

## Zapak ZP93B & ZP97A

- **Brushless Motor:** Zapak's exclusive single-motor system for long service life and low maintenance.
- **High-Performance Li-Ion Battery:** 18V, 4.0Ah/5.0Ah with Smart Charge Indicator for easy monitoring.
- **Fast Charger:** Full recharge in just 50–60 minutes.
- **ZP97A (Heavy-Duty):** Max tension 400kg (4000N).
- **ZP93B (Standard-Duty):** Max tension 250kg (2500N).
- **Enhanced Strap Grippers:** Patented design ensures high tension and better strap tolerance.



### Powerful & Speedy

- **One-Handed Operation:** Tensions, seals, and cuts in one smooth motion.
- **User-Friendly:** Pre-programmed touch panel for easy, precise control.
- **Lightweight:** At just 3.4 kg (7.5 lbs), the lightest in its class, reducing operator fatigue.
- **Smooth Removal:** Built-in system for easy detachment after sealing.
- **Protective Roller:** Prevents scuffs on packaging surfaces.
- **Customisable:** Self-adjusting strap guides and replaceable parts for durability.
- **Optional Tool Hanger:** Reduces fatigue during extended use.
- **Soft Mode (ZP93B):** Low tension for delicate items.

### Built-in Safety

- One-handed use, CE and RoHS compliant.
- Li-Ion battery meets UN38.3 transport safety standards.

# Friction Weld Tooling cont.

## Signode BXT Hand Tool Series

The Signode BXT4 combination tool offers high-speed performance and advanced EasyTrigger™ Technology, elevating your plastic strapping operations with ergonomic design and seamless integration.



### Features and Benefits

- Lightweight, ergonomic design with heat-treated tool steel and powder metallurgical materials.
- Easy-to-use interface with colour display for quick access to strapping functions.
- Enhanced efficiency with AMPSHare® battery from BOSCH®, offering up to 800 cycles per charge.
- Adjustable tensioning speed and welding via force-sensitive resistor.

### EasyTrigger™ Technology

- EasyTrigger™ Technology – starts strapping with a simple finger pull, making operation effortless and reducing fatigue in any direction.

## Tabletop Semi-Automatic Strapping Machine

- Strap Compatibility: Works with 5mm-15.5mm polypropylene strap without part changes.
- Fast Setup: Ready to operate in just 45 seconds.
- Quiet & Energy Efficient: Operates at 57.2 dB and uses only 0.35Kw.
- Dual Tension Modes: Normal (up to 450N) for standard packs, Soft Tension for delicate items.
- Easy Maintenance: Electric components are easily accessible for quick maintenance.
- Optional Equipment: Side/rear panels, support plates, and adjustable legs (755–925mm height).



# Manual Tools

## MH32A & MH35–Sealless Combination Tool

The MH32A and MH35 are heavy-duty, manually operated sealless strapping tools designed for use with steel strapping in demanding industrial applications. Built for durability, speed and cost-efficiency, both tools eliminate the need for metal seals by crimping the strap together to form a secure joint.



## MR36 Manual Pusher-Type Tool

The MR36 is a durable, manually operated pusher-type steel strapping tool designed for securing round, irregular or compressed packages such as pipes, coils, drums and bundled materials. Unlike sealless tools, the MR36 uses closed (pusher) seals, making it ideal for applications where the strap must be fed around awkward or curved loads.



## MIP1610 & MIP1620 Manual Pusher

The MIP1610 and MIP1620 are manual pusher-type tensioners designed to tension steel strapping securely around various loads. These tools are used in combination with manual sealers to complete the steel strapping process.



## Manual Steel Strapping Sealer Lap-Over Seals

Our manual sealers are designed for use lap-over steel seals and are available in single notch and double notch models. Engineered for durability and ease of use, they deliver secure, reliable closures for heavy strapping in industrial applications.



# Pneumatic Tools

Pneumatic strapping tools provide fast, reliable tensioning and sealing for heavy-duty strapping applications. Powered by compressed air, these tools deliver consistent performance with minimal operator effort, making them ideal for high-volume packaging environments.

Designed for use with steel strapping, pneumatic tools apply strong, adjustable tension and secure seals in seconds. They are widely used in industries such as construction, metalwork, timber and logistics, where strong, stable loads are critical.

Pneumatic strapping tools help streamline the packaging process, improve load security, and reduce downtime. For businesses looking for efficiency and strength in their strapping operations, these tools provide a powerful and professional solution.

A dependable choice for securing heavy or irregular loads quickly and with confidence.



For 'how to' guides featuring many of our strapping tools, visit our **YouTube** channel



0114 257 4470 | [nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)

# Support Products



## Coil Holder: Ribbon Wound

- Dispenser for 10-32mm ribbon wound steel strapping
- Large removable tool/seal tray
- 32mm tubular construction
- 150mm dia heavy duty wheels

## Coil Holder: Oscillated Wound

- Dispenser for 406mm core steel / polyester strapping
- Large removable tool tray
- 32mm tubular construction
- 200mm heavy duty wheels
- Adjustable friction roller brake



## Strapping Seals

- Durable Construction – Made from galvanised steel for strength and reliability.
- Secure Application – Used with a strapping tensioner and sealer to maintain tight, secure strapping during storage and transport.

## Buckles

- Weather-resistant galvanised surface
- For polypropylene, hotmelt strapping, composite and woven polyester strapping
- Secure by pulling the strapping through the buckle



# Cargo Restraint



At Samson Pallet Stability, we provide innovative solutions to secure, stabilise and protect your export shipments. Our range of high-performance products ensures your goods travel safely and sustainably, wherever they're headed.



**Scan here for**  
more  
information on  
Cargo Restraint  
Solutions



## Ty-Gard

Ty-Gard is the most versatile securement system in the marketplace today. Ty-Gard is approved to secure drums, FIBCs, IBC's and various types of palletised and loose cargo.

Tested and approved to secure dangerous goods and general cargo by the Association of American Railroads (AAR) and the BOE.

Ty-Gard also meets the cargo securement guidelines stipulated by IMDG, FMCSA, USCG, RID, ADR & DOT.

- Restrains 10,000kg with one band
- Easy to install cargo restraint
- No anchor points required
- Wood floor and nails not required
- Easy to remove at destination

# Dunnage Bags & Inflators

Dunnage bags are a simple yet highly effective way to secure cargo during transport. Placed in the gaps between pallets or boxes, they cushion and stabilise loads, preventing movement and reducing the risk of damage in transit.

Made from tough, puncture-resistant materials, these inflatable bags are quick to install and suitable for use in trucks, containers, rail transportation and ships. They adapt to a wide range of cargo sizes and shapes, offering reliable support where it's needed most.

Dunnage bags offer a simple, cost-effective way to secure loads, especially for fragile or heavy goods. Lightweight and reusable, they enhance safety and support more sustainable shipping.



## Sustainable Palletising Solutions



### Honeycomb Boards

Strong, lightweight and 100% recyclable. Honeycomb boards are the eco-friendly choice for impact protection and stacking strength.

**Get in touch**



**Contact us** to discuss your packaging requirements.

[nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)

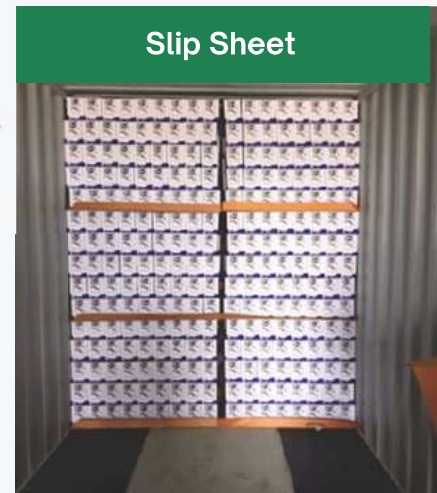
[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)

# Slip Sheets

Export slip sheets are lightweight, sustainable, and save on space without compromising strength.



Space usage is not optimised. Shipping pallets is not sustainable.



Optimised Loading.  
Single, Double or Triple Stacking.

## Why Use Slip Sheets?

- Reduce transport and fuel consumption by using a slip sheet instead of a 15kg-25kg wooden pallet
- 94% less CO<sub>2</sub> emissions compared to wooden pallets from cradle to gate - additional CO<sub>2</sub> for freight forwarding empty pallets vs slip sheets
- Slip Sheets are 100% recyclable and can be reused
- Reduce freight costs – less containers needed as more goods shipped on each container. Saves 8 cubic metres per container
- Cost of warehouse ordering, handling and storage of pallets – for every 10 wooden pallets you can store 1500 slip sheets

## How Do I Use It?

- Slip sheets are handled with a Push/Pull attachment (or Rollerforks).
- Attachments are compatible with most FLT's. They attach and detach very quickly.
- The sender and receiver need the attachment to load and unload.
- The ROI is very fast, due to the huge savings from the material/transport costs.
- You can still use standard pallets as slave pallets in your racking or to transport goods around the warehouse.



# Testing Lab



The **Slingshot** is the first of its kind to be installed in the UK and unique to Samson Pallet Stability. The Samson Nano Slingshot is a horizontal pallet testing table that replicates the inertia of a vehicle and ascertains whether the load will potentially displace in transit.

The machine initially tests at 0.1G and works up to the EUMOS standard of 0.8G. From the pallet data entered, the maximum deformation of the load is calculated to create a pass or fail. If a pallet fails the test, the wrapping process is adjusted until a pass is received. This gives clients reassurance that their goods will arrive safely and securely.

Pallet stability and safety are crucial to manufacturers, who not only want their goods to reach their destination in perfect condition, but also need to keep their warehouse teams, logistics operators and the wider public safe from displaced loads.

The cost of a displaced load can sometimes be more than the cost of the goods themselves, and manufacturers can be at risk of logistics operators refusing to take their goods if health and safety concerns arise for operators.

For more information on our testing lab, **scan here**



EUMOS is the European Safe Logistics Association, of which Samson Pallet Stability are proud members. EUMOS are aiming to reduce the number of fatalities to Zero by 2050, instilling safer working practices throughout the supply chain and have created standards which are industry recognised.

By using the Samson Nano Slingshot, customers can guarantee compliance with the EUMOS:40509 2020 safety standards.



## Stretch Film Analysis

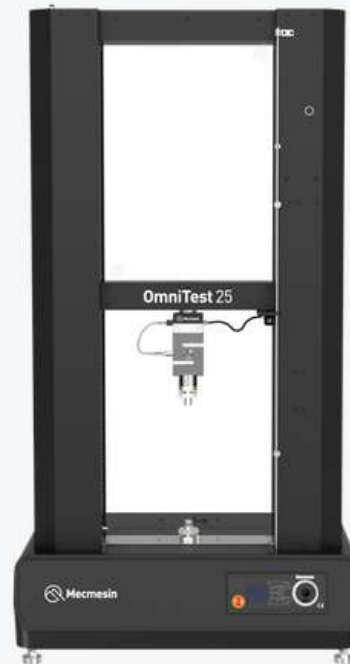
Highlight Industries, based in the USA, has been the global leader in stretchfilm testing solutions for over two decades. Their equipment is designed to accurately and reliably measure the length of stretchfilm rolls, ensuring precision in packaging and quality control.

The unwind testing capabilities include high-speed performance, with the ability to test at rates of up to 150 metres per minute. This allows for efficient and rapid evaluation of stretchfilm performance.

The Highlight LMS-1000 exemplifies the company's ongoing commitment to producing high-quality testing equipment, combining advanced technology with durable design to meet the needs of modern packaging operations.

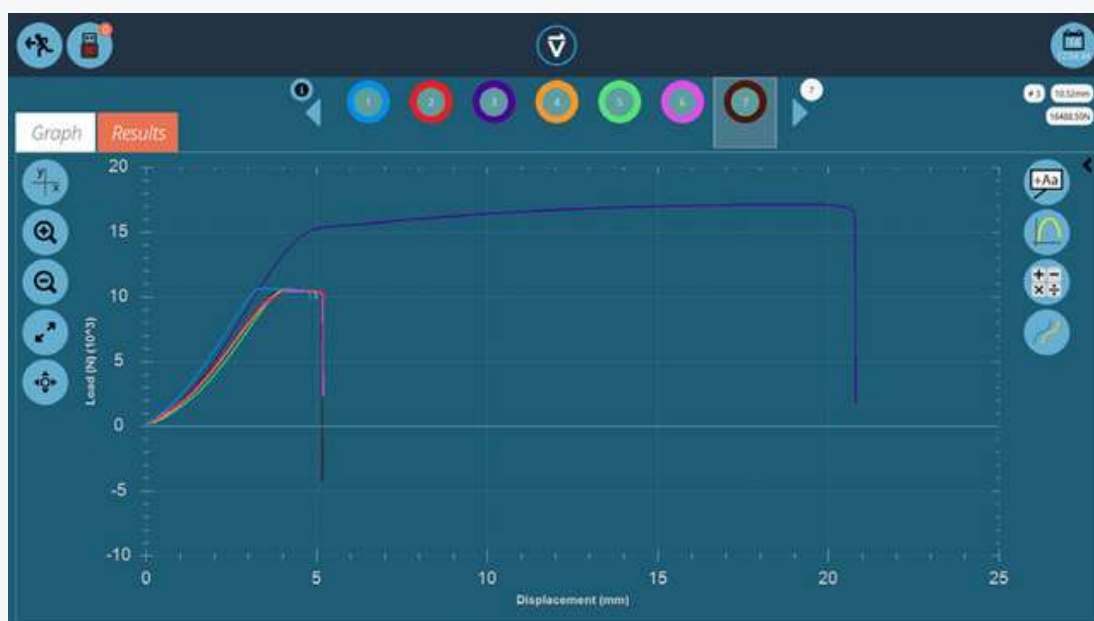
# Strapping Breakload Testing

Our Strapping Breakload Testing machine measures the efficiency of strapping, by stretching the strap to its breaking point. This allows us to compare the breaking point to the weight of the goods being palletised and recommend the optimum strapping solution to ensure safe and secure transit. For further peace of mind, once the correct strapping solution has been applied, customers can test the pallets on the Slingshot to EUMOS standards.



- Tensile and break load testing of PP, PET and Steel Strapping
- Measure the exact break load and % of joint efficiency of sealing method
- Full detailed report analysis including number of straps recommendation, for optimum pack safety
- Testing capacity 25kN

Samson Pallet Stability are committed to providing the complete solution for pallet stability and load safety.



*example of an Omnitest25 report*

**"Our mission is to help customers choose the right strapping, wrapping, tools and machinery to ensure their goods arrive safely and securely at their destination."**



**For a complete professional and first class wrapping and strapping service, call us today**

**Scan here to get in touch**



**[samsonpalletstability.co.uk](http://samsonpalletstability.co.uk)**

**0114 257 4470 | [nano@samuelgrant.co.uk](mailto:nano@samuelgrant.co.uk)**