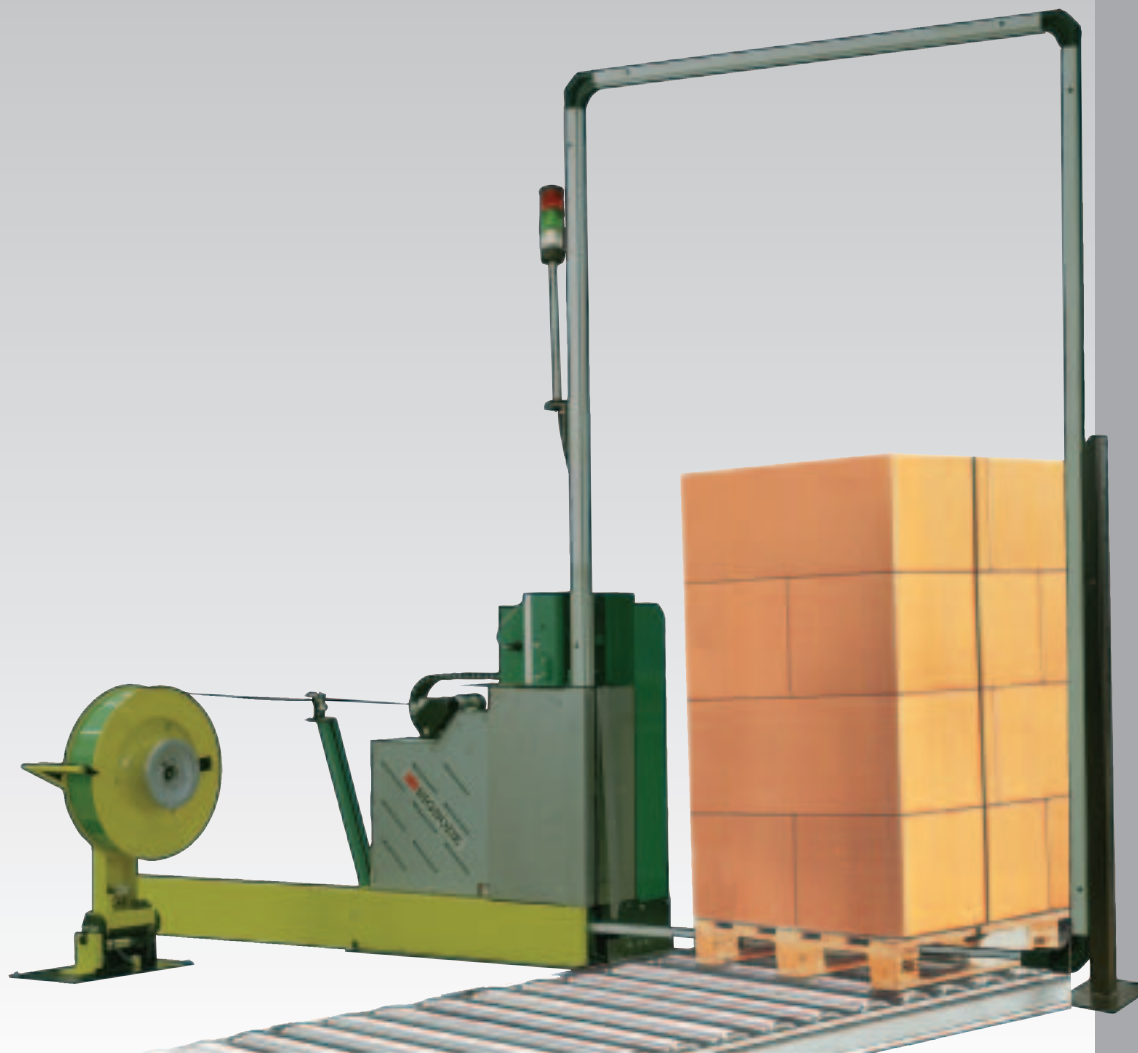


SIGNODE MD-VRB

Fully automatic vertical pallet strapping machine

MD-VRB



for 9, 11, 13 or 16 mm polypropylene or polyester strap

Advanced Signode Technology for Maximum Availability and Productivity

SUREGRIP

Tension Winder System

SwingWELD

Vibration Weld System

Exchangeable sealing module – minimises service downtime.

Automatic strap loading – ensures maximum machine uptime.

High strap tension – electronically controlled to within +/-3% repeat consistency.

MD strapping head – innovative design prevents tension loss on varying size loads.

High strap joint strength – patented and proven 'SwingWELD' technology.

Pallet void feeding attachment (Bayonet) – straps low profile pallets with ease.



SIGNODE[®]

An ITW Company



MACHINES
PALLET STRAPPING

SIGNODE MD-VRB

Fully automatic vertical pallet strapping machine

Maximum productivity and availability in a complete package

The MD-VRB has been specifically developed for the vertical strapping of palletised loads and combines advanced features with proven technology to deliver industry standard levels of reliability and availability. Suitable for use with polypropylene or polyester strapping in 9, 11, 13 or 16 mm widths, it offers total operational flexibility to strap and secure a wide variety of palletised loads, including cartons, appliances, timber products, metal and glass components, bales and bundled products. The combination of Signode's clutch free technology, multi-motor design and consistent (+/- 3%) strap tension from 80 to 2100 Newtons, provides a technologically advanced machine that is exceptionally reliable and can be specified to suit specific productivity targets.



The MD Strapping Head

The side-mounted design of the MD strapping head enables it to securely strap pallet loads of differing widths without any loss of tension. The pallet side is detected via a sensor and the MD head moves towards the pack at the optimum approach speed to prevent any damage to the pallet.

For maintenance, the MD head rotates through a full 90° providing complete access to both sides, enabling operators to service or clean the head without the need of removal from the machine.



High Strap Tension

The patented tension winder system is electronically controlled to ensure consistent strap tension of between +/-3% from strap to strap. Tension levels from 80 to 2100 Newtons are available to suit a wide variety of product applications.



Exchangeable Sealing Module

The sealing module is easily exchanged and, when used with the optional spare module, enables operation to continue, minimising downtime when service is required.





High Strap Joint Strength

Innovative yet proven Signode technology in the form of the patented SwingWELD vibration system guarantees consistently high joint strength, yet is sensitive to the environment as it produces no heat, fumes or smoke.



Automatic Strap Loading

All Signode MD machines are equipped with a fully automatic, high speed strap feed system to maximise machine availability.



Quick Change Coil Dispenser (optional)

The MD-VRB features a novel strap dispenser which enables coils to be loaded from either horizontal or 45° positions and is hinged to lay down for easy loading. Its design minimises operator lifting effort when moving the dispenser back to the upright position. The whole process is extremely fast ensuring full productivity is quickly restored.



Low Strap Indicator

A photo-cell, located on the dispenser itself detects low strap conditions and activates a warning light signal to the operator to prepare a new strap coil.



Pallet Void Feeding Attachment (bayonet)

At just 33 mm, the MD-VRB's PVFA ensures low profile pallets are strapped easily and safely.

MD-VRB models with top compression

Two further developments of the modular MD side-seal strapping system, both featuring an additional compression device, have been specially developed for palletised bottle and can applications.

Can applications – supplied with a compression force of 5,000 Newtons, adjustable in 5 steps.

Bottle applications – supplied with a compression force of 20,000 Newtons, adjustable in 17 steps.

Electrically driven and controlled, the compression device features:

a single power source for clean, efficient and fast operation, plus ease of control, high machine availability, with low maintenance costs and precise compression force with high repeatability.



Innovation and total reliability for pallet strapping

FULLY AUTOMATIC STRAPPING

MD-VRB

Construction, operation and service

The MD-VRB is designed for the vertical strapping of pallet loads with polypropylene or polyester strapping of 9, 11, 13 or 16 mm width. The strapping head, mounted at the side of the machine, can travel up to 500 mm towards the pack to accommodate packs of different widths. The side of the pack is detected by a sensor that guarantees an optimum approach speed to prevent the strapping head from

damaging the load. The strap chute and bayonet are manufactured from extruded aluminium profile to ensure positive transfer through the machine. The MD-VRB carries CE safety certification to guarantee the highest level of user protection. The electrical power circuit is designed to shut down immediately when the safety chain is broken i.e. doors opened or other emergency stop facilities activated.

Options

Spare sealing module
Non standard chute dimensions
Additional spare strap dispenser
Riser kit
Photocell for low strap detection and machine status beacon
Foot cycle switch
Bayonet lengths exceeding 2000 mm
Allen Bradley MicroLogix PLC
Automatic strap rewind. (Automatically rewinds the strap during long periods of inactivity, ensuring greater efficiency when re-starting).

Machine Design

The MD-VRB is available in a wide range of chute sizes with aluminium construction. The height of the strap chutes varies between 1400 mm and 3000 mm, in 200 mm increments. Bayonets are available in lengths of 1250 mm to 2000 mm in 250 mm increments. Bayonet lengths exceeding 2000 mm are available for special order only.

Strapping Materials

Signode Dylastic® Polypropylene		Signode Tenax® Polyester	
654 series	9 mm	1616 series	9 mm
714 series	11 mm	1716 series	11 mm
716 series	11 mm	1718 series	11 mm
718 series	11 mm	1816 series	13 mm
816 series	13 mm	1818 series	13 mm
818 series	13 mm	1822 series	13 mm
935 series	15 mm	2030 series	16 mm
936 series	15 mm	2040 series	16 mm
		2080 series	16 mm

Worldwide Service Back-up

As a global product, consumables, service and parts back-up is available from Signode distributors and partners, worldwide.

MD-VR and MD-V

For applications where a bayonet is not required, the MD-VR and MD-V models are also available.

Technical Data

Strapping Head	MD with patented new technology
Sealing Method	SwingWELD – vibration seal
Strap Tension	Adjustable from 80 to 2100 Newtons (alternative 2400 N) with high repeat accuracy
Strap Cycle	Initiated by means of photo cells
Power Supply	400/415 volts, 3 phase, 50Hz or 460 volts, 3 phase, 60Hz
Power Consumption	2.15 kW without conveyer
Control Voltage	24 volts DC
Control	Siemens S7-200
Max Noise Level	79 dB (A)
Max Chute Size	2000 x 3000 mm (width x height)
Min Load Height	700 mm including pallet
Machine Weight	Approx 520 kg
Machine Finish:	
Bayonet and Head	RAL 1003 yellow
Tracking Housing	Aluminium
Strap Chute	Aluminium
Frame and Base	RAL 7021 black + RAL 6000 green
Max Head Stroke	500 mm

