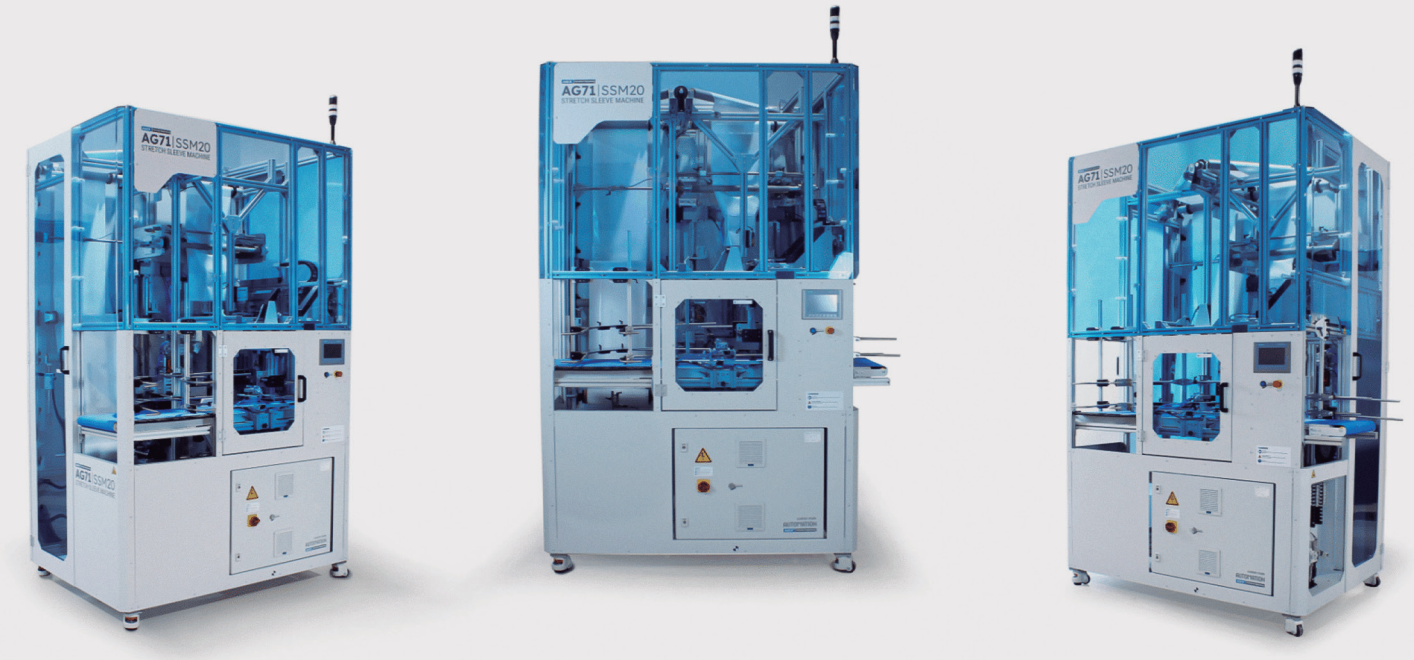
AGIX® Innovative Engineering



Stretch Sleeve Machine
AG71-SSM20

Plastic sleeve label insertion equipment – Stretch Sleeve Applicator - typically used for blow-moulded plastic packaging.

Applications and Industries

Applications
- Labelling of blow-moulded plastic packaging.

Industries
- Manufacturers of blow-moulded plastic packaging.

Compatible Packaging
- Blow-moulded or similarly processed plastic packaging ranging from 1L to 20L.

Equipment Highlights

Compact
Compact layout - 1900 x 1200 x 3100 (mm)

Performance
Up to 600 cycles per hour

Flexible
Quick change of the sleeve application matrix

Configurable
Packaging from 1L to 20L

Integration
Can be integrated into production lines

Expandable
Optional quality control module - AG55-LQC50

Compact Layout

① • Front or side packaging entry
② • Stretch sleeve rolls up to Ø400 mm and 20 kg
• Dimensions – 1900 x 1200 x 3100 (mm)

Performance

- Up to 10 cycles per minute / 600 cycles per hour
- End-of-roll and label detachment detection
- Detection of various label colours, including transparent ones

Integration and Expandability

- Possibility to operate in a production line or as a stand-alone system (online or offline)
- Option to integrate with the quality control line – AGIX | AG55-LQC50

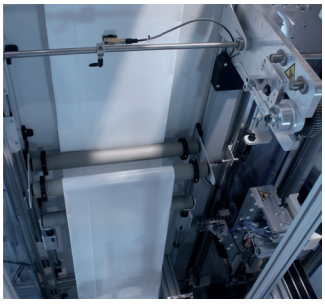
③ • Option to integrate custom-sized conveyor belts – AGIX | TTAG

Configurable

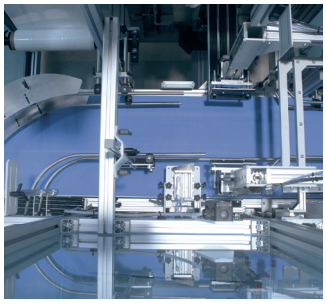
④ • Quick-change tool system for different packaging models
• Supports various geometries – circular, square, rectangular, or others
• Packaging dimensions range from 100 x 100 x 200 (mm) to 280 x 240 x 500 (mm)
• Configurable packaging orientation

① • Adjustable conveyor height: 1000-1300 (mm)

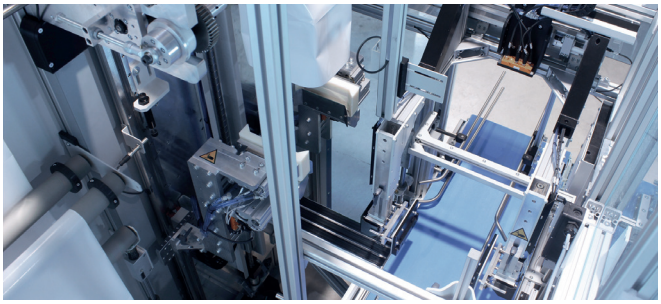
① **AG71-INPUT**
Packaging entry conveyor



② **AG71-Sleeve Feeding**
Stretch sleeve roll support systems



③ **AG71-Aerial View**
Packaging entry path



④ **AG71-Labelling**
Singularisation and labelling zone

Key Features Table

Processing	**Roll**	Stretch sleeve roll Roll dimensions: up to Ø400mm and 20 kg
	Sleeve Material	Polyethylene (PE)
	Label Dimensions	Up to 480 x 250 (mm)
	Packaging Format	Bottles and carboys in various shapes: circular, square, rectangular, or others Orientation position: indifferent Maximum dimensions up to 280 x 240 x 500 (mm)
	Operating Speed	10 cycles per minute / 600 cycles per hour
Dimensions	**Overall Dimensions**	1900 x 1200 x 3100 (mm)
	Implementation Space	2900 x 2000 x 3100 (mm)
	Weight	700kg
	Conveyor Height	Adjustable 1000-1300 (mm)

Product Data

Equipment Description

Operating Summary

A conveyor belt directs the packaging to the accumulation zone, where a pneumatic cylinder stops the movement.
A singularisation system, consisting of a horizontal electric axis and a set of grippers, guides the packaging to the label insertion zone.
The stretch sleeve is applied through an unwinding system and directed to an opening matrix, shaping the sleeve. The sleeve is then pulled downward by a set of grippers on a vertical electric axis, separating the label along the perforation and applying it to the packaging.
The packaging is then transported from the singularisation zone to the equipment's exit and reintroduced into the production line.

Equipment Systems

Packaging Transport System
- Entry – The packaging is fed into the equipment either perpendicularly or in line with the transport direction. A pneumatic cylinder acts as an entry brake, stopping the packaging before it moves to the next zone.
- Singularisation zone – The area where each packaging unit is isolated for label insertion.
- Exit – The packaging, now with the sleeve applied, exits the equipment.

Sleeve Feeding
- Roll – The stretch sleeve (elastic and pre-perforated) is designed to stretch for insertion onto the packaging and then shrink to conform to its shape without requiring heat application.
- Roll support – Holds the roll and allows its rotation in sync with the system. It includes a sleeve tensioning mechanism and a locking system for roll replacement.
- Sleeve buffer – Guides the sleeve from the roll to the opening nozzle, controlled by sensors that detect the tension applied to the sleeve.
- Sleeve unwinding system – Consists of rollers that pull and unwind the sleeve towards the opening matrix rollers.
- Opening matrix – Designed according to the packaging format, ensuring the sleeve is properly opened for application.

Packaging Singularisation System
- Segregates the packaging from the entry point to the sleeve insertion zone.
- Electric axis with a pneumatic gripper to position the packaging in the label application area.

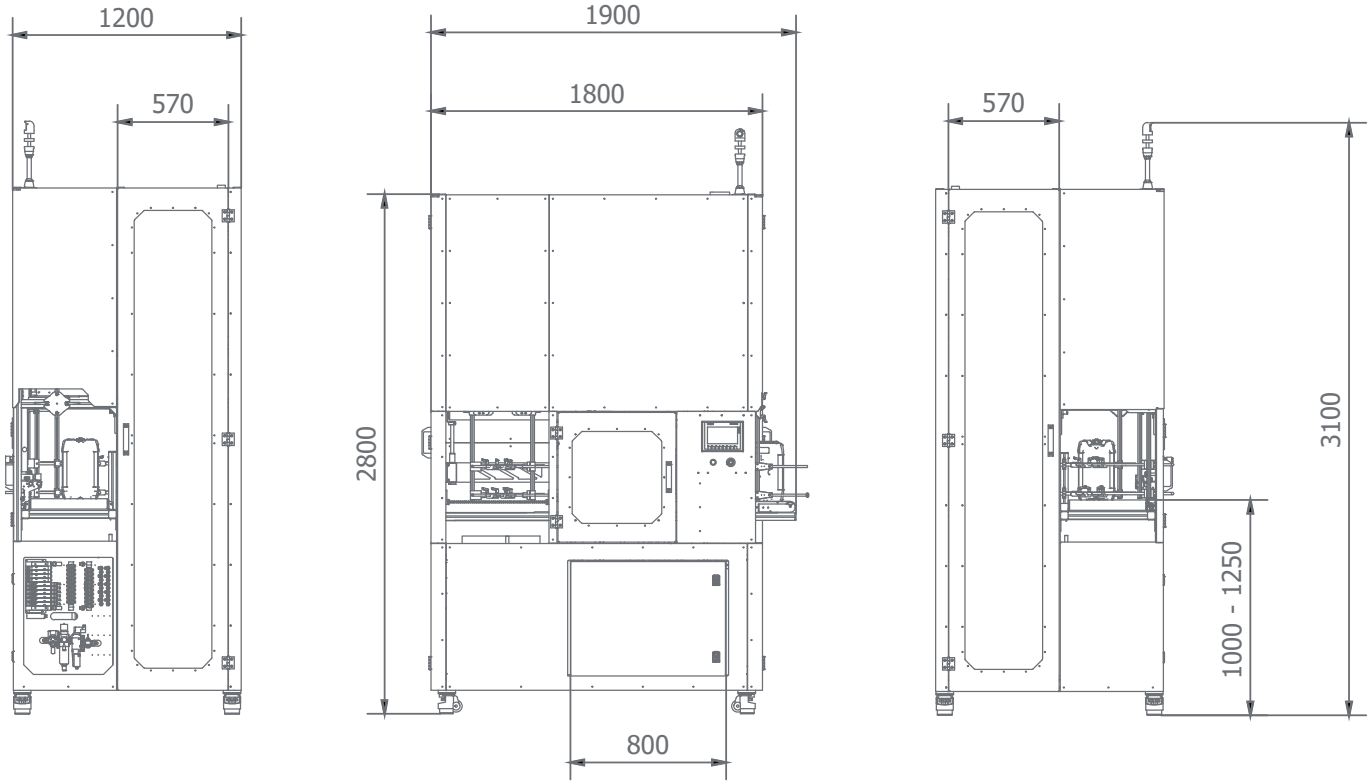
Label Separation and Insertion
- A linear system moves the gripper, unwinding the sleeve, which has been previously opened by the matrix. During the pulling motion, the label is detached along the perforation and applied to the packaging.

Characteristics Table

Implementation	**Base and Feet**	Elevating support feet Does not require fixation
	Movement	Castor
	Loading/Unloading	Lift from the base
Construction, Materials, and Appearance	Structure made of standardised aluminium profile Guards in lacquered steel with textured epoxy paint (colour RAL 7035) Doors and windows with transparent blue acrylic Brand and model: AGIX | AG71	
Processing Capacity	**Customised Elements**	Sleeve opening matrix Grippers for label separation
	Packaging Material	Plastics (PET, PE, PVC, others) and metals (aluminium, stainless steel, others)
	Packaging Condition	Empty or filled
	Packaging Weight	Basic version: Up to 5 kg - Extended version: Up to 20 kg

	Operating Speed	< 10 cycles per minute or 600 cycles per hour
	Transport Conveyors	Conveyor belt dimensions: 1815 x 400 (mm) Low-friction belt that allows accumulation Height adjustment 1000-1300 (mm) Side guides with vertical and horizontal adjustment DC motorisation
Automation and Control	Console	SIEMENS KTP700 Basic; 7” touchscreen display
	Operating Modes	Stop Emergency Manual Pre-automatic: Performs a secure start-up verification Automatic: All operations and safety features are active Bypass: Labelling operations are disabled, allowing only conveyor movement
	Configurations and Parameterisations	Equipment status control Operating mode control I/O control Roll management and sleeve consumption monitoring (scheduled roll change) Recipe management Safety and alarm management
Electrical Characteristics	Power Supply	3 FASE 400 VAC (+/-10%); 50 Hz; 3 Phase + Neutral + Earth
	Maximum Power	2000W
	Standards	EN 60204-1:2006+A1:2009
Sound Characteristics	Noise Level	55 dB (A)
Pneumatics and Control	Control	**Centralised Control Panel Located Outside the Equipment:** • Air treatment unit • Solenoid valves with individual pressure regulators • Individual flow regulation for actuators
Safety	Equipment developed in compliance with the directive 2006/42/CE	
Adds-ons and Compatibility (Not Included)	**Equipment Add-ons** • Integrated or external sleeve buffer module for increased autonomy • Automatic roll change and splicing module • RFID tag reading system for identifying or confirming the current set-up of the matrix or separation **Add-ons for Inline Integration** • Quality control line AGIX | AG55-LQC50 • Conveyor belts AGIX | TTAG • Custom-developed AGIX modules for packaging turners and line selectors • Custom-developed AGIX modules for rejecting non-conforming packaging	

Notes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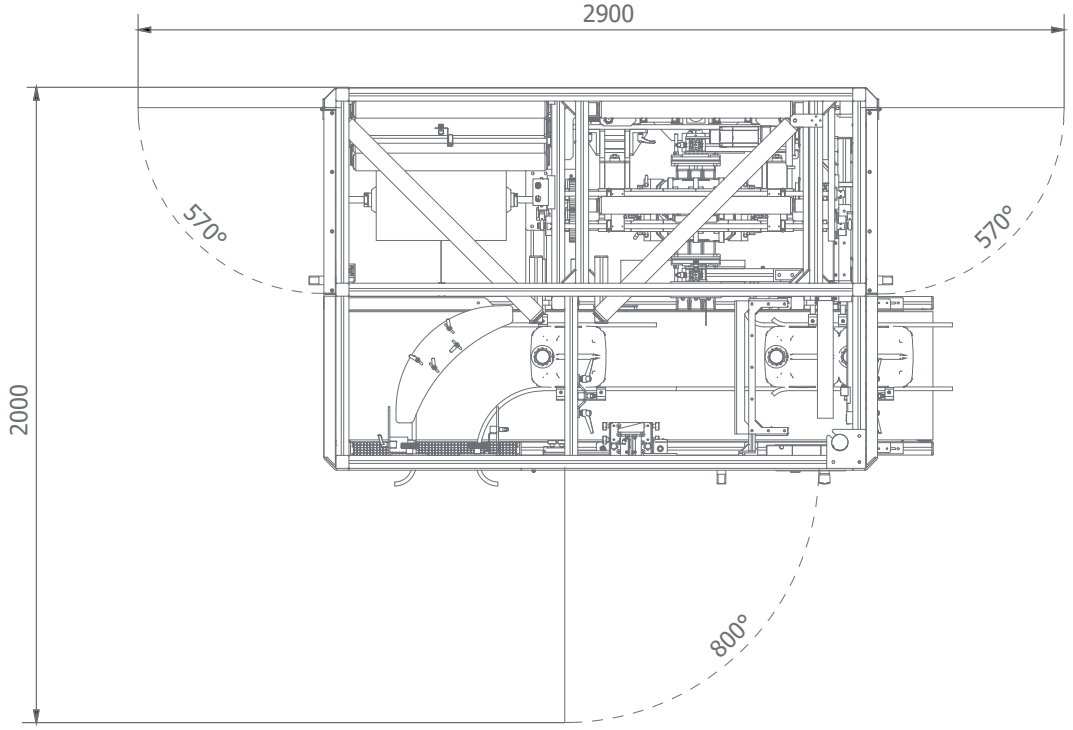
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