

Gerätebeschreibung

● Bestimmungsgemäße Verwendung

Ihre Etikettiermaschine ist eine vollautomatische Maschine, die Selbstklebeetiketten auf Produkte klebt. Jegliche andere Verwendung gilt als nicht bestimmungsgemäss und ist ein Missbrauch. Die Etikettiermaschine darf nur in der Industrie, in Gewerbe- und Geschäftsbereichen sowie in Kleinbetrieben verwendet werden.

● Maschinenaufbau

Die Etikettiermaschine besteht aus folgenden Baugruppen:

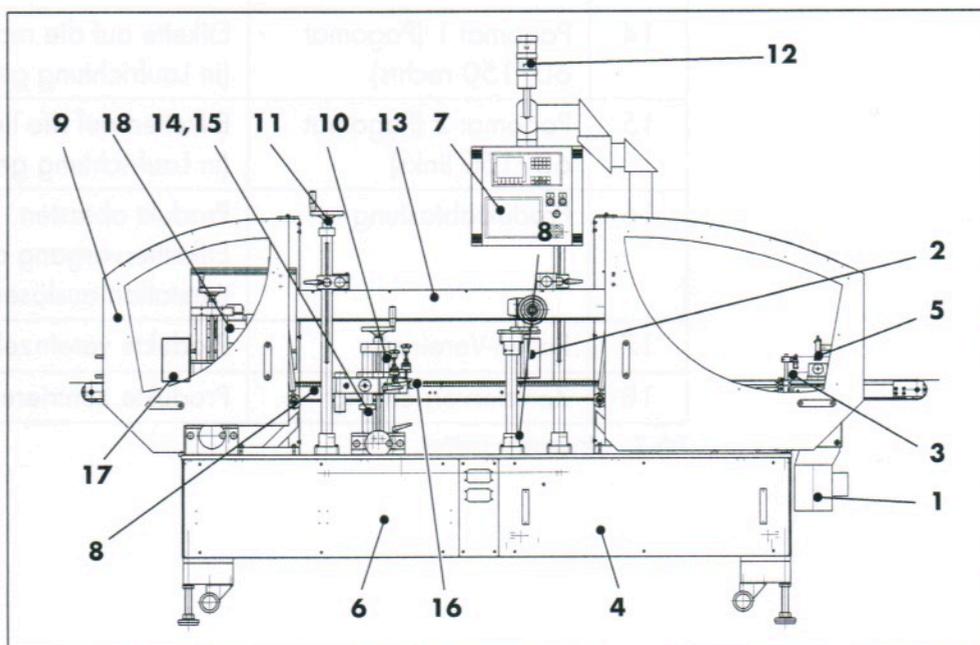


Fig. 1 Maschinenaufbau Etikettiermaschine

Die Baugruppen haben folgende Funktionen:

Pos.	Baugruppe	Funktion
1	Antrieb Förderband	Förderband antreiben.
2	Andrückvorrichtung	Etikette auf das Produkt drücken.
3	Auswerfvorrichtung	Fehlerhaft etikettiertes Produkt auswerfen.
4	Einschub	Etikettiermaschine steuern.
5	Farbmarkenleser	Anwesenheit der Etikette auf dem Produkt prüfen.

Pos.	Baugruppe	Funktion
6	6AC/6HS-Steuerung	Bedienung der Pagomaten 1+2 sicherstellen.
7	Bedienkasten	Etikettiermaschine bedienen.
8	Förderband	Produkte transportieren.
9	Haube	Produktentnahme verunmöglichen.
10	Höhen-Seitenverstellung mit Neigungsverstellung	Pagomat positionieren.
11	Höhenverstellung	Oberes Halteband positionieren.
12	Meldeleuchte	Betriebszustand anzeigen.
13	Oberes Halteband	Produkte auf dem Förderband fixieren.
14	Pagomat 1 (Pagomat 6D/150 rechts)	Etikette auf die rechte Seite des Produkts (in Laufrichtung gesehen) spenden.
15	Pagomat 2 (Pagomat 6D/150 links)	Etiketten auf die linke Seite des Produkts (in Laufrichtung gesehen) spenden.
16	Produktabtastung	Produkt abtasten. Etikettiervorgang der betroffenen Etikettierstation auslösen.
17	Rollen-Vereinzzler	Produkte vereinzeln.
18	Zentriervorrichtung	Produkte zentrieren.

Tab. 2 Baugruppen-Funktion

Pos.	Baugruppe	Funktion
1	Ärmer Förderband	Förderband anhalten
2	Ärmer Vorrichtung	Etikette auf das Produkt drücken
3	Auswerfvorrichtung	Fehlend etikettiertes Produkt auswerfen
4	Einrichtung	Etikettiermaschine steuern
5	Fachkennzeichner	Auswerfen der Etikette auf das Produkt prüfen

● Funktionsablauf bei ovalen Produkten

- 1 Das Förderband transportiert das Produkt zum Rollen-Vereinzelner.
- 2 Dieser lässt die Produkte in einem bestimmten Abstand passieren.
- 3 Die Zentriervorrichtung zentriert das Produkt auf dem Förderband.
- 4 Mit dem oberen Halteband wird das Produkt fest gehalten, so dass es sich beim Etikettieren nicht bewegt.
- 5 Die Produktabtastung tastet ein Produkt ab, und Beide Pagomaten spenden je eine Etiketle an die rechte und auf die linke Seite des Produktes.
- 6 Die Andrückvorrichtung drückt die Etiketten an das Produkt.
- 7 Die Lichtschranke 30B2 öffnet das Lesetor des Farbmarkenlesers.
- 8 Die Farbmarkenleser 30B7 hinten und 30B5 vorne kontrollieren die Anwesenheit der Etiketle auf dem Produkt.
- 9 Kann einer oder beide Farbmarkenleser keine Farbmarke auf der Etiketle erfassen, gibt die Lichtschranke 34B2 das Signal zur Betätigung des pneumatischen Auswerfers.
- 10 Die Lichtschranke 30B4 kontrolliert, ob das Produkt tatsächlich ausgeworfen wurde. Beim Nichterfassen des Auswurfes wird die Etikettiermaschine gestoppt.
- 11 Gut etikettierte Produkte werden dem nächsten Förderband übergeben.
- 12 Die Staulichtschranke 17B4 meldet gegebenenfalls einen Stau beim Auslauf.
Darauf folgt:
 - der Rollen-Vereinzelner wird gestoppt, damit keine weitere Produkte in die Etikettiermaschine gelangen.
 - die Grüne Meldeleuchte fängt an zu blinken und
 - die Meldung "Stau beim Auslauf" erscheint auf der Bedieneinheit.

● Technische Daten

Allgemein

Eigenschaften	Werte
Länge	3200 mm
Breite	2270 mm
Höhe	2240 mm
Gewicht	785 kg
Max. Leistung	130 Produkte/min.
Geschwindigkeit des Förderbandes	13 bis 30 m/min.

Tab. 3 Eigenschaften Etikettiermaschine

Anschlusswerte Elektrik

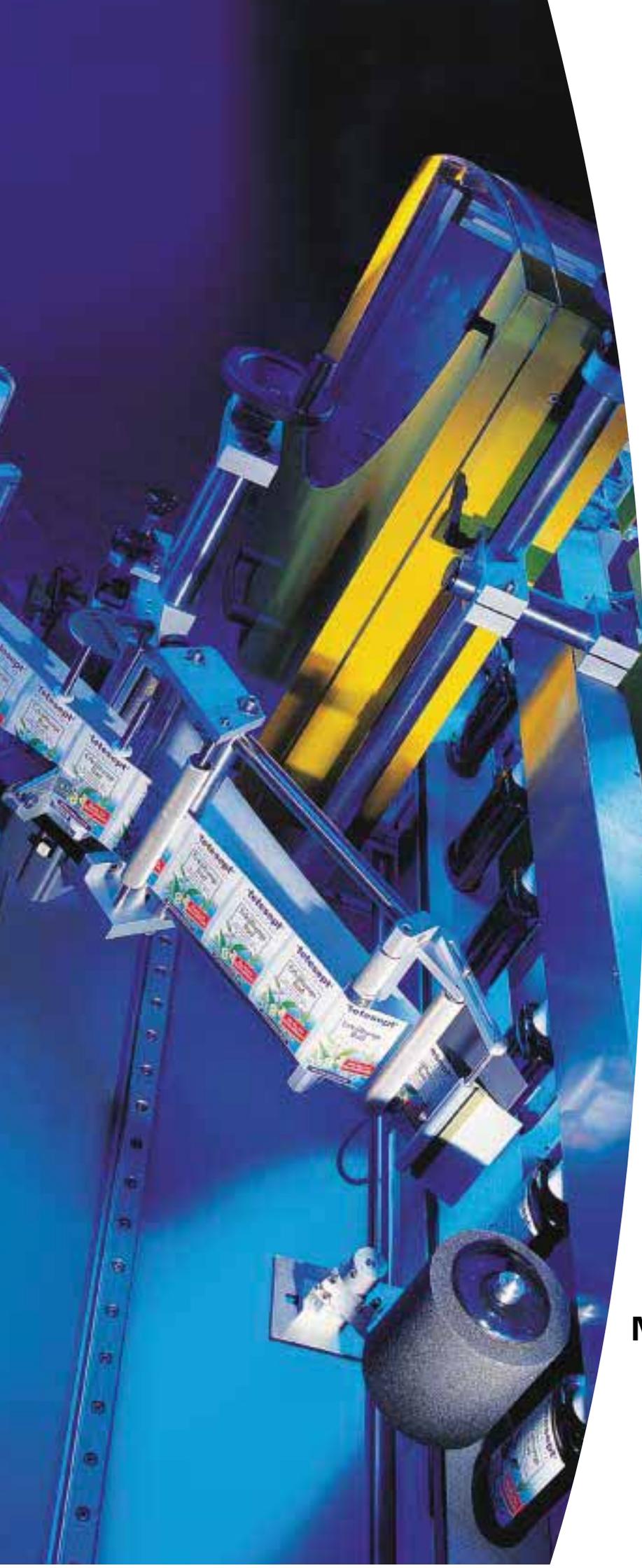
Eigenschaften	Werte
Netzwerke	3 x 400 VAC, 50...60 Hz
Netzeingangs-Sicherung	10 AT einstellbar
Leistungsaufnahme	2,2 kVA

Tab. 4 Anschlusswerte Elektrik

Anschlusswerte Druckluft

Eigenschaften	Werte
Betriebsdruck	5 bar
Druckluftanschluss	6 bar
Druckluft	ölfrei
Stecknippelanschluss für Druckluftschlauch	8 mm x 1 mm (d _{innen} = 6 mm) (evt.)

Tab. 5 Anschlusswerte Druckluft



**Maximum flexibility for
product presentation**

PAGO System 520

Decorative labelling expertise

PAGO System 520



For years now, Pago has been successfully developing new products and building up the essential expertise that facilitates versatile and quick response to customer requirements.

Furthermore, we are committed to using our expertise and development potential to continue creating innovative systems for the current and future requirements of the label market.

New market conditions call for forward looking technology

In a rapidly changing market and in view of ever-faster product cycles, now is the time to be flexible towards current market developments and to forge ahead with new, customised concepts in marketing and packaging.

With its modular construction, our new in-line labelling system 520 guarantees the highest level of flexibility and offers a multitude of possible combinations – aimed at fulfilling both current and future market requirements.

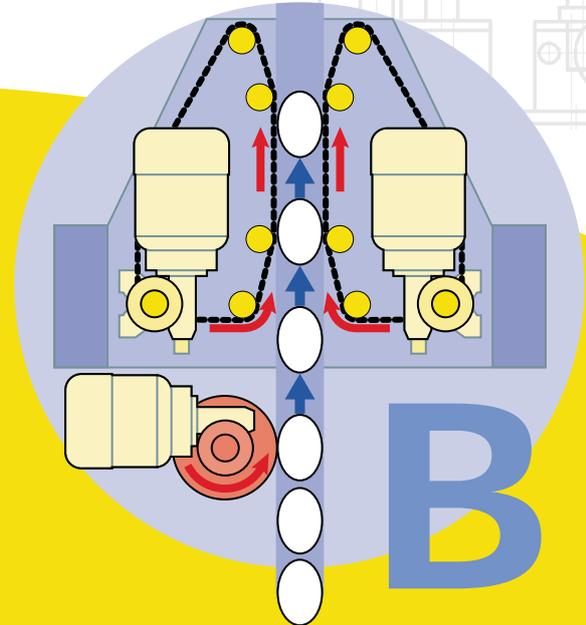
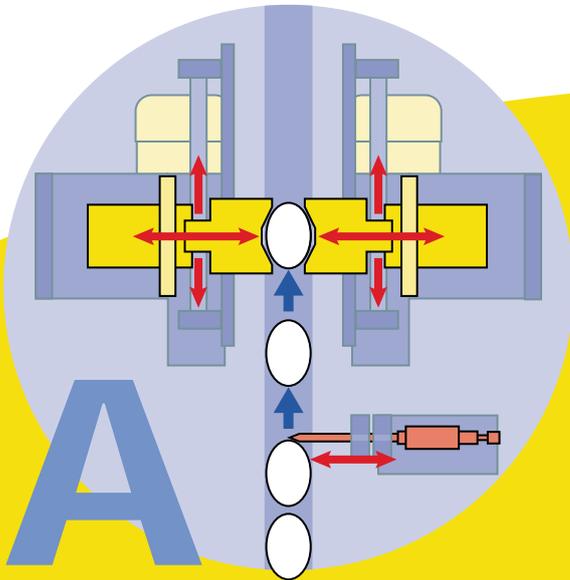
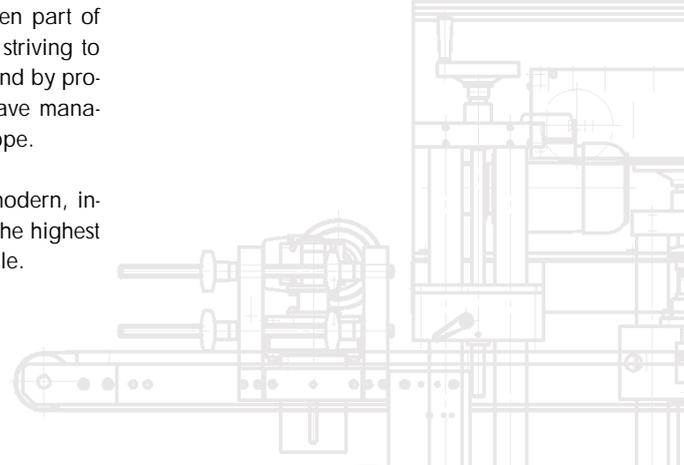


More and more customers are relying on PAGO in-line systems

Success awaits you with the new 520 concept

Development and manufacture of in-line labelling systems has always been part of our core business. By constantly striving to make good systems even better and by progressing innovative ideas, we have managed to set new standards in Europe.

The result is our new range of modern, in-line systems capable of meeting the highest demands on an international scale.



Electro-pneumatic product alignment station

Product separator

- electro-pneumatic
- coupled with the alignment station

Product alignment

- aligns both sides of the product
- linear stroke with dedicated drive (synchronised with the conveyor belt and top hold)
- electro-pneumatic centring device

Product centring and alignment is performed along the longitudinal axis.

Even the most awkwardly shaped products can be precisely aligned. The only change parts required are the holding jaws and these can be quickly and easily interchanged.

Features of the 520 A, 520 B and 520 C models

PRODUCT ALIGNMENT prior to being transferred to the top hold is essential for labelling precision when dealing with moulded bottles, bottles with handles, oval containers and other awkwardly shaped packaging.

Types A, B and C have different task-specific modules.

This is how we are able to arrive at custom-built, performance-oriented and product-specific systems for our present range of applications.

Chain alignment

Product separator

- (roller separator)
- driven rollers
- distance between products is adjustable

Product alignment

(chain centring device)

- quick and cost-effective changeover from one product to another

Products are handled carefully and alignment is performed continuously.

There are no change parts required for the chain alignment unit in system B.

Ergonomic operation

Processes supported by technology

When developing the 520 range, we used modern control concepts with the aim of making operation of the entire installation uncomplicated and easy to understand.

Drive technology

Based on our practical experience with versatile designs and modular systems, we managed to develop a new drive concept.

- The entire installation is adjustable.
- All individual drives are synchronised and high labelling accuracy is guaranteed by precise synchronisation.

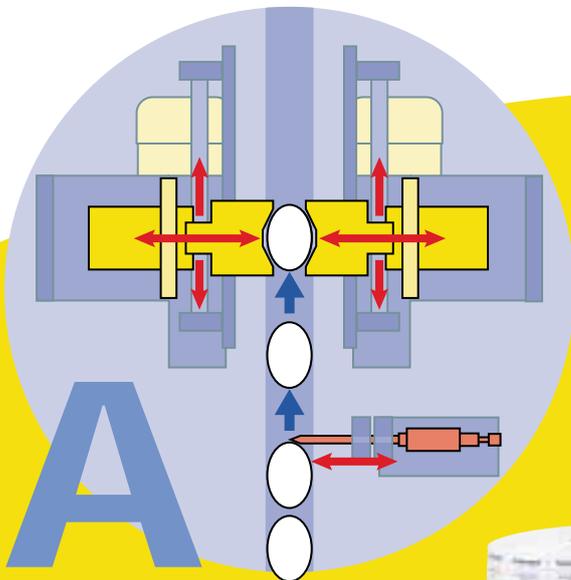
- The automatic speed regulation on Pagomat labelling units ensures that the labelling position remains constant and exact, even when the speed is adjusted.

Capacity for reproducing jobs

The Pagomat controls allow important product parameters to be stored, including

- dispensing speed
- labelling position
- label lengths, pre-dispensing, etc.

Depending on the drive type, data for 9 products or for up to 100 products can be input, stored and retrieved.



PAGO System 520 A

A new layout and appearance has been created for all the models in the 520 range of labelling systems.

The design was developed from an ergonomic viewpoint and ensures optimum access to unit parts without jeopardising essential protective functions.

The earlier version of the System 520 A was our most popular decorative labelling system.

The application versatility, the variety of possible combinations and various presentation options offered by this system will be very difficult to surpass.

In the performance class of up to 80 bottles per minute, type A is an excellent choice for a wide range of applications.



Unit lengths:	
Type 520 A:	2700 mm
Type 520 AL:	3200 mm

The picture shows the extended version of model 520 (the 520 AL) with Vario-slide and additional wraparound labelling unit.

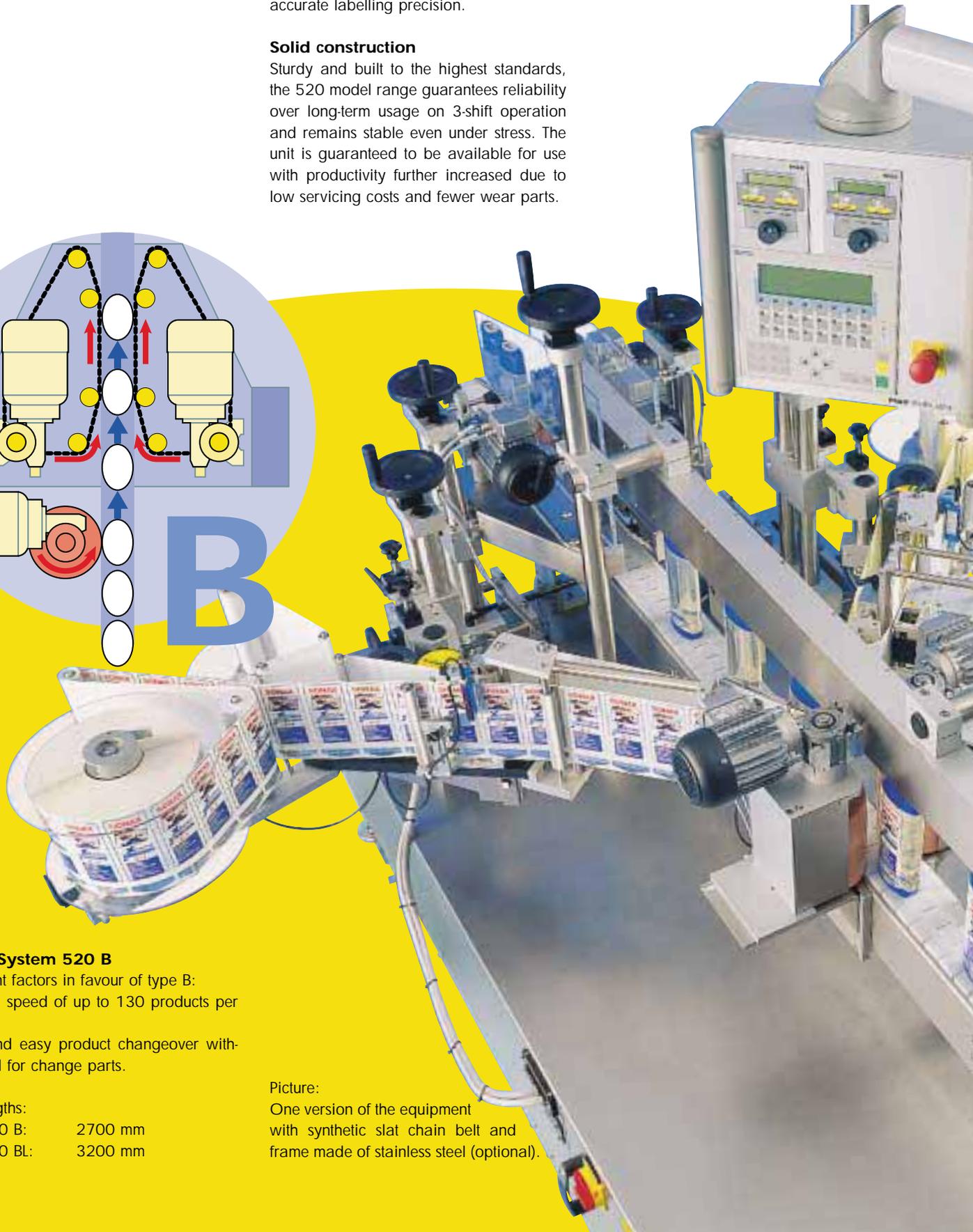
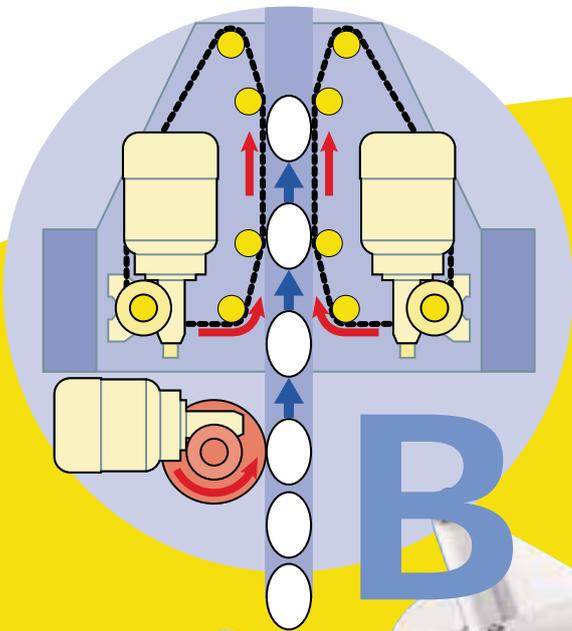
Perfection down to the finest detail

Functionality and reliability

Our experience in the manufacture of high performance, reliable labelling units is reflected in the detail of our designs – each of our precision-engineered units guarantees optimum operational reliability and accurate labelling precision.

Solid construction

Sturdy and built to the highest standards, the 520 model range guarantees reliability over long-term usage on 3-shift operation and remains stable even under stress. The unit is guaranteed to be available for use with productivity further increased due to low servicing costs and fewer wear parts.



PAGO System 520 B

Important factors in favour of type B:

- labelling speed of up to 130 products per minute
- quick and easy product changeover without need for change parts.

Unit lengths:

Type 520 B:	2700 mm
Type 520 BL:	3200 mm

Picture:

One version of the equipment with synthetic slat chain belt and frame made of stainless steel (optional).

Success guaranteed with the PAGOMat 6



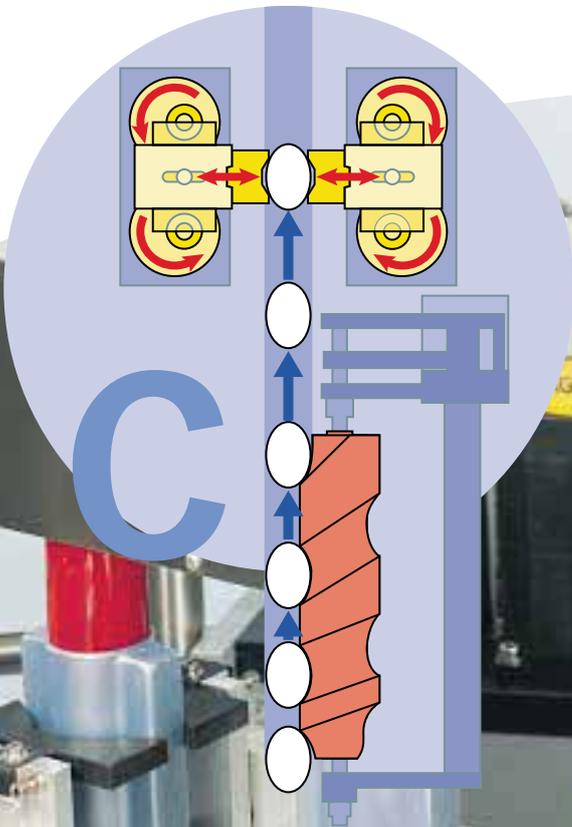
The heart of all 520 labelling systems is the series 6 Pagomat labelling unit.

Continuous development and planned integration of new technologies keeps the Pagomat labelling unit a leader in the future of label technology.

There is a suitable Pagomat unit available for all applications and requirements.

6-series Pagomats are equipped with a high-performance stepper motor for

- very high labelling precision
- minimal servicing and few wear parts
- dispensing speeds of up to 75 m/min. (depending on label width and dispenser type).



PAGO System 520 C

Type C has a fast labelling speed of up to 250 bottles per minute. This speed, and a consistently high production quality make the 520 C system amongst the very best of in-line systems.

Furthermore, type C is ideally suited to the application of decorative labels on awkwardly shaped products, which usually demand special, often product-specific units for labelling.



Maximum labelling flexibility

Vario-slides

Standard front and back labelling is not always the only requirement for product presentation, often, additional labels are applied and round bottles, and cans have wraparound labels.

However, with sophisticated engineering concepts embodied in the extended L version, these tasks pose no problems. Indeed, there are few decorative tasks left that cannot be successfully realised using this version of the system 520.

Factors affecting the development of the European range

Whilst designing extension modules and various pieces of equipment for the 520 models, we considered the benefits of standardisation in Europe for our international customers.

Virtually limitless flexibility

The extended versions, i.e. the 520 AL, 520 BL and the 520 CL, are only 500 mm longer than the standard models.

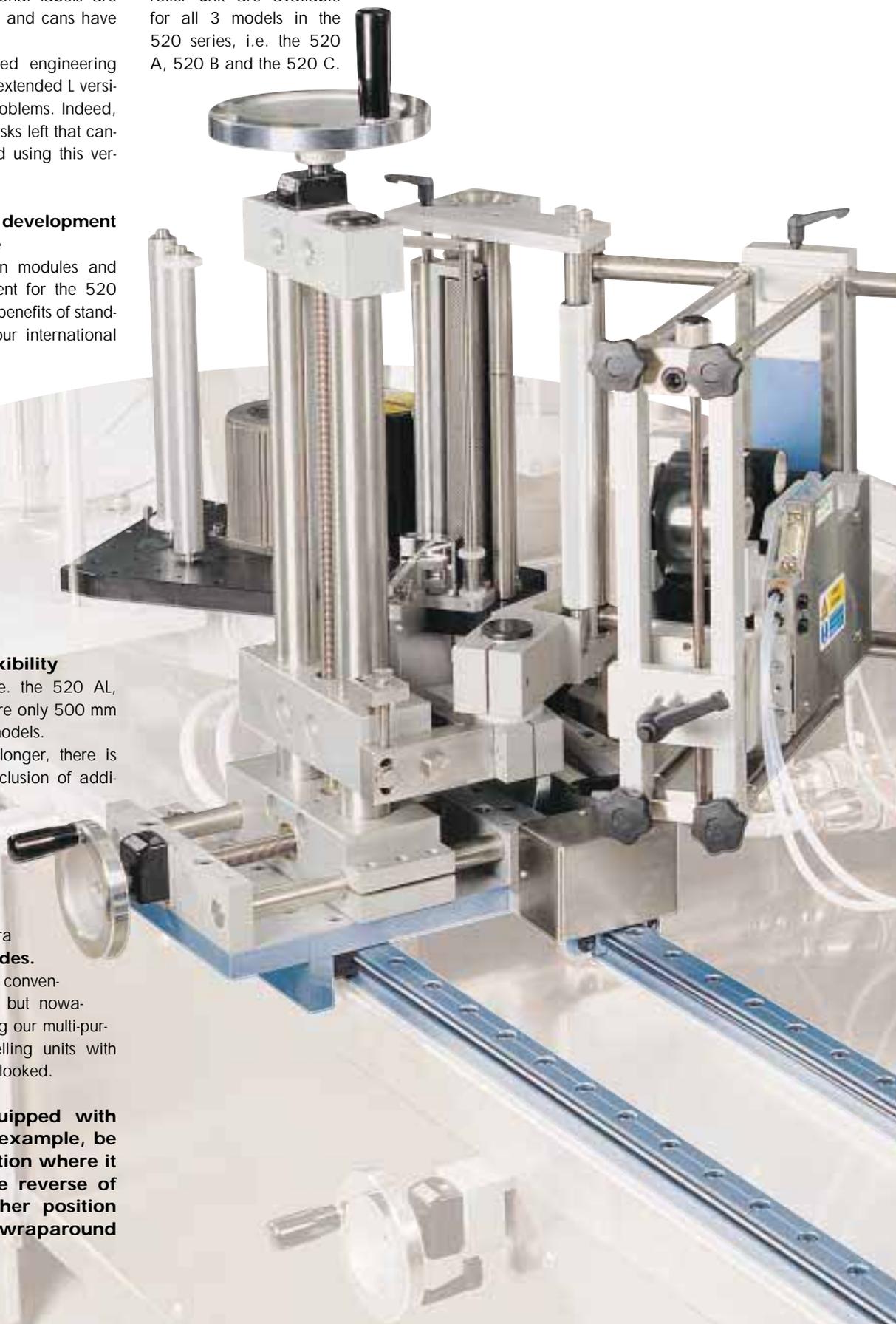
Since these versions are longer, there is space available for the inclusion of additional function modules or further Pagomat labelling units for applying extra labels or tamper evident labels, etc.

More often than not the extra space is used for **vario-slides**.

The vario-slide began as a conventional Pago development, but nowadays the value of equipping our multi-purpose, highly flexible labelling units with vario-slides cannot be overlooked.

A labelling unit equipped with vario-slides can, for example, be moved from the position where it applies labels on the reverse of the product to another position where it performs wraparound labelling.

The extended L versions, the variable size slides, the wrap around belt and the three roller unit are available for all 3 models in the 520 series, i.e. the 520 A, 520 B and the 520 C.



Labelling without limits

Options and special solutions

The modular design of our systems makes it possible to equip labelling units with additional function and extension modules, custom-built for your special requirements.

Indeed, the basic design was created with this in mind and so even the standard models provide a perfect, cost-effective solution for non-standard, special labelling tasks.

The advantage:
As far as possible we use tried and tested system components and extend these with project specific modules in order to produce customer specific solutions.

Eccentric pressure station

When dealing with certain product shapes and special labelling materials, it is often necessary to apply additional pressure to ensure the labels are firmly adhered. There are various additional modules available to perform this task.

For example on the System 520 C:
The eccentric running pressure station (picture on the right) with product specific pressure clamps. This unit is controlled by an intermediate gearbox on the central drive (synchronised with the worm screw product separator and alignment station).





Pago stands for the highest quality in advanced labelling technology and system know-how in all areas of decorative labelling with self-adhesive labels. Our activities span the range in product presentation – ask for further details.

The services we provide extend far beyond the manufacture of labelling units and labels as we are also highly competent in:

- consultation facilities
- engineering services
- individual, customised solutions
- unit commissioning and staff training
- practical documentation and operating instructions
- guarantees and prompt service with regard to replacement parts
- reliable service work carried out by qualified and experienced service technicians
- optional remote maintenance and unit control

Trust our competence

Pago Systems fulfil EU guidelines
 Pago is DIN EN ISO 9001 certified
 You can rely on our service.



Pago AG • Labels • Labelling systems • Industrie • CH-9472 Grabs SG
 Tel. +41 (0)81 772 35 11 • Fax +41 (0)81 772 36 55
 Postal address: Postfach • CH-9471 Buchs SG 1
 admin@pago.ch • www.pago.com • www.pago.ch

Pago Ltd. • Labels • Labelling systems
 Centenary House • Gilberd Court • Severalls Industrial Park • GB-Colchester, Essex CO4 9WN
 Tel. 01 206 75 52 06 • Fax 01 206 75 52 10 • sales@pago.co.uk • www.pago.co.uk