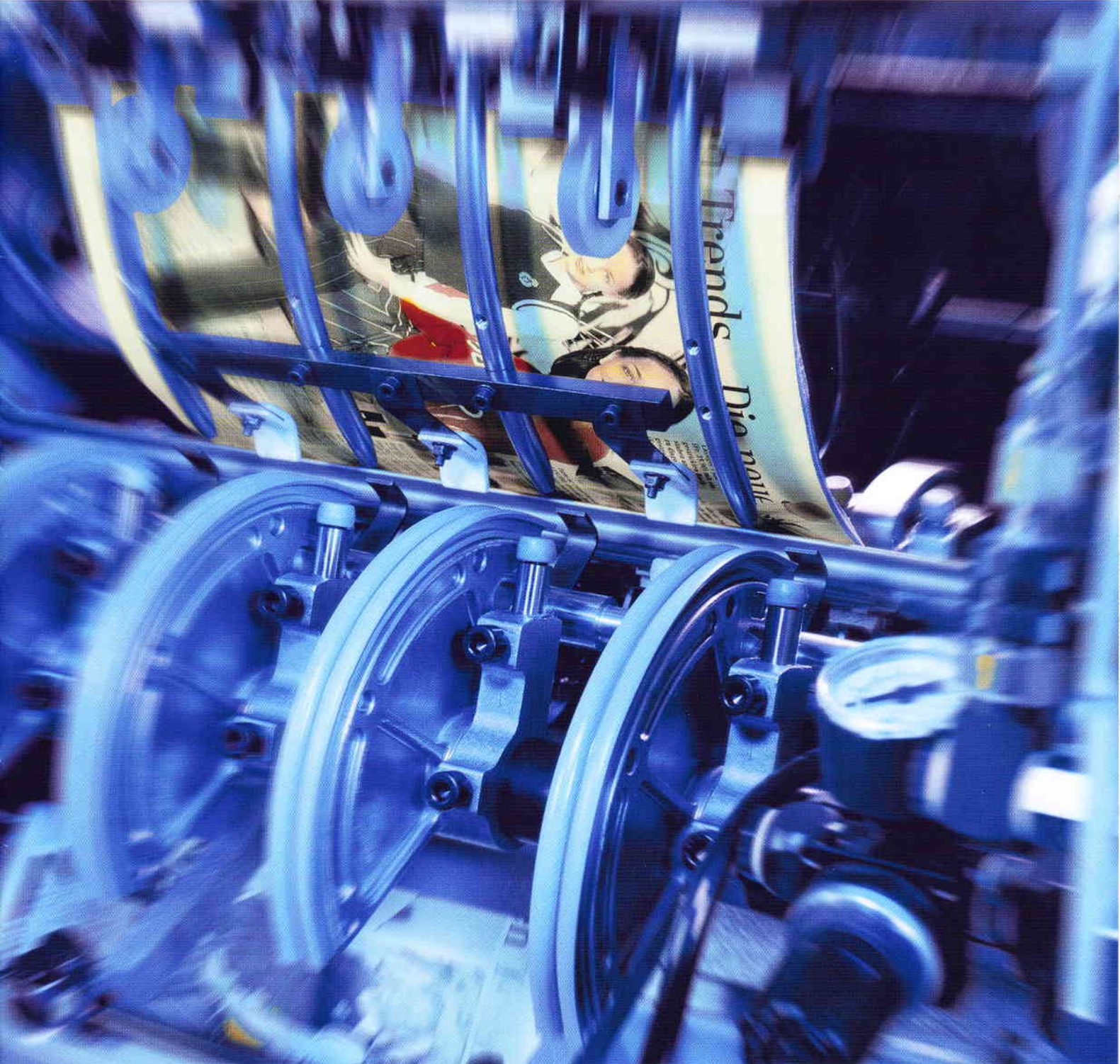


BravoPlus Saddle Stitcher

The Most Successful Saddle Stitcher
in Its Performance Class



Saddle Stitching and More BravoPlus

The BravoPlus is the most successful saddle stitcher in Muller Martini's product line. BravoPlus features a degree of automation that is unique in its performance class.

AMRYS (Automatic Make-Ready System) allows to respond flexibly and quickly to changing job formats. Set-up times are shortened by up to 50 percent. The BravoPlus saddle stitcher is also available with partial AMRYS.

BravoPlus further proves its flexibility with a comprehensive line of available feeders and automatic loading options. Individualized system expansion also provides capabilities for inserting, compensated stacking and die-cutting.

The easy-to-manage and compact design, along with intelligent control system, help make it simple for the machine operator to monitor running production. What's more, easy-to-understand displays on the touchscreen and a large text display deliver continually updated production data.

Thanks to extensive quality controls, the BravoPlus produces complete and impeccably stitched products with minimal waste.

The great versatility of the BravoPlus stitcher enables bookbinders to meet a multitude of widely-varying product demands, cost-effectively and on-time.



The Advantages of the BravoPlus:

- ▶ Very easy to operate
- ▶ Secure and fast make-ready
- ▶ High net output
- ▶ Extensive quality controls
- ▶ Variable loading for all signature types
- ▶ Incomparable, robust construction
- ▶ JDF/JMF capable according to the CIP4 production standard
- ▶ Highest degree of automation in its class
- ▶ Flexible layout design and expansion options

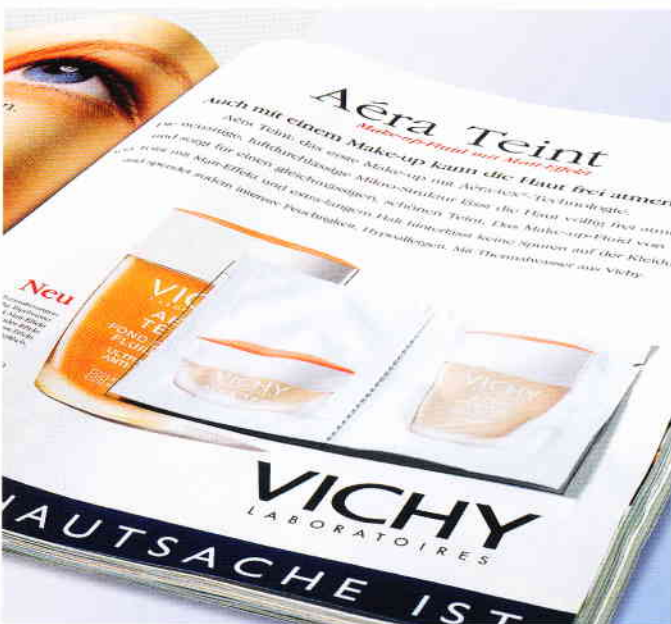
Exclusive Products with High Added Value



Gluing-in DVDs and CDs



Application of wrap-around covers and personalization



Gluing-in of demanding inserts and product samples



Special eyelet stitching

BravoPlus Saddle Stitcher

Thoroughly Modular Providing Application Flexibility



11
Perfitto compensating stacker for perfect stack formation, even in double and three-up production



10
Three-knife trimmer for single, double and three-up productions as well as for various hole punching



9
Stitching unit for standard, eyelet or child-safe stitching



8
Large-scale display for fast recognition of current production information



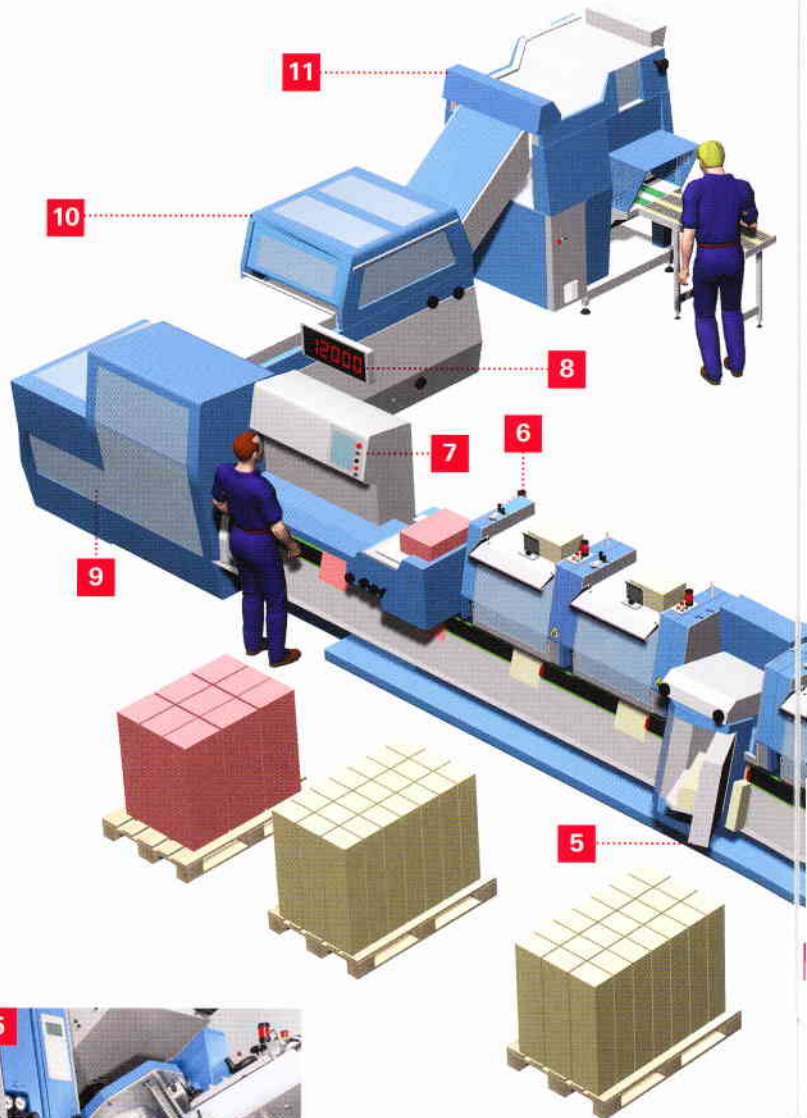
7
Touchscreen operation for optimal production control and monitoring

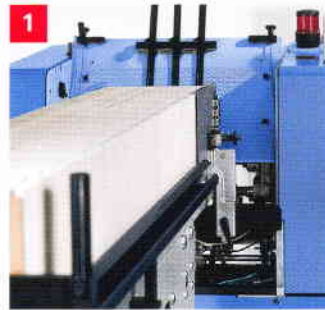


6
Cover/card folder feeder for folding single-sheet covers and cards



5
Sample gluer for tip-on product samples, cards, small brochures, CD-ROMs and Post-it® notes

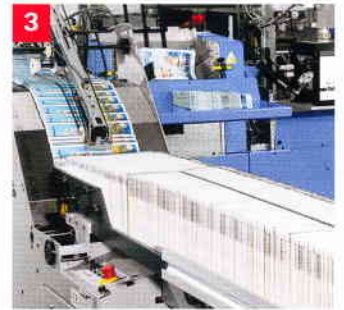




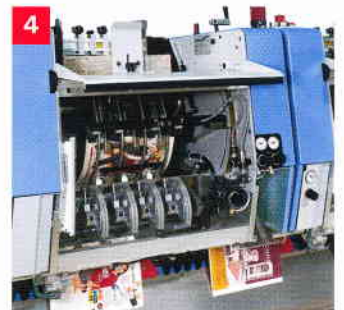
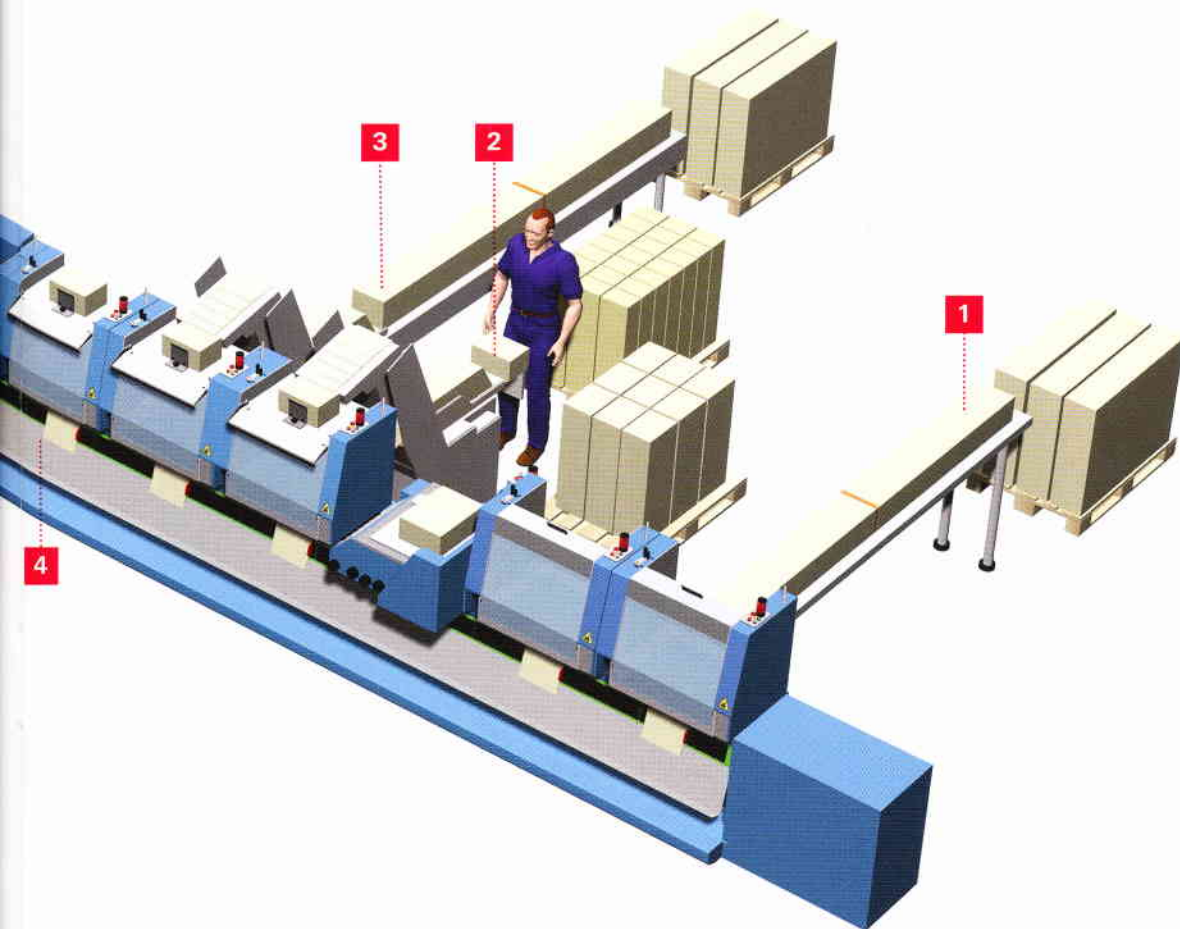
1
Vertical Pile Feeder with bundle extension



2
Streamfeeder loading without bundle extensions on flat pile feeder



3
Streamfeeder loading with bundle extensions on flat pile feeder



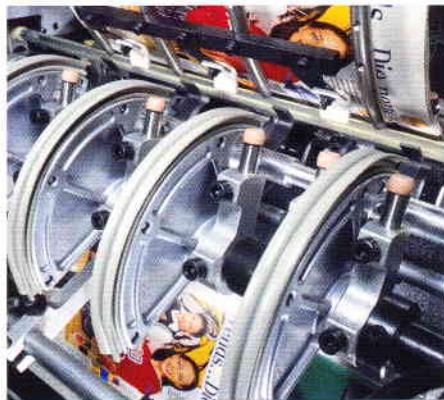
4
Flat pile feeder for manual or automatic feeding of signatures

Saddle Stitching and More

Variable Loading, Flexible Configurations

BravoPlus offers a wide range of feeders that can efficiently solve a variety of even the most difficult production demands.

All feeders are mounted on a solid, universal subbase and can be arranged in any desired sequence as well as repositioned in the shortest possible time.



Flat Pile Feeder

- ▶ For all signature opening types with high, low or no lap
- ▶ Fast changeover to all signature opening types
- ▶ In tilt back version as option
- ▶ Bundle feeding via Streamfeeder
- ▶ Easily accessible with good process visibility from the front

Individually Adjustable Feeder Timing

The synchronization between the feeder and the gathering chain can be adjusted by motor via a rocker switch on the feeder. This allows the timing of the signature drop to be optimized during production without stopping, as in the case of heavy or very light signatures.



Vertical Pile Feeder

- ▶ For all signature opening types with high, low or no lap
- ▶ Especially for the processing of heavy signatures with high page count
- ▶ Automatic bundle feeding directly on the feeder



Tilt back Feeder

If the feeder in the tilt back version is used, special or creative signatures – such as those that are die-cut – can be loaded manually.



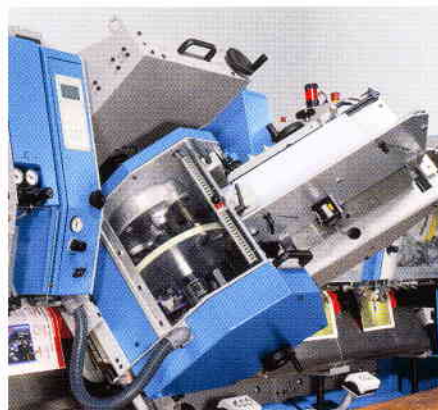
Cover and Card Folder Feeder

- ▶ For single-sheets such as covers, cover wraps or cards
- ▶ Scoring, folding and feeding in a single pass
- ▶ All adjustments can be made during production
- ▶ Usable at every feeder position



Loading via Streamfeeder

- ▶ Changeover in minutes from manual loading to automatic bundle feeding
- ▶ Cost-effective compact solution with two available bundle feeding lengths



Product and Card Gluer

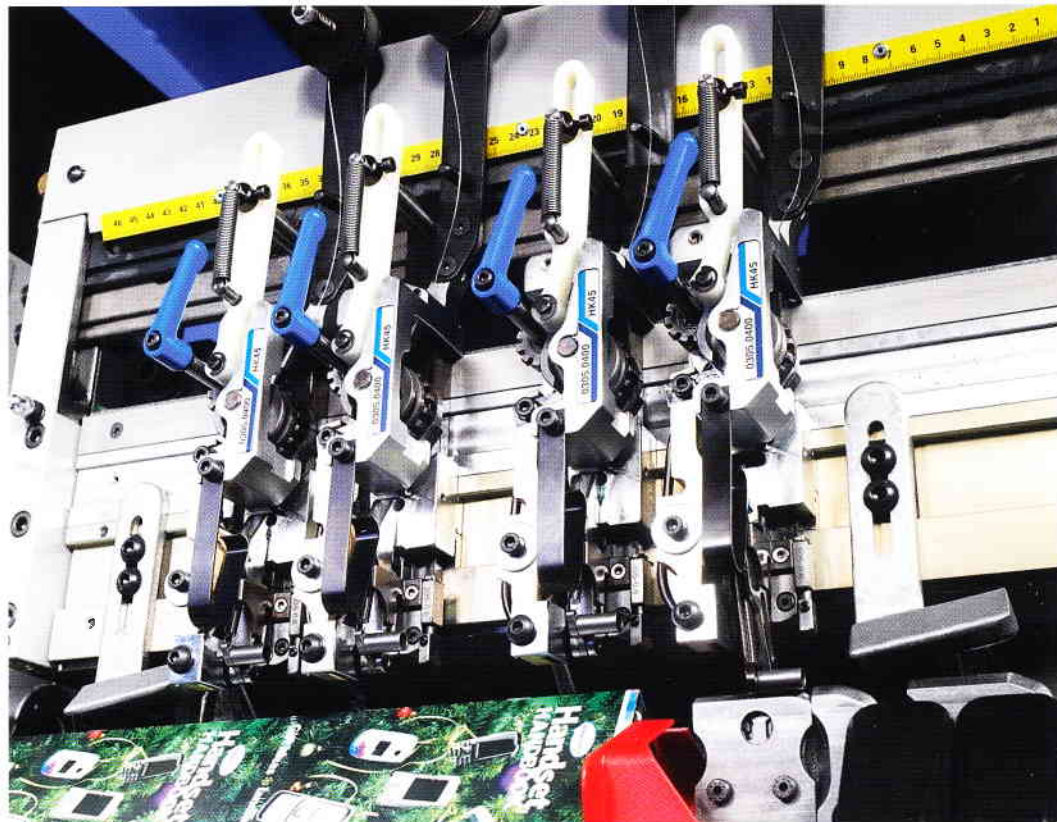
- ▶ For efficient tip-on of the widest variety of product samples, cards, CD-ROMs, Post-it notes or small brochures, spine-to-spine
- ▶ Large hopper for comfortable loading intervals

Precise Stitching

Advanced Technology for High Processing Reliability



Muller Martini's advanced, original "flying stitching heads" technology ensures high processing reliability. The system without stop-and-go was further improved and achieves high-consistency stitching with little wear and an efficient production flow. Solid, durable construction ensures secure and consistent stitching quality – even in continuous operation with multiple shifts.



Stitching Machine

- ▶ Robust, moving stitcher carriage and continuous double gathering chain
- ▶ Stitching is triggered electro-pneumatically, via the PLC control
- ▶ Motorized adjustment of chain position to the stitching unit via a toggle switch – or automatically in the case of the AMRYS version
- ▶ Large selection of staple types for standard, narrow and wide stitching, as well as eyelets and special child-friendly Lego stitching
- ▶ Good accessibility to the stitching assembly thanks to large sliding doors

"Flying Stitching Heads"

The stitching heads, running synchronized to the machine cycle, create an efficient production flow with gentle stitching and high net output. There is no stop-and-go movement of the products during the stitching process.



The good accessibility, due to fold-out doors, and the precise scales positioned ergonomically allow for quick and easy set-up of the stitching heads and clincher.

Precise Trimming

Many Refinements for Perfect Product Quality

The integrated three-knife trimmer in the BravoPlus assures exceptional trimming results and long knife life. The trimmer is easy to adjust, has short set-up times and cuts in a proven sequence (front trim/head-foot trim). Products are handled with the utmost care. Center cut, trio cut and hole punching deliver extraordinary production flexibility. The robust cast frame ensures uniform quality for years, even when running at maximum thickness capacity.



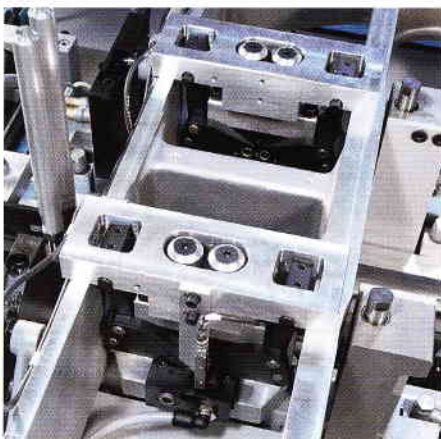
Three-Knife Trimmer

- ▶ Automatic alignment of products
- ▶ New, mechanical side alignment for the highest trimming accuracy
- ▶ Robust and wide knife guides for exceptional trim quality
- ▶ Low wear and less marking transport system
- ▶ Service-friendly safety guards



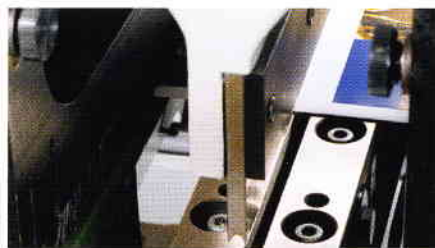
Added Value with Trimming

- ▶ Inserting of center cut knives or hole punching equipment
- ▶ Increased flexibility in production
- ▶ Installation and removal in less than 10 minutes



Pneumatic Knife Clamping

The knives can be adjusted quickly and easily, without tools. If the BravoPlus is equipped with AMRYS, the sizes are set fully automatically.



Center Cut, Trio Cut, Hole Punching

- ▶ Splitting of stitched products with punch or split cut into two or three end products
- ▶ Efficient production of manuals, CD booklets, coupon booklets and checkbooks
- ▶ With hole punching equipment, single, double, triple or quadruple punches are possible during the cutting process.

Customized Finishing Cleanly Trimmed and Stacked Products

The post trimmer automation on the BravoPlus is also designed for individual applications. Depending on job structure, final processing can be completed easily manually or automatically.



Shingle Delivery on Three-Knife Trimmer

The moveable shingle delivery, with automatic gap compensation and shingle stream separation after a desired number of copies, accepts products directly behind the three-knife trimmer.



Perfetto Compensating Stacker

The cost-effective and very sturdy Perfetto compensating stacker is designed for saddle stitchers in the mid-performance range. Perfetto forms perfect packages in single, double and three-up production. Sizes and package structure can be easily entered, and quickly adjusted, on the compensating stacker or centrally on the saddle stitcher's touchscreen. For added production flexibility, the compensating stacker is also available in a mobile version.



Stacker Deliveries

The deliveries can be attached to the right or left. Both roller delivery and belt delivery with air table are possible.

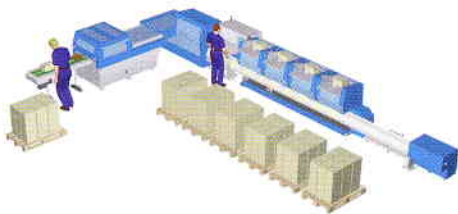


Trio Cut Products

With the Perfetto compensating stacker, products trimmed in three-up can also be stacked.

BravoPlus Saddle Stitcher Successful and Flexible

The proven BravoPlus saddle stitcher has not only achieved a high level of success based on its well-known sturdy construction, simple operation, short set-up times and first-rate production results.



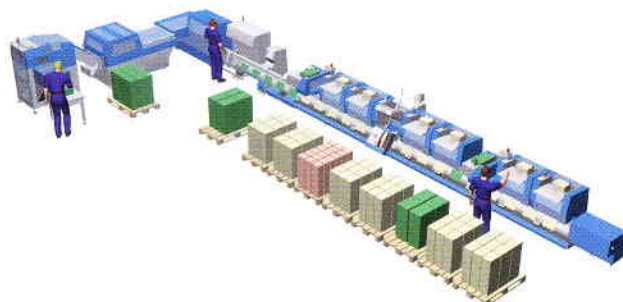
BravoPlus with Simple Manual Loading

Four flat pile feeders, two hand feed stations, three-knife trimmer after stitcher (configurable to front or rear), one shingle stream delivery



BravoPlus Inline with Die-Cutter

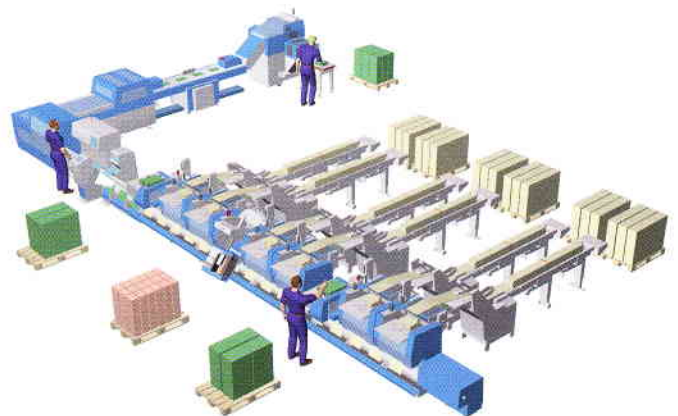
Four flat pile feeders, two hand feed stations, one die-cutter with shingle delivery, extensive quality checks (Asir 3 for barcode and image recognition, for example)



BravoPlus with Basic Manual Loading

- Two folder feeders, six flat pile feeders, one sample gluer, a Perfetto compensating stacker with belt delivery and air table, data collection and job programming offline

Customers also value the available customized system solutions. With its extensive expansion options, the BravoPlus is unique in its performance class.



BravoPlus with Automatic Bundle Loading and Postal Route Addressing

Two folder feeders, six flat pile feeders, automatic loading with bundles or stacks via Streamfeeders, one sample gluer, one mailing base with inkjet addressing, a Perfetto compensating stacker with belt delivery and air table, outside addressing and postal route sorting, JDF/JMF link-up to company network



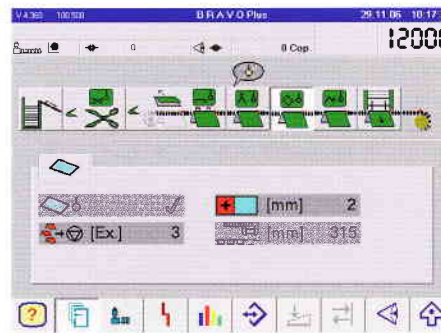
BravoPlus with Inline Packaging Solutions

Inline solutions for bundle film-wrapping. Electro-static blocking, Inserting and individual film-wrapping with Onyx Rubin, and much more

Easy to Operate, Optimal Production Reliability and Fast Make-Ready

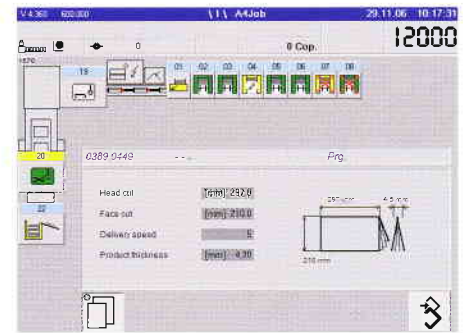
BravoPlus provides simple operation, maximized production reliability and high net output.

Set-up time can be reduced by up to 50% with AMRYS (Automatic Make-Ready System) – resulting in considerably more productivity due to the ability to change job parameters quickly and automatically.



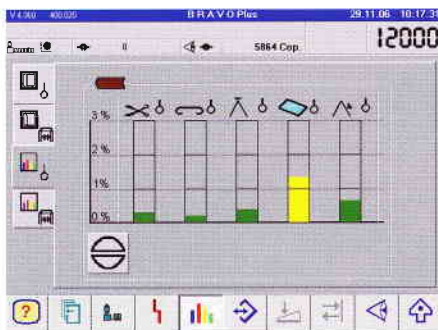
Programmable Control

- ▶ Touchscreen operation for simple production control and monitoring
- ▶ Local, menu-guided control units on every module. Prepared for connection to production data collection system
- ▶ Large-scale display of current production data for optimal monitoring of production
- ▶ Operating data capture for precise analysis and optimization during production. Data output for company evaluations
- ▶ Modem interface for remote diagnostics and software updates



Automatic Job Set-Up with AMRYS

- ▶ More productivity through shorter make-ready time
- ▶ Fast and automatic job adjustments for feeder, stitching machine, three-knife trimmer and compensating stacker
- ▶ Reduction of set-up times by up to 50%
- ▶ Cost-effective partial AMRYS for customized automation (only for feeders or only for stitching machine, three-knife trimmer and compensating stacker)
- ▶ JDF capable for link-up to MIS (Management Information System) according to CIP4 production standard



Comprehensive and Fast

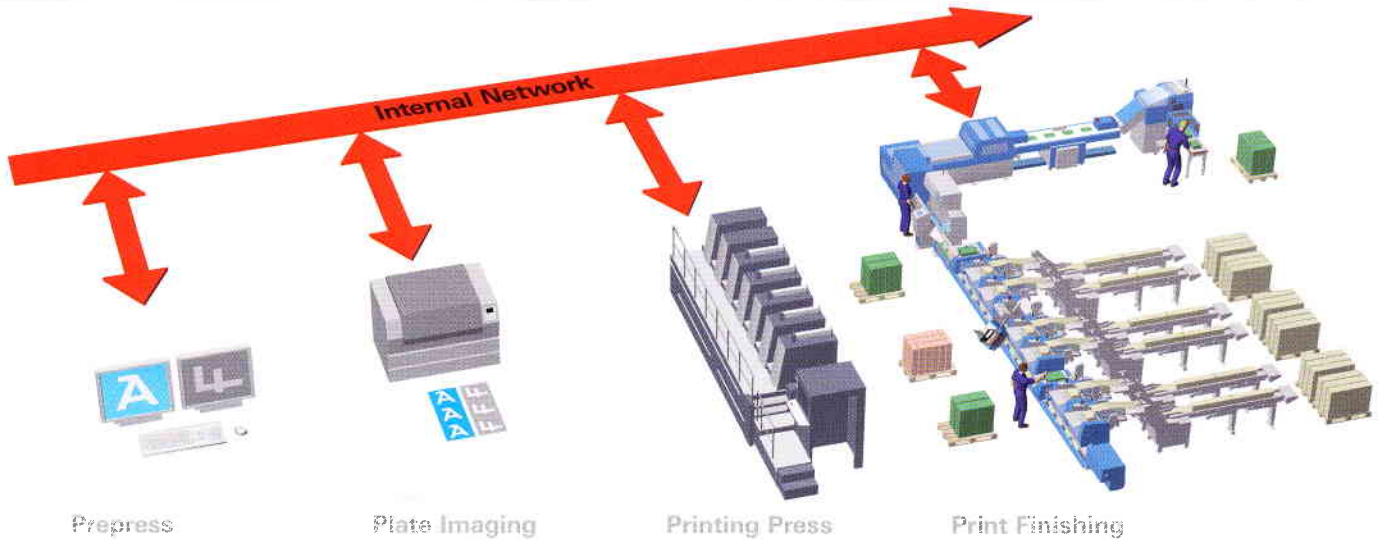
The easy-to-understand displays help the machine operator to quickly achieve high net production speed. Production can be easily and specifically optimized, ensuring perfect quality and high customer satisfaction.

Offline Programming

Even during running production, the next job can be entered directly on the machine, or conveniently from a PC workstation. The following production can be started immediately.



Networked Finishing with the BravoPlus Saddle Stitcher



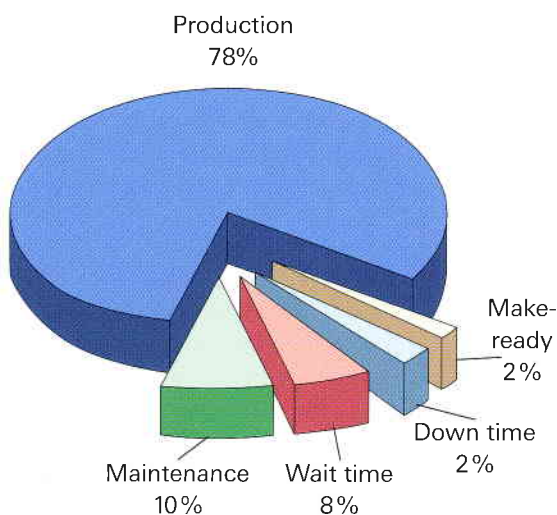
The new BravoPlus saddle stitcher is JDF/JMF-capable and can be integrated into the digital workflow. The uniform MM Port interface allows the link-up of saddle stitchers, perfect binders, press delivery systems and other Muller Martini systems. This ensures direct, reciprocal communication

between the customer's Management Information System (MIS) and print finishing. Important information such as job status, machine condition, production speed or current gross and net counts can be exchanged.

Advantages of Digital Workflow According to the CIP4 Standard

- ▶ Independent of manufacturer with JDF/JMF
- ▶ Data only has to be captured once, resulting in fewer sources for errors
- ▶ Electronic job ticket includes all planning and production data
- ▶ Simple production planning and job tracking
- ▶ Short make-ready times

Example Graphic for Analysis of Operating Data



Operating Data Collection

The standard integrated operating data storage provides options for individualized evaluation of production results, even without link-up to the digital workflow. The saddle stitcher's production data is stored. Using a USB interface, the data can be easily taken from the memory and individually evaluated at any workstation, using Microsoft Excel, for example.

Controlled Quality

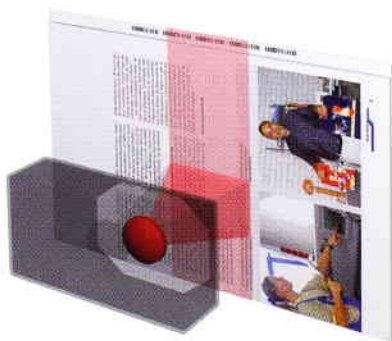
Error-free Production for Greater Customer Satisfaction

Thanks to extensive quality controls for all important processing steps, BravoPlus provides perfect stitching quality, complete products and considerably less waste – in other words: error-free production for greater customer satisfaction.



▶ Asir 3 Optical Image and Barcode Recognition

Asir 3 for optical image and barcode recognition provides the most reliable control for correct signatures and correctly assembled products.



Bar Code Mode

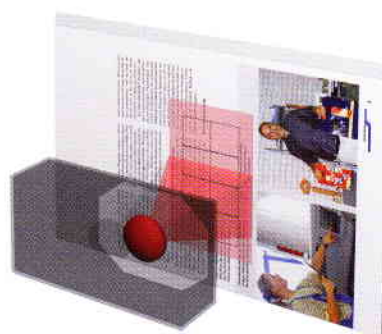


Image Recognition Mode

▶ Copy Control

If Copy Control recognizes a missing section, signature feeding is inhibited on the following feeders. This reduces the waste rate considerably.

▶ Lateral Thickness Measurement (Semko)

Every copy is inspected based on a reference value. Incomplete copies are ejected unstitched and signatures can be re-used which reduces the waste rate. The measurement system adjusts automatically.

▶ Skewed Signature Control

Photocells inspect the position of every copy. If skewed signatures are recognized, the product is ejected unstitched.

▶ Thickness Measurement (Ridge caliper)

Every copy on the chain is checked for the correct thickness in the binding. Faulty copies are ejected unstitched.

▶ Stitch Control

The wire staple control continually inspects the number of stitching staples in every product.

▶ Trim Control

Each individual product is inspected during the trimming process for the required measurement accuracy via the integrated visual control. Faulty products are ejected automatically.

▶ Sequential On/Off

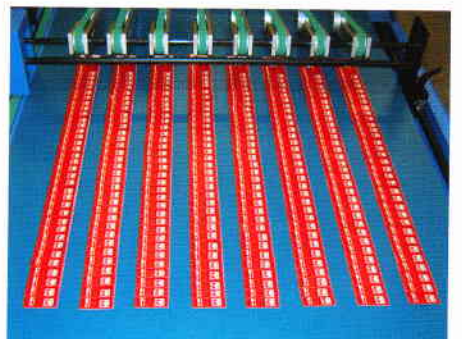
At the start of production, the feeders are activated one after the other and deactivated in the same manner after production ends. This ensures that only complete products leave the saddle stitching line and reduces the start and stop waste.

In-Line System Expansion for Added Value

The BravoPlus can be customized for individual needs. The following inline configurations are possible:



Inline Inserting and Film-Wrapping
with Onyx/Rubin

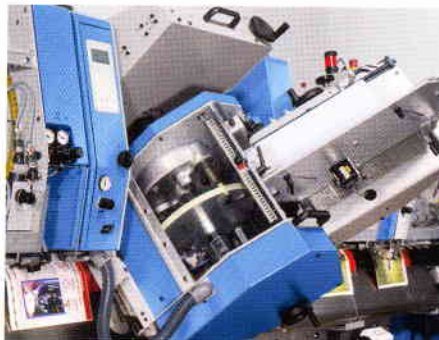


Inline Die-Cutting
for creatively die-cut, hole-punched and perforated products, as well as 8 up productions for small sizes



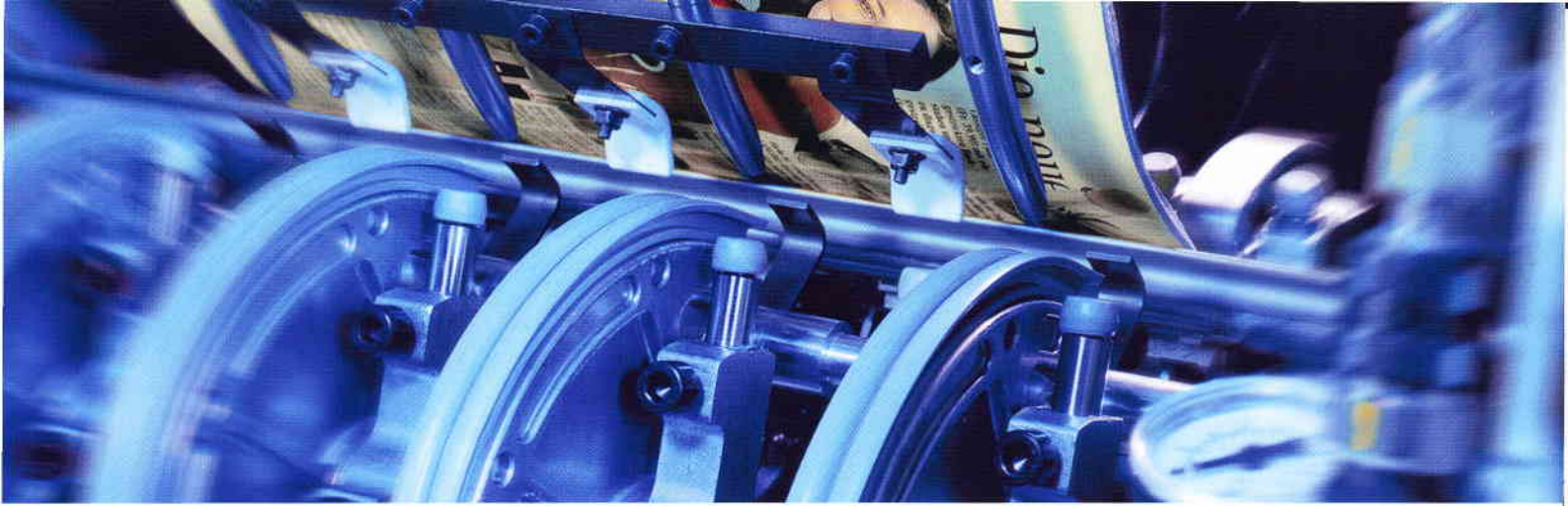
Inline Addressing

Products are addressed on a mail table with conventional inkjet systems



Product and Card Gluer

Card gluer for tip-on of product samples, cards, small brochures, CD-ROMs and Post-it® notes



Printing Presses

Automated web printing presses with inline finishing and a wide array of sizes provide consistent print quality. Orders placed once can be easily reproduced and therefore more quickly processed.

Press Delivery Systems

Efficient and reliable solutions are demanded by press delivery systems: Transporting printed signatures, rotary trimming, log or bundle formation, palletizing, forming rolls. The ideal link between press and print finishing.

Saddle Stitching Systems

A complete range of saddle stitchers, inserting, film-wrapping and packaging systems – in a wide array of performance classes – automate print finishing. Modern systems manufacture products in first-class quality with great added value.

Softcover Production

Perfect binding lines in all performance classes produce a wide range of spine-glued products such as brochures, magazines, catalogs and paperback books... in perfect quality at the highest speeds.

Hardcover Production

Hardcover machines, whether connected inline or as individual units, master all the processing steps needed to create finished books from folded signatures with hard covers and protective jackets.

Newspaper Mailroom Systems

Powerful and flexible mailroom systems transport and process freshly printed newspapers fully automatically, from the press through the inserting process, bundling and up to the loading ramp.

Books-on-Demand

With the first industrial total solution for Book on Demand, printed products are produced in a single pass... from pre-press data through digital printing to the finished, adhesive-bound or saddle stitched product.

This brochure may show components that are not part of the standard equipment and are available as options only. In some cases, protective covers in photographs have been removed or opened for illustrative purposes. Design and equipment configuration are subject to change.

Sales and Service

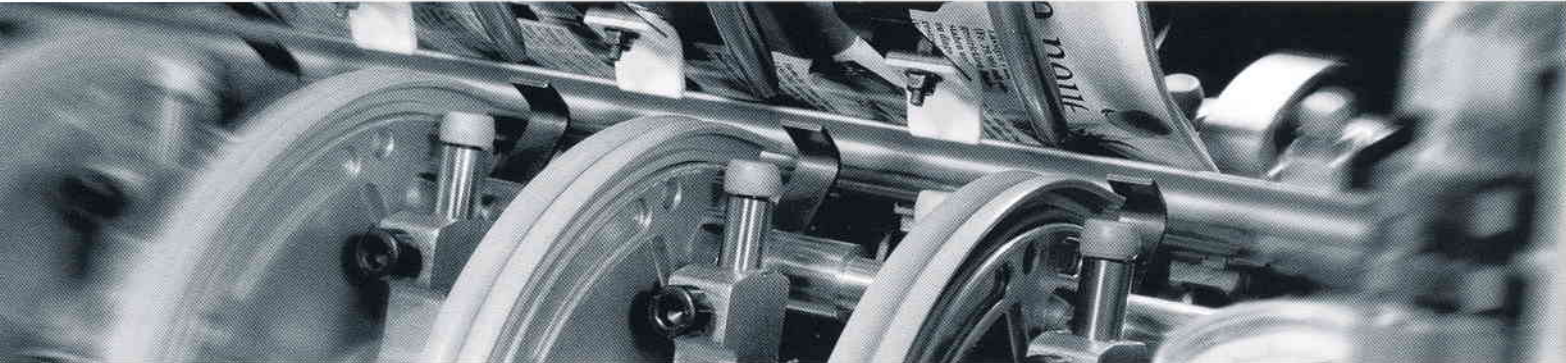
Muller Martini Limited

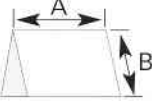

The Ridgeway
Iver, Buckinghamshire SL0 9JQ
Phone 0845-345 3588 (national)
Phone +44 (0)1753 657700 (international)
Fax +44 (0)1753 630740
sales@mullermartini.co.uk

Müller Martini Marketing AG
Untere Brühlstrasse 13
CH-4800 Zofingen, Switzerland
Phone +41 (0)62 745 45 75
Fax +41 (0)62 751 55 50
info@mullermartini.com
www.mullermartini.com

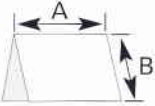
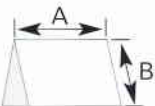


Saddle Stitcher **BravoPlus**

Technical Data



Mechanical speed	21" chain pitch	max. 12,000 cycles per hour		
Number of stations		max. 14 feeders		
Product sizes, untrimmed	feeder	A		
	high folio lap	max.	480 mm (18 ⁷ / ₈ "	320 mm (12 ⁵ / ₈ "
		min.	105 mm (4 ¹ / ₈ "	115 mm (4 ¹ / ₂ "
	low folio lap	with add-on	90 mm (3 ⁹ / ₁₆ "	80 mm (3 ¹ / ₈ "
		max.	480 mm (18 ⁷ / ₈ "	300 mm (11 ³ / ₄ "
		min.	105 mm (4 ¹ / ₈ "	125 mm (4 ⁷ / ₈ "
	without lap (suction opening)	with add-on	90 mm (3 ⁹ / ₁₆ "	90 mm (3 ⁹ / ₁₆ "
		max.	400 mm (15 ³ / ₄ "	300 mm (11 ³ / ₄ "
		min.	150 mm (5 ⁷ / ₈ "	120 mm (4 ³ / ₄ "
	lap	with add-on	90 mm (3 ⁹ / ₁₆ "	80 mm (3 ¹ / ₈ "
		max.	18 mm (1 ¹ / ₁₆ "	
		min.	6 mm (1/4"	
Product size, stitching unit		max.	480 mm (18 ⁷ / ₈ "	320 mm (12 ⁵ / ₈ "
		min.	153 mm (6"	115 mm (4 ¹ / ₂ "
		CD size	126 mm (4 ³¹ / ₃₂ "	123 mm (4 ¹³ / ₁₆ "
Stitching heads	HK 75Q, HK 75VQ	max.	6 heads	
	HK 45	max.	8 heads	
	eyelet stitching head	max.	4 heads	
Cut-off	head/foot trim	max.	50 mm (2"	
	front trim	max.	50 mm (2"	(larger upon request)
Product thickness	standard	max.	10 mm (3/8"	
	optional	max.	13 mm (1/2"	
Center and trio cut	split cut	max.	6 mm (1/4"	
	punch cut	maximum product thickness = half knife width		

Subject to dimensional, construction and equipment changes.

Product size, untrimmed		three-knife trimmer	A	B
One-up production		standard	max. 480 mm (18 7/8")	320 mm (12 5/8")
			with add-on 120 mm (4 11/16")	115 mm (4 1/2")
Product sizes, trimmed			A	B
One-up production		standard	max. 475 mm (18 3/4")	300 mm (11 3/4")
			with add-on 475 mm (18 3/4")	315 mm (12 7/16")
		compensating stacker	min. 148 mm (5 7/8")	105 mm (4 1/8")
		small size	min. 105 mm (4 1/8")	75 mm (3")
Center cut		split cut	max. 237 mm (9 5/16")	300 mm (11 3/4")
			with add-on 237 mm (9 5/16")	305 mm (12")
			min. 95 mm (3 3/4")	75 mm (3")
			with add-on 95 mm (3 3/4")	63 mm (2 1/2")
		punch cut	max. 234 mm (9 1/4")	300 mm (11 3/4")
			with add-on 234 mm (9 1/4")	305 mm (12")
Trio cut		split cut	max. 153 mm (6")	300 mm (11 3/4")
			with add-on 153 mm (6")	305 mm (12")
			min. 90 mm (3 9/16")	75 mm (3")
			with add-on 90 mm (3 9/16")	63 mm (2 1/2")
		punch cut	max. 153 mm (6")	300 mm (11 3/4")
			with add-on 153 mm (6")	305 mm (12")
Loading		bundle loader	min. 200 mm (7 7/8")	100 mm (4")
		stream feeder	min. 140 mm (5 1/2")	100 mm (4")
Folder feeder	1529/0554	max.	480 mm (18 7/8")	610 mm (24")
		min.	90 mm (3 9/16")	165 mm (6 1/2")
	1528/0553	max.	365 mm (14 7/16")	610 mm (24")
		min.	90 mm (3 9/16")	165 mm (6 1/2")
Card gluer	0315	max.	210 mm (8 1/4")	210 mm (8 1/4")
		min.	80 mm (3 1/8")	60 mm (2 3/8")
Merchandise tipper	0423	max.	210 mm (8 1/4")	210 mm (8 1/4")
		min.	80 mm (3 1/8")	55 mm (2 3/16")
Drive rating		7.5 kW up to 10 feeders/11 kW: 11 – 14 feeders		
Power consumption		depending on project		
Pressure-vacuum pumps		depending on project		
Compressed air		6 bar (87 psi), on site (depending on project)		

- 1 Stitching machine 0380*, delivery to the rear or front
- 2 Control panel
- 3 Gathering chain
- 4 Oblique sheet monitor
- 5 Folder feeder 1529/0554*
- 6 Folder feeder 1528/0553*
- 7 Card gluer 0315/Sample gluer 0423*
- 8 Flat pile feeder 0370*
- 9 Infeed to feeder 0370*

- 10 Stream feeder Universal 3738
- 11 Stream feeder Universal 3738 with extension
- 12 Vertical pile feeder 0370
- 13 Bundle loader for vertical pile feeder 0370
- 14 Three-knife trimmer 0449*
- 15 Stacker Perfetto 0450*
- 16 Roller slide delivery, belt delivery, air table

* Amrys option

