

**Three-knife Trimmer 3670 –  
Superior output  
and quality in book production**

MÜLLER MARTINI



## Smooth running and constant cutting speed for less wear

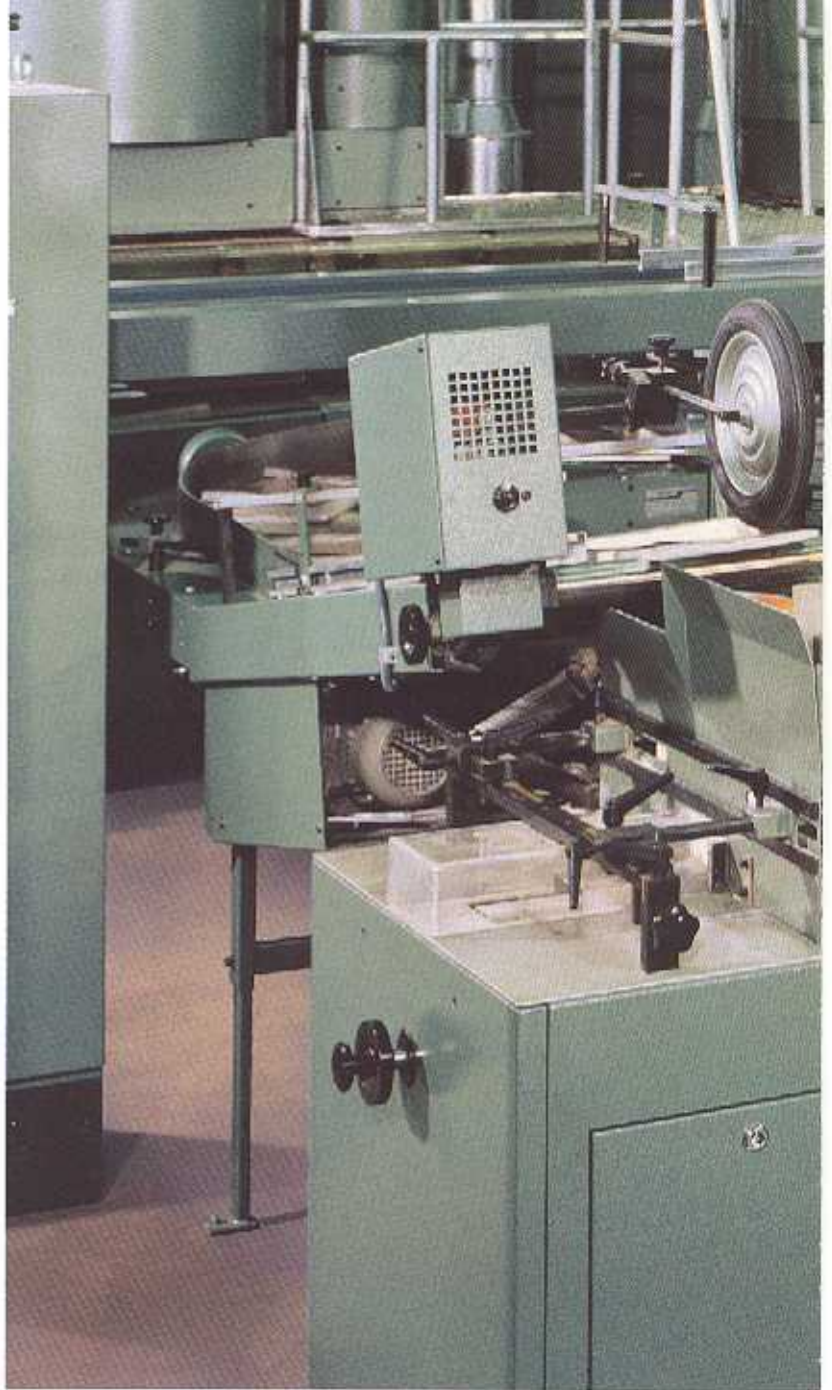
The Model 3670 Three-knife Trimmer offers you outstanding capabilities:

- superior trim quality
- quick size changeover
- short makeready
- long knife life
- convenient operator controls
- maximum versatility for soft and hard cover books
- efficient operation

The MÜLLER MARTINI 3670 Trimmer is a heavy-duty machine designed for multishift operation, with automatic knife stroke control for extended knife life. Quickchange cutting tables and the swiveling operator console make size changeover fast and easy. The 3670 is the market leader for soft and hard cover book production.

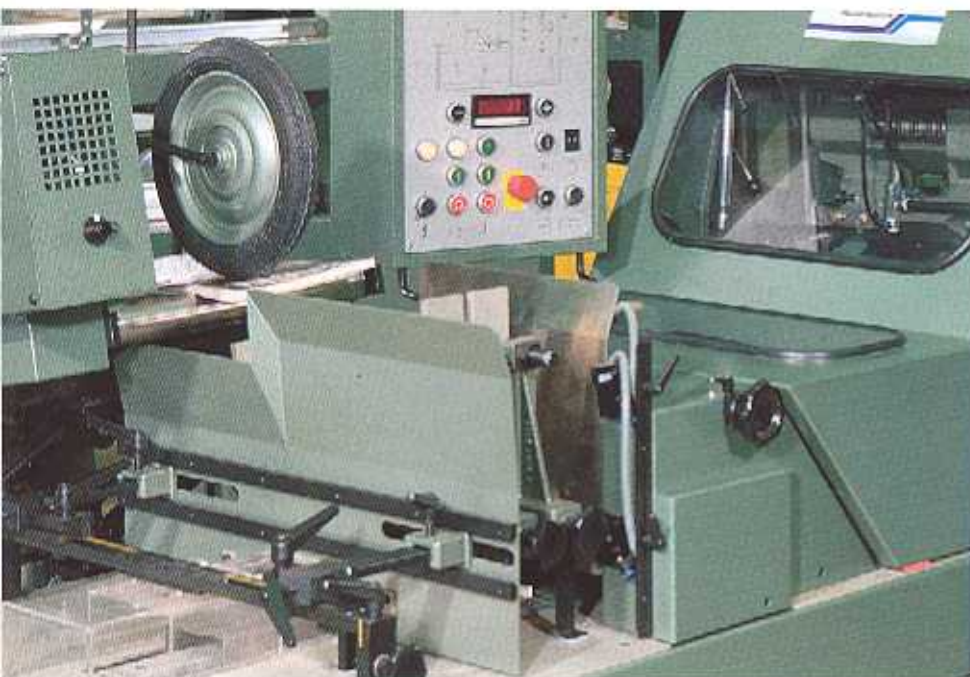
Outstanding features:

- **precise trimming**  
Trimming in a single station against cutting sticks while the book is stationary. Head and foot cutting action is towards the front edge, and the front cut is cam-controlled for increased shearing action.
- **quick changeover**  
Cutting tables are prepared away from the machine and are locked into place without tools in minutes.
- **large trim cut-off range**  
Head, foot and face trim is variable from 3 mm to 40 mm ( $\frac{1}{8}$ " to  $1\frac{5}{8}$ ").
- **efficient trim removal**  
Narrow cutting sticks, built-in air blow-down nozzles and unobstructed design assure reliable trim removal. Trim segregation is available.
- **long knife life**  
Automatic knife stroke control prevents contact with cutting sticks if no book is present.
- **adjustable clamp pressure**  
Clamp pressure across the entire book is pneumatically adjustable while the machine is running.
- **thin book capability**  
Products as thin as 3 mm ( $\frac{1}{8}$ " ) can be reliably processed with special pusher plate.
- **central hopper adjustment**  
Hopper, pusher, stack retainer and top belts are simple to adjust by handwheels.
- **positive book infeed**  
Single or stacked products are held securely between driven top and bottom belts.
- **swiveling operator console**  
Programmable Logic Controller with fault readout for convenient operation



## The Key details

In book production, makeready and changeover times on downstream machines are as important as they are on the gathering machine and the perfect binder.



### Efficient Infeed

- height adjustable, telescoping belt for infeed from left or right.
- large-capacity hopper with built-in photoelectric control ensures constant pile height.
- gentle buffering of products entering the hopper.

### Central Feeder Adjustment

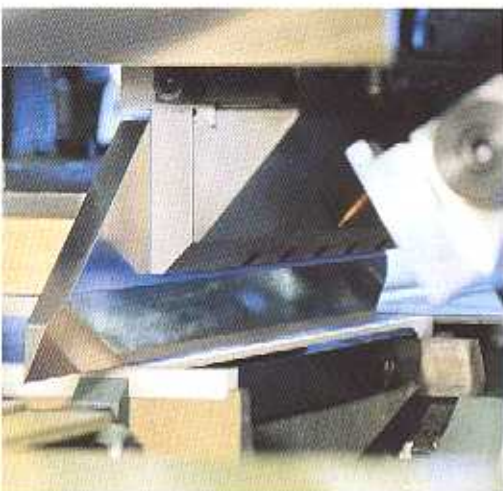
- by spindle, in a thickness range of 3 mm to 70 mm ( $\frac{1}{8}$ " to  $2\frac{3}{4}$ ").
- retainer for stack advance is adjustable by handwheel.

The most efficient workflow and space utilization, simple adjustments and gentle product handling are key advantages.

### Time-saving, quick-change cutting table

- cutting table cassettes are prepared in advance, away from the machine.
- pneumatically controlled locking and positioning, without tools.
- narrow cutting sticks ensure efficient trim removal.
- square, narrow cutting sticks (10 mm x 10 mm /  $\frac{3}{8}$ " x  $\frac{3}{8}$ " ) can be used 8 times before changing
- cutting table cassettes are available for sizes from 100 x 112 mm (4" x 4 $\frac{1}{2}$ ") to 410 x 420 mm (16 $\frac{1}{2}$ " x 16 $\frac{1}{2}$ " )
- optional cabinet for cassettes

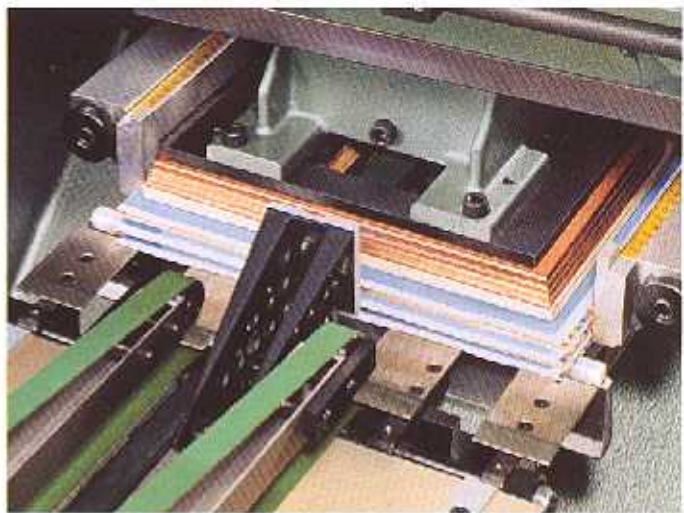
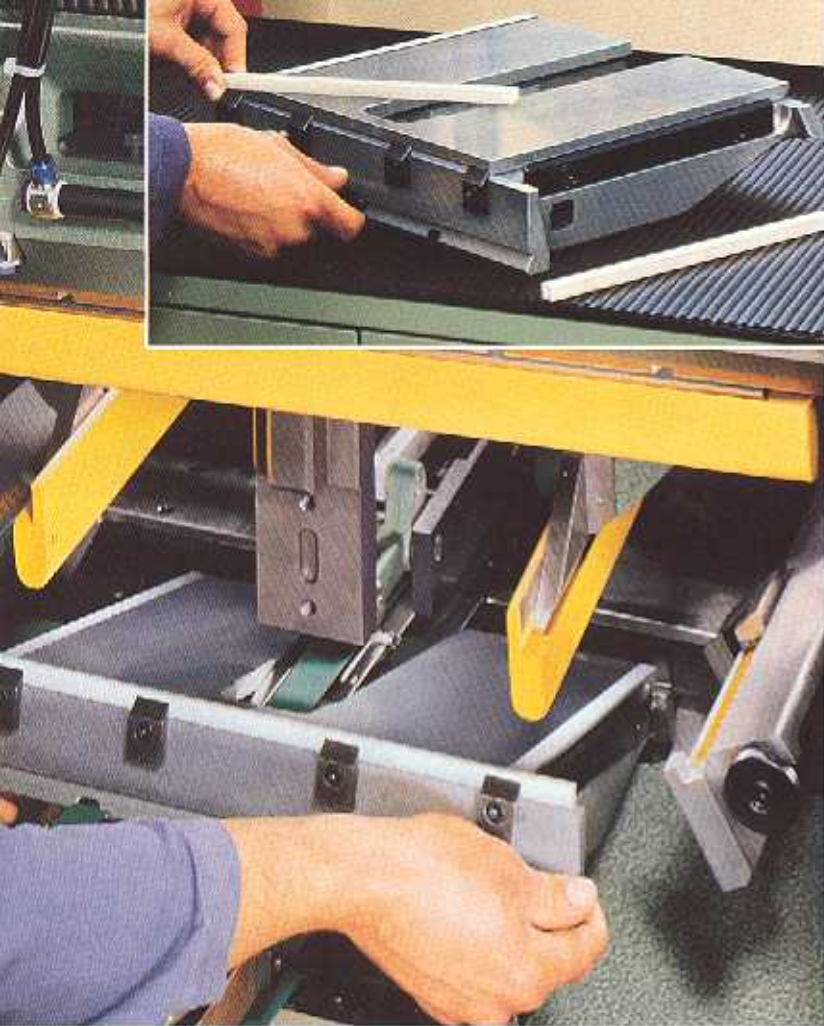
The quick-change cutting table cassettes ensure fast changeover. The wide range of cassettes covers all book sizes. Fourteen commonly-used sizes are furnished with the trimmer.



### Long Knife Life

- heavy-duty knife holders for outstanding stability.
- knife stroke control prevents knives from contacting cutting sticks if no book is present.
- cycle speed is maintained during short interruptions of production flow to prevent stop-and-go motion.
- choice of steel or carbide knives.

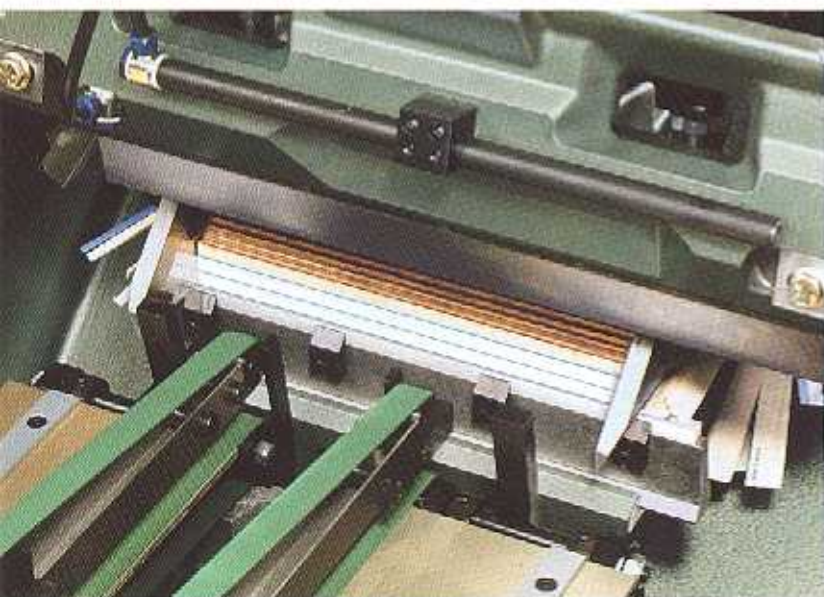
The MÜLLER MARTINI patented cutting principle dramatically increases knife life and reduces operating costs.



### Precise Book Infeed

- books enter the knife station under positive control of driven top and bottom belts.
- a pusher ensures accurate positioning of the book between front and side stops.
- books automatically slow down as they approach the front stops to prevent bouncing.
- precise, lateral alignment prior to clamping in the cutting station.
- motorized adjustment of stops for size changes.

The Three-knife Trimmer 3670 ensures neat, square trimming of thin as well as thick products, simply and efficiently.



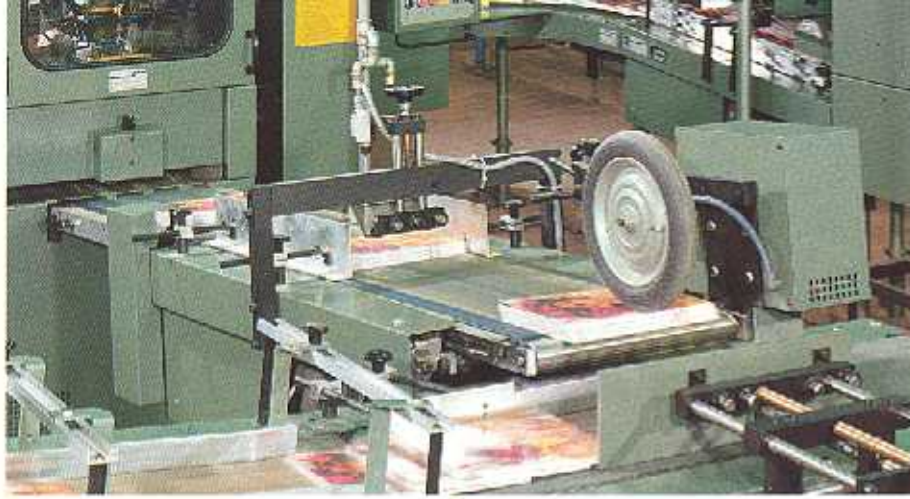
### Accurate Cutting Station

- pneumatically adjustable pressing.
- all three sides are trimmed against cutting sticks in one station, with head and foot cutting action towards the front edge.
- cam operated slicing motion at front knife.
- patented trimming system with cam-controlled front knife stroke control.

- trim cut-off adjustable from 3 mm to 40 mm (1/8" to 1 5/8") on all three sides.
- quick knife change, with set screws for fine adjustment of the knives.
- adjustable air blast nozzles in the knife holders ensure efficient trim blow down.
- large-diameter, central trim removal pipe with sliding window.
- optional trim segregation for head/foot and face trim.
- silicon spray for side knives (optional).

Low acceleration speeds and smooth movements based on the patented cutting system ensure superior trim quality with minimal wear.

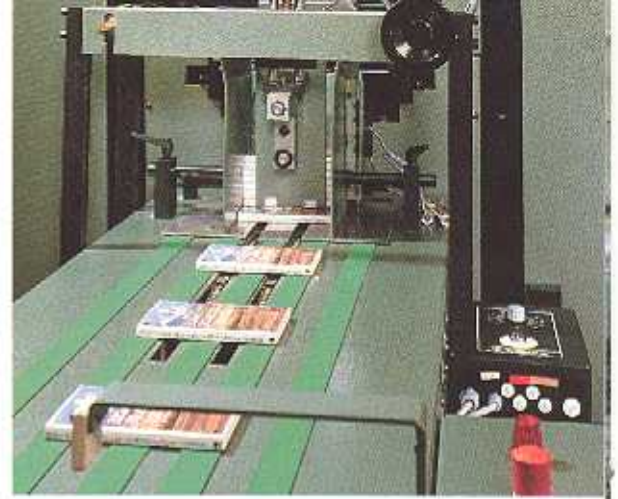
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### Positive Delivery

- the trimmed product is securely clamped between independently driven belts.
- gentle handling of books in single or collect mode.
- positive delivery of trimmed loose-leaf work.
- quick and simple set-up.

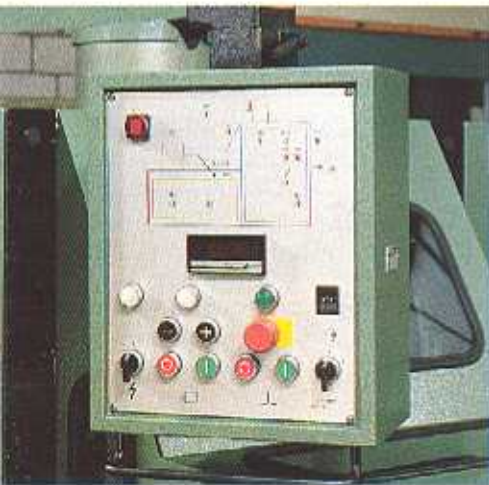
Gentle handling of the product from infeed to delivery is assured and is an important consideration for top quality and efficient finishing.



### In-line finishing

- optional destacking device for products which are trimmed in collect mode, but must be processed individually, for example by an inserting machine (as shown) or for single-copy addressing.
- direct transfer to PrintStack CB-16 Stacker.
- compatible with machines requiring single-copy infeed.
- suitable for processing stacks of thin products.

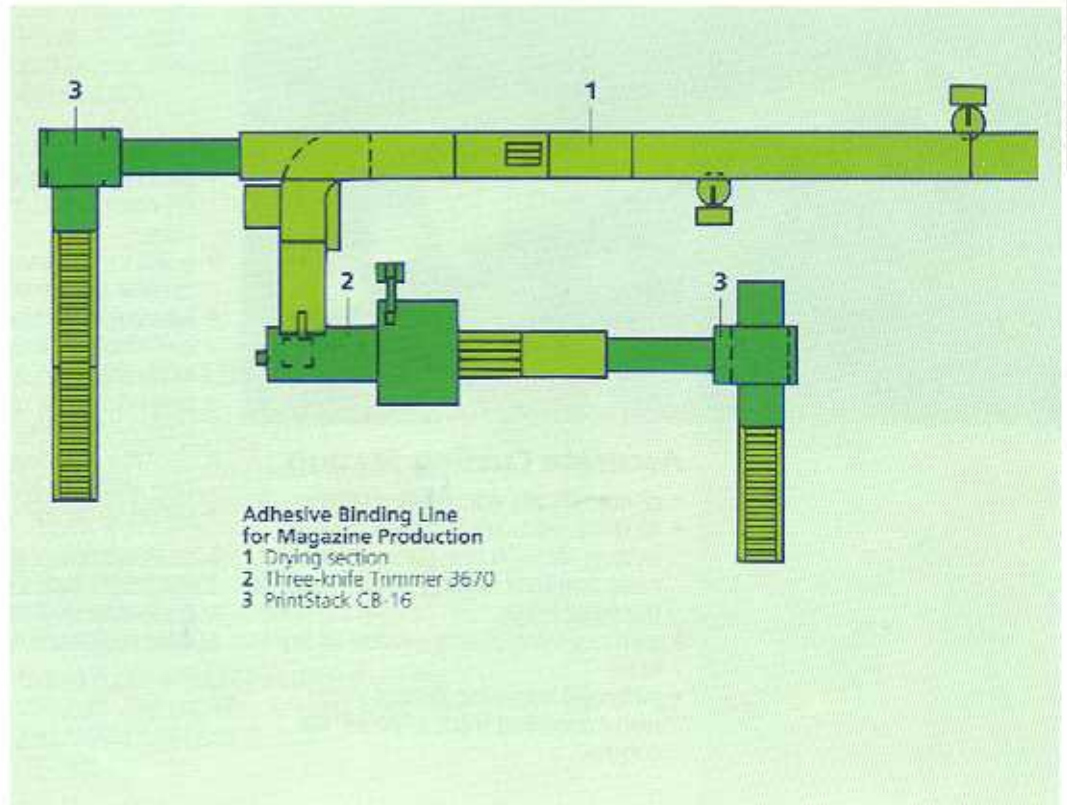
Finishing is tailored to individual needs for efficient production flow.



### Swivel-mounted operator console

- user-friendly programmable controller.
- digital display with fault diagram for quick reference.
- size-independent book control.
- blast air is automatically switched off if a book is missing for three consecutive cycles.
- automatic switchover to standby mode after 90 seconds.
- simulation mode for activating each valve and for testing machine.

Conveniently arranged controls ensure reliable and easy operation — an important requirement for achieving high output.



## PrintStack CB-16, the ideal stacker for the Three-knife Trimmer 3670

Adhesive bound book blocks for hard cover production, soft cover books, magazines, paperbacks, mail order catalogs and telephone directories – PrintStack CB-16 handles all these products gently and stacks them efficiently.



### High-performance PrintStack CB-16

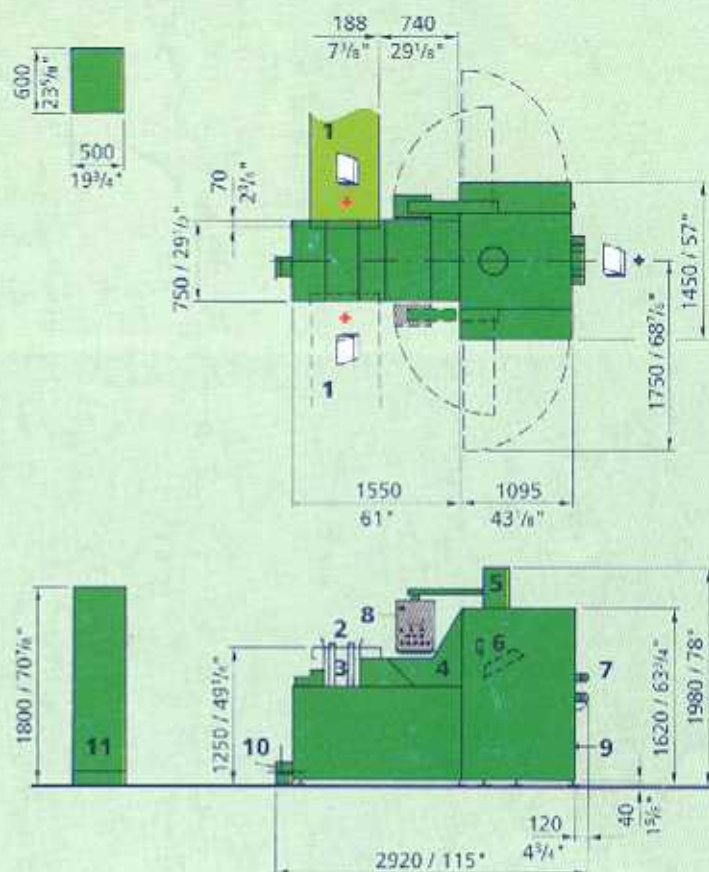
- High production capacity: up to 16,000 cycles/hr.
- Quick makeready: central adjustment by handwheels.
- Outstanding stack quality: essential for efficient packaging and palletizing.
- Wide size range: from a 3 mm (1/8") magazine to a 60 mm (2 3/8") telephone directory.
- Choice of stacking: compensated or uncompensated, depending on type of product and finishing requirements.

- Deliveries to meet layout and workflow requirements: for manual take-off or in-line processing.
- Programmable controller with alphanumeric display: for easy interactive programming of production parameters by operator.
- Movable casters and plug-in connections for use on various production lines.

The PrintStack CB-16 is a must for an efficient, modern bindery.

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# High-speed Three-knife Trimmer 3670

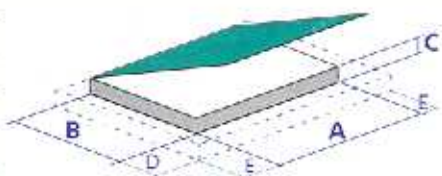


## Index

- 1 Telescoping accelerating belt (infeed from left or right)
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- 5 Pneumatic cylinder
- 6 Knife station
- 7 Delivery
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- 9 House air connection
- 10 Trim removal pipe
- 11 Electrical cabinet

## Specifications:

Mechanical speed	2,200 - 6,600 cycles/hr.	
Untrimmed sizes	min.: 146 mm ( 5 3/4" ) (A + 2E) x 103 mm ( 4 1/8" ) (B+D)	
	max.: 440 mm (17 3/8" ) (A + 2E) x 350 mm (13 3/4" ) (B+D)	
Trimmed sizes	min.: 140 mm ( 5 1/2" ) (A) x 100 mm (3 15/16" ) (B)	
	max.: 420 mm (16 1/2" ) (A) x 310 mm (12 3/16" ) (B)	
Book thickness (C)	min.: 3 mm ( 1/8" )	
	max.: 70 mm (2 3/4" )	
Trim cut-off (D)	min.: 3 mm ( 1/8" )	
	max.: 40 mm (1 1/2" )	
Trim cut-off (E)	min.: 3 mm ( 1/8" )	
	max.: 40 mm (1 1/2" )	
Small size capability	min.: 110 mm (4 3/16" ) x 75 mm (2 15/16" ) (factory installed option only)	
Power consumption	17 kW	
Air connection	40 Nm <sup>3</sup> /hr., 6 bar (24 cfm, 87 psi)	
Weight	approx. 3,800 kg (8,360 lbs.)	
Dynamic floor load	20 x 10 <sup>2</sup> N/m <sup>2</sup>	



Design, specifications and measurements subject to change.

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## Sales and service

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Printed in Switzerland / 3670 / 9112 / MZ EF



**Three-Knife Trimmer 3670 –  
for unparalleled output and quality  
in book production**

**MÜLLER MARTINI**







**Automatic Knife Stroke Control  
for Maximum Knife Life**



## Outstanding features

### **For books and book blocks**

Offering the high trim quality and output demanded by manufacturers of soft as well as hardcover books.

### **Trim accuracy**

Trimming in one station against cutting sticks while the product is stationary and registration to the spine provide the highest trim accuracy.

### **Large trim-off range**

3 to 40 mm ( $\frac{1}{8}$ " to  $1\frac{5}{16}$ " ) on all three sides

### **Long knife life**

The automatic knife stroke control prevents knives from contacting the cutting sticks when no book is present.

### **Accurately adjustable clamp pressure**

Clamp pressure is adjustable even while the machine is running

### **Thin products**

Products as thin as 3 mm ( $\frac{1}{8}$ " ) can be reliably processed using a special shuttle plate.

### **Central hopper adjustment**

Hopper, shuttle, book retainer and top belt are simple to adjust.

### **Positive book infeed**

Single or stacked products are held securely between independently driven top and bottom belts.

### **In-line or off-line operation**

The feeder can be loaded manually or books can be fed by infeed belt, directly from the binder.

### Important Requirements of a Three-Knife Trimmer

- high productive capacity
- outstanding trim quality
- maximum versatility for hard and soft cover books

are fulfilled by the high-performance Three-Knife Trimmer 3670. Heavy-duty construction for round-the-clock operation, smooth running at top speed, the unique cutting principle using computer designed cams and automatic knife stroke control make this machine a leader in book manufacturing.

The Model 3670 has set new standards in book trimming technology. It is an important modular component for achieving exceptional product quality efficiently and economically.



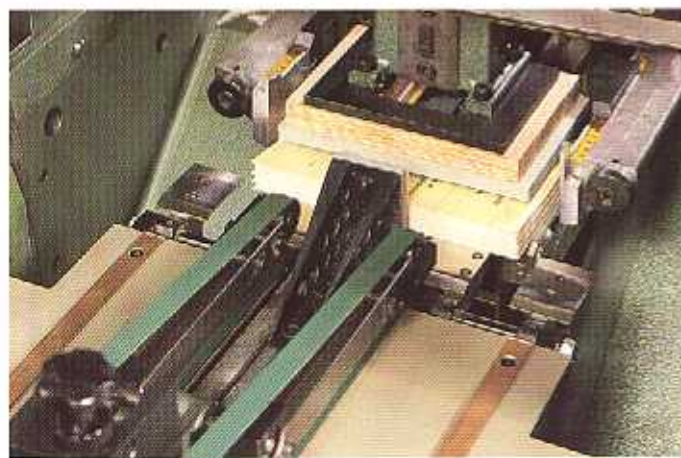
### The Efficient Hopper

- loading from the left or right, manually or automatically
  - large-capacity hopper with built-in photoelectric control ensures constant stock height
  - gentle handling of products entering the hopper
  - simple, wrenchless adjustments on scales
- The most efficient workflow and space utilization, simple adjustments and gentle product handling are key advantages.



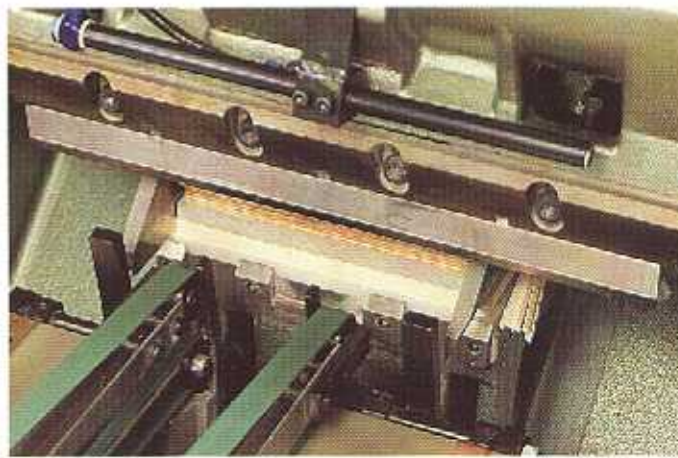
### Central Feeder Adjustment

- by spindle, in a thickness range of 6 mm to 65 mm (1/4" to 2 1/2"), and between 3 mm and 65 mm (1/8" to 2 1/2") using a special shuttle plate
  - retainer for book or stack advance is adjustable by handwheel
  - top infeed belt and transport rollers are hydraulically adjustable by a handwheel
- Size changeover without tools or complicated set-up aids reduces makeready and assures maximum efficiency at lowest operating costs.



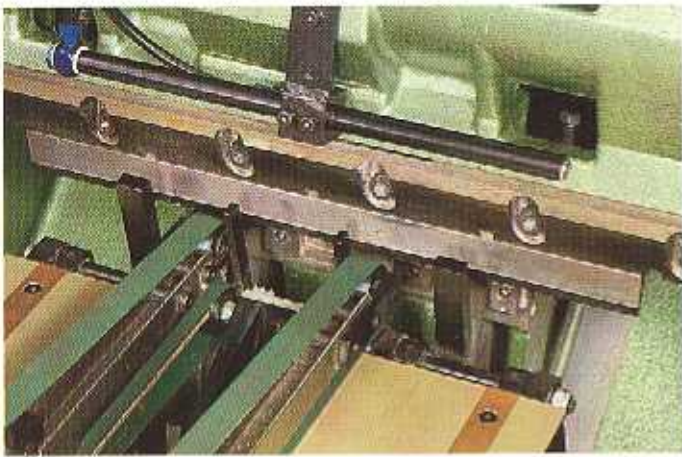
### Precise Book Infeed

- books enter the trimming station under positive control
  - a pusher ensures accurate positioning of the book between front and side stops
  - books automatically slow down as they approach the front stops to prevent bouncing
  - precise, lateral alignment prior to clamping
  - register stops are adjusted on scales
- Precise infeed of the book into the cutting station is the key to accurate and square trimming. The Three-Knife Trimmer 3670 fulfills this requirement for all product thicknesses.



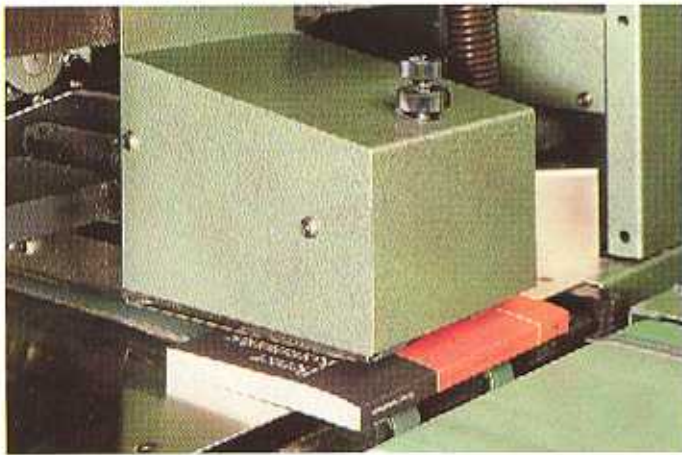
### Accurate Cutting Station

- mechanically controlled clamp with pneumatically adjustable pressure
  - pressing block extends over the entire product
  - all three sides are trimmed against cutting sticks in one station
  - patented trimming system with unique front knife control
  - head/foot and face trim of 3 - 40 mm (1/8" - 1 3/4")
  - quick knife change
  - set screws for fine adjustment of the knives
  - gauge for pre-setting of the knives outside the machine
  - adjustable air blast nozzles in the knife holders ensure efficient trim blow down
  - large-diameter, central trim removal pipe with externally adjustable damper
- Low acceleration speeds, smooth movements and minimal wear are direct results of the patented operating principle.



### Long Knife Life

- knife control prevents knives from contacting cutting sticks if no book is present
  - cycle speed is maintained during short interruptions of production flow. Trimmer is always ready – continual starting and stopping is eliminated
  - choice of steel or carbide tipped knives
- This trimming principle, pioneered by MÜLLER MARTINI, results in a dramatic increase in knife life and reduces operating costs.



### Positive Delivery

- the trimmed product is securely clamped between independently driven belts
  - gentle handling of books in single or collect mode
  - positive delivery of trimmed loose-leaf work
  - quick and simple set-up by means of a single, easily accessible set screw
- The gentle handling of the product from infeed to delivery is assured and is an important consideration in book production.

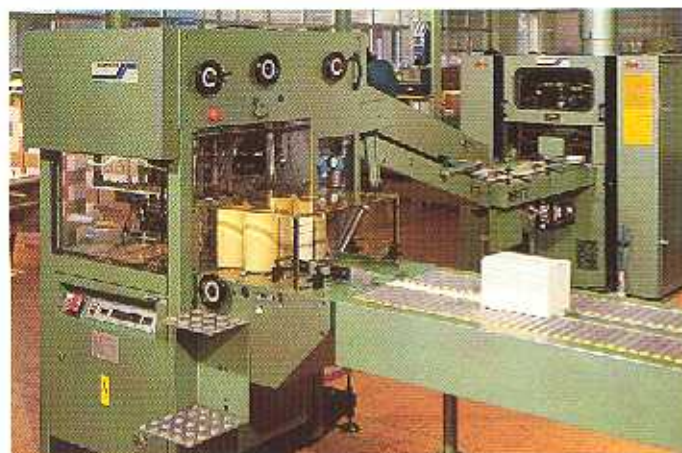


### In-line Finishing

- PrintStack CB-15 Stacker can operate in-line with the trimmer and handles single copies or stacks of thin products.

#### NEW

- a de-stacking device is optionally available for products which are trimmed in collect mode, but must be processed individually

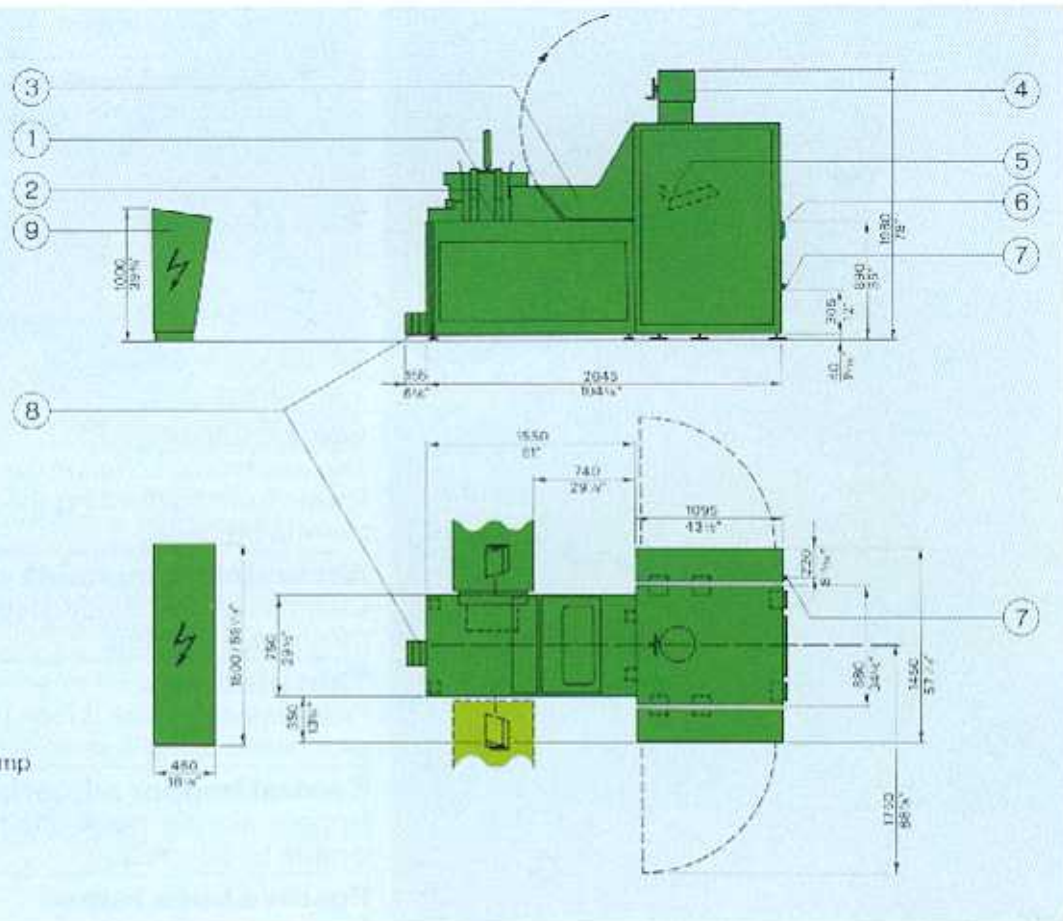


### Advantages of the PrintStack CB-15:

- quick size changes without tools
- independently driven top and bottom infeed belts for gentle product handling
- compensated or uncompensated stacks
- choice of deliveries ensures finishing flexibility
- programmable control system to meet diverse production requirements

The Three-Knife Trimmer 3670 and the PrintStack CB-15 add the perfect finishing touch

# Three-Knife Trimmer 3670



## Specifications

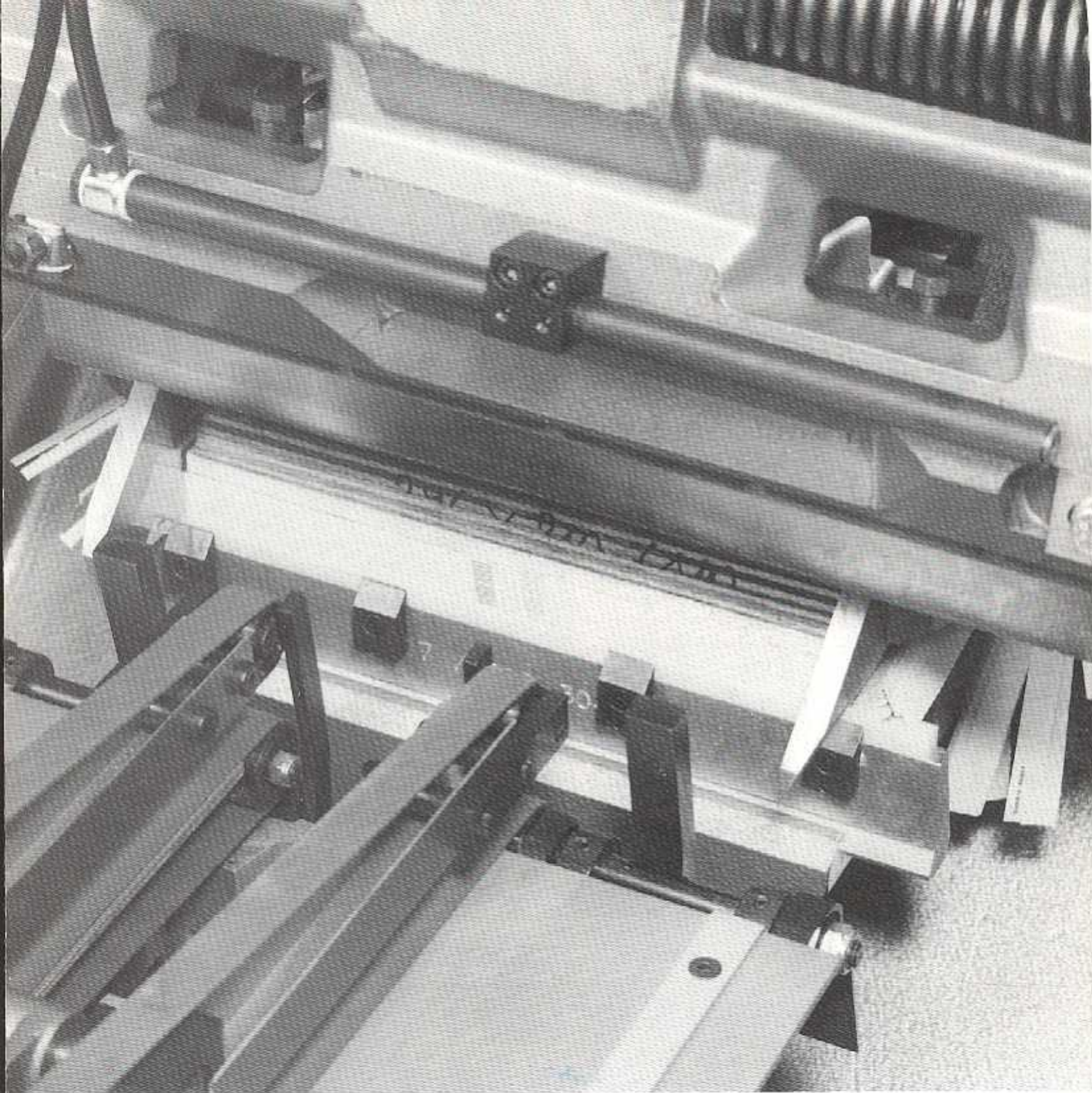
Mechanical speed	min.	2,000 cycles/hr	
	max.	6,600 cycles/hr	
Power consumption		11 kW	
Trim capacity	min.	3 mm / 1/8"	
	max.	70 mm / 2 3/4"	
Head/foot and face trim	min.	3 mm / 1/8"	
	max.	40 mm / 1 1/2"	
Sizes	spine length		
	untrimmed	max. 410 mm / 16 1/8"	width 320 mm / 12 5/8"
	with short knives	max. 350 mm / 13 3/4"	250 mm / 9 7/8"
	trimmed	min. 140 mm / 5 1/2"	100 mm / 4"
		max. 400 mm / 15 3/4"	310 mm / 12 1/4"
		max. 340 mm / 13 3/4"	240 mm / 9 1/2"
Other sizes on request.			

Design, specifications and measurements subject to change

## Sales and Service:

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**Three-Knife Trimmer 3670 –  
for unparalleled output and quality  
in book production.**

**Now furnished with quick-change  
cutting table.**

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## Dramatic reduction in changeover times

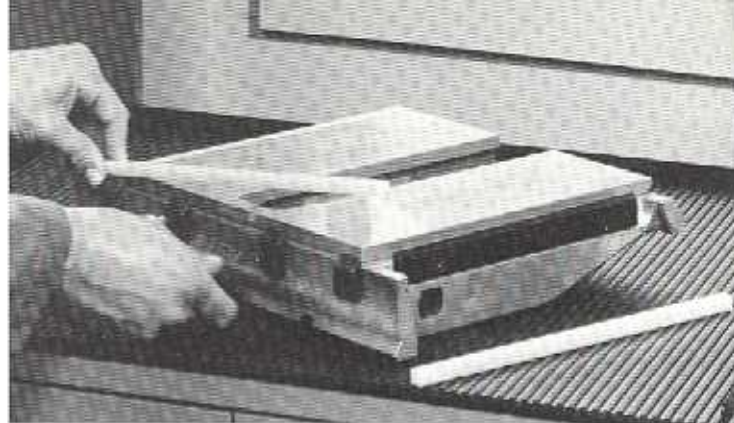
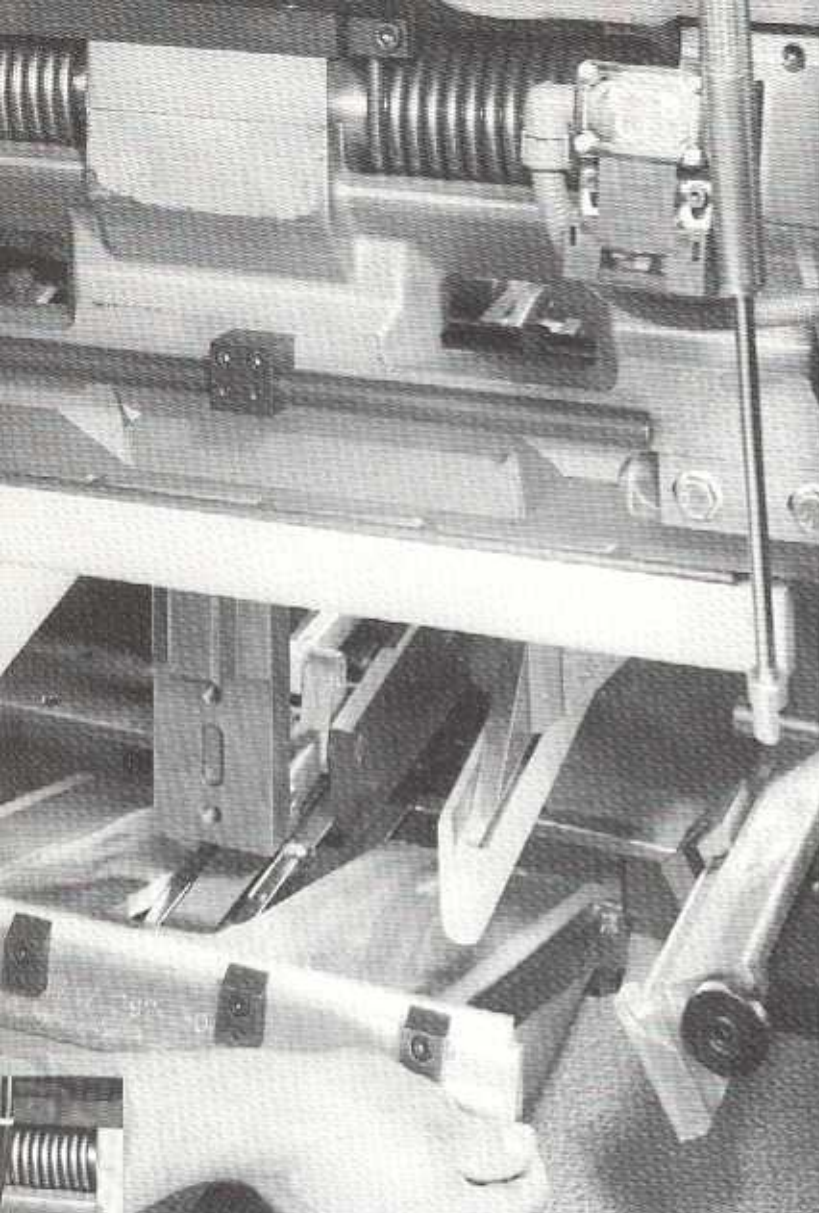
In book production, makeready and changeover time on downstream machines are as important as they are on the gathering machine and adhesive binder. Size changeover on the Three-Knife Trimmer 3670, which has established a reputation for quality trimming and high output, has now been made significantly easier by the addition of a quick-change cutting table. Tables are prepared in advance, away from the machine. They are quickly inserted in the machine and pneumatically locked into position.



### Timesaving advantages

- cutting tables are exchanged in minutes
- pneumatically controlled locking and positioning, without tools
- cutting sticks and tables are prepared away from the machine
- use of narrow cutting sticks ensures efficient trim removal





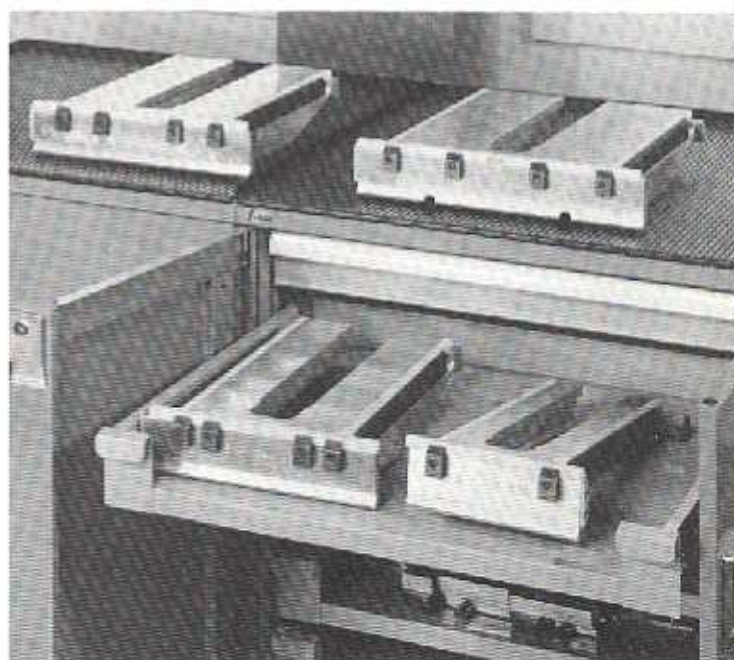
### Fast and reliable

- cutting sticks are changed away from the machine
- all four sides of the square (10 mm x 10 mm – 3/8" x 3/8") cutting sticks can be used



### Size range of cutting tables

Cassette number	Size range	Parts list number	Size
	<b>3.93" - 4.4"</b>		
1	100-112		
2	112-124	3670.0116	Small (optional)
3	124-136		
4	136-148		
5	148-160		
6	160-172		
7	172-184		
8	184-196		
9	196-208		
10	208-220	3670.0117	Standard
11	220-232		
12	232-244		
13	244-256		
14	256-268		
15	268-280		
16	280-292		
17	292-304		
18	304-316	3670.0125	
19	316-328	3670.0126	
20	328-340	3670.0127	
21	340-352	3670.0128	
22	352-364	3670.0129	Large (optional)
23	364-376	3670.0130	
24	376-388	3670.0131	
25	388-400	3670.0132	
26	400-412	3670.0133	
27	412-420	3670.0134	

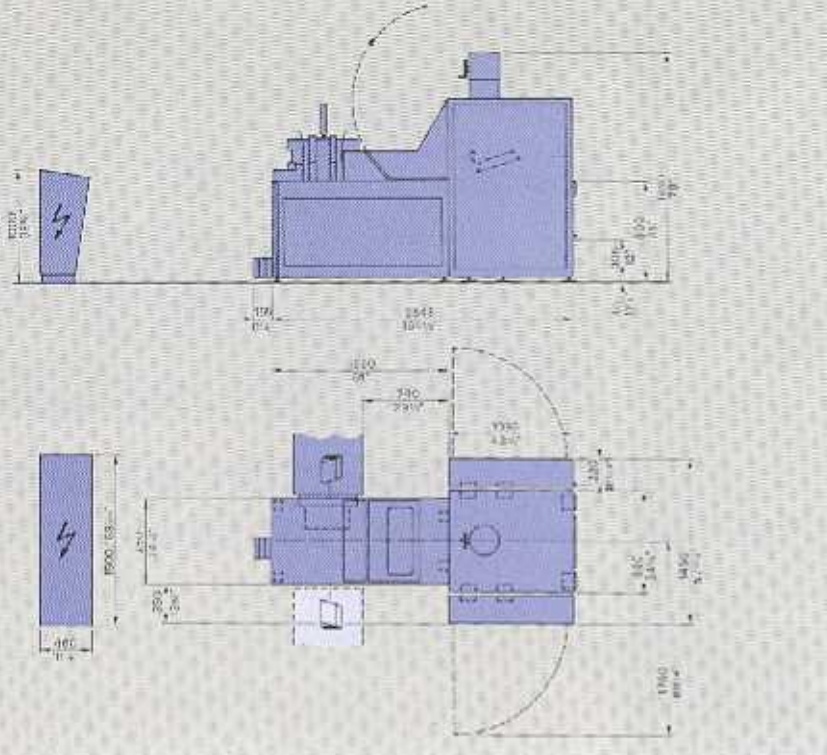


### Designed for any size requirement

- 14 cutting tables are standard
- 10 cutting tables for sizes greater than A4 or greater than 8 1/2" x 11" (optional)
- 3 cutting tables for small sizes (optional)
- storage cabinet for up to 14 cutting tables (optional)

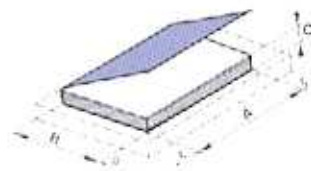
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## Specifications:

Mechanical speed	2200–6600 cycles/h
Set-up speed	2000 cycles/h
Untrimmed sizes	min. 146 mm (A+2E) x 103 mm (B+D) 5 3/4" x 4 1/16"
	max. 440 mm (A+2E) x 350 mm (B+D) 1'5 1/8" x 1'1 3/4"
Trimmed sizes	min. 140 mm (A) x 100 mm (B) 5 1/2" x 4"
	max. 420 mm (A) x 310 mm (B) 1'4 1/2" x 1'1 1/4"
Book thickness (C)	min. 3 mm / 1/8" max. 70 mm / 2 3/4"
Trim (D)	min. 3 mm / 1/8" max. 40 mm / 1 5/8"
Trim (E)	min. 3 mm / 1/8" max. 40 mm / 1 5/8"
Small size capability (factory installed option only) trimmed	min. 110 mm x 75 mm 4 3/8" x 3"
Power consumption	12 kW
Drive	11 kW
Maximum clamping pressure at 5 bar (74 psi)	20,000 N (4400 lbs.)
Weight	approx. 3800 kg (8360 lbs.)
Dynamic floor load	20 x 10 <sup>3</sup> N/m <sup>2</sup>
Design, specifications and measurements subject to change.	



Sales and service

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