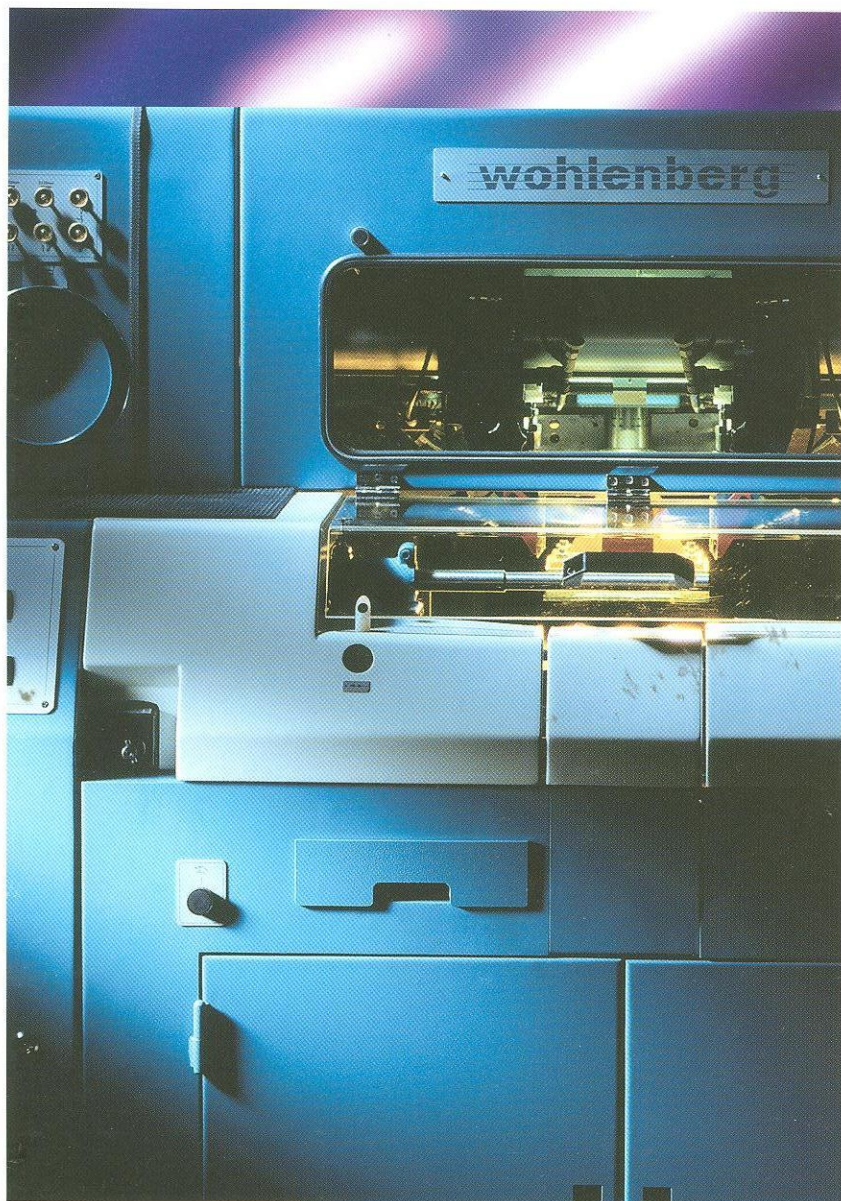


# Three-Knife Trimmers

trim-tec 45, 56, 30



The pioneers of precision trimming

**wohlenberg**



# Three-Knife Trimmers trim-tec

## Perfection in three-side trimming

### 140 years of tradition

In 1855 KRAUSE built the first paper cutting machine. Since 1949 Wohlenberg continues this tradition. Always in dialogue with our customers. Experience born in tradition combined with the technology of today. Competent. Innovative. Reliable.

### This is important for Three-Knife Trimmers

Reliability, especially in inline production. Robust construction for a long

lifetime. Precision trimming of single copies or piles. That is what made Wohlenberg Three-Knife Trimmers world-famous. More than 5000 installed machines prove it.

Today's demands are higher:

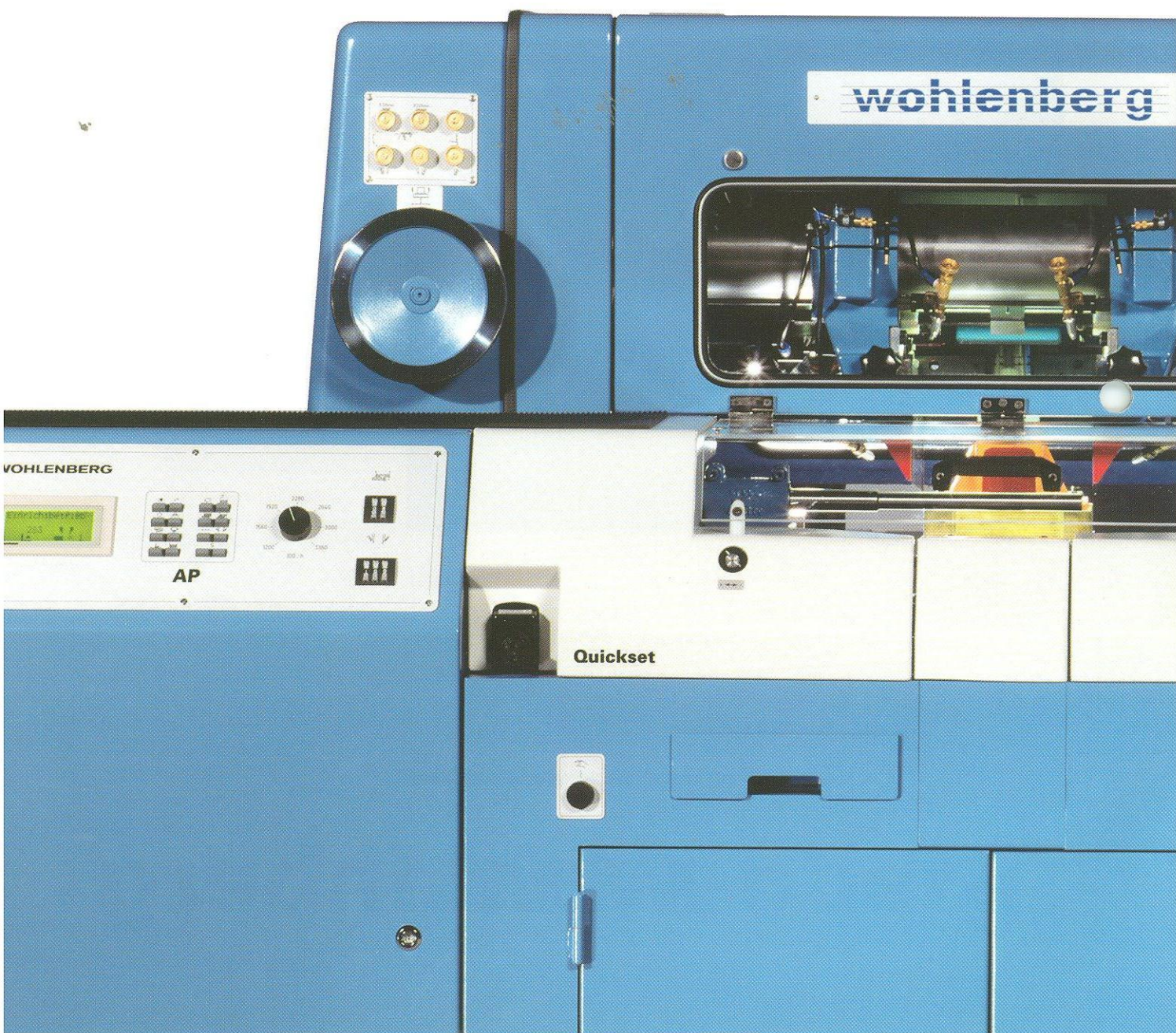
- extremely short make-ready-time, quickly into production
- quality trim, no scratches, even with difficult material.

The new generation of Wohlenberg Three-Knife Trimmers offers that, too. Of course.

### Choose the right model from our programme for your success:

#### trim-tec 45 i

- inline Three-Knife Trimmer with integrated Counter-Stacker for production lines in the lower and medium speed range
- up to 45 cycles/min. = 2700/h single copies or piles
- max. trimmed size 380 x 300 mm (15 x 11<sup>13</sup>/<sub>16</sub>"")
- min. 145 x 100 mm (5<sup>3</sup>/<sub>4</sub> x 4")





**trim-tec 56 i**

- inline Three-Knife Trimmer with integrated Counter Stacker for production lines in the medium and upper speed range
- up to 56 cycles/min. = 3360/h single copies or piles
- max. trimmed size 380 x 300 mm ( $15 \times 11\frac{13}{16}$ "")
- min. 145 x 100 mm ( $5\frac{3}{4} \times 4$ "")

**trim-tec 56 o**

- the all-purpose Three-Knife Trimmer with automatic infeed
- self-contained unit with manual feeding or inline, also mixed operation
- up to 56 cycles/min. = 3360/h single copies or piles
- max. trimmed size 380 x 300 mm ( $15 \times 11\frac{13}{16}$ "")
- min. 145 x 90 mm ( $5\frac{3}{4} \times 3\frac{9}{16}$ "")

**trim-tec 30 o**

- the three-knife trimmer for manual feeding for medium and small runs
- motorised auto-positioning AP with operator guidance
- 20-30 cycles/min mechanical speed
- also for thin copies down to 1 mm
- max. size 440 x 300 mm ( $16\frac{5}{16} \times 11\frac{13}{16}$ "")
- min. 80 x 70 mm ( $3\frac{1}{8} \times 2\frac{3}{4}$ "")

We manufacture Three-Knife Trimmers offering you reliable, low-cost production for a long time. Wohlenberg Three-Knife Trimmers are a safe investment.





# Three-Knife Trimmer trim-tec 45 i

## with integrated Counter-Stacker

### Field of operation

- inline with Perfect Binders, Hard-Cover Booklines etc.
- in the lower and medium speed range
- also manual feeding is possible.

### Capacity

up to 45 cycles/min.  
= 2700 single copies or  
5400 products in piles of 2,  
8100 products in piles of 3 etc.

The model 45 i is the "smaller brother" of the larger, faster, heavier model 56 i and is, therefore, exceptional value in its speed range.

### Features

- Particular advantages of model 45 i are
- high productivity thanks to very short make-ready times (AP Autopositioning, plate tables, knife changing device etc.)
  - long lasting precise trimming for single copies or piles
  - product-caring transport system
  - simple operation
  - GS safety, CE conform
  - fully automatic lubrication
  - long lifetime.

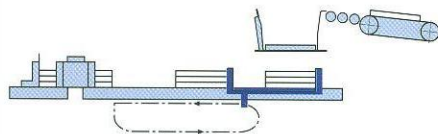
That is what makes this machine so economical when comparing price and performance.

You will find technical details on page 7 of this leaflet.

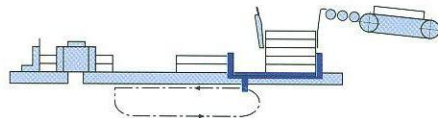
### Mode of operation of the automatic infeed

An integrated conveyor transports the products into the stacker which can be used in two ways:

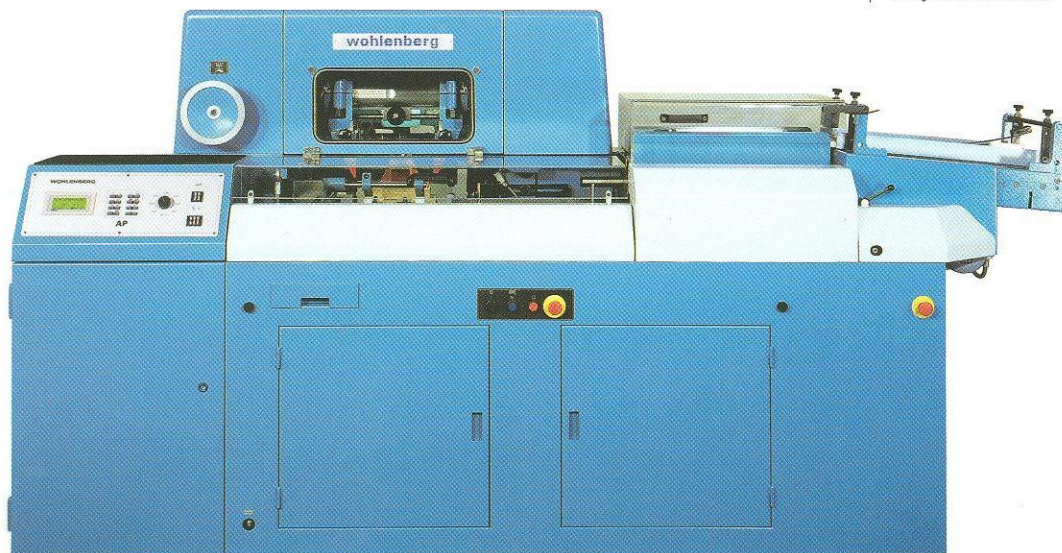
1. Thin products 2-10 mm thick are counted in the upper pre-stacker and then lowered to the machine table while the following pile is already compiled.



2. For thicker products from approx 10 mm = 1/2" on it is advisable to determine the pile height directly on the machine table by means of the height-adjustable pusher. Of course, also single copies can be handled.



Feeding into the trimming station, clamping, trimming and ejection are fully automatic.





# Three-Knife Trimmer trim-tec 56 i

## with integrated Counter-Stacker

### Field of operation

- inline with Perfect Binders, Hard-Cover Booklines etc.
- in the medium and upper speed range
- also manual feeding is possible

### Capacity

up to 56 cycles/min.  
= 3360 single copies or  
6720 products in piles of 2,  
10080 products in piles of 3.

Model 56 i is a very robust Three-Knife Trimmer. It is of the same construction as its sister model 56 o, the only difference being in the automatic infeed and consequently in the field of operation.

### Features

- The superior Wohlenberg trimming technology guarantees precision, neat trimming for single copies and piles. For a long time.
- Higher productivity thanks to faster knife sequence and to extremely short make-ready-time with motorized Auto-positioning, micro-adjustment with Quickset, plate-table system, knife-changing device, ejector presetting device etc.
- The transport system handles very gently even difficult material.
- Safety for operator and machine, GS and CE conform. Overload devices.

- Long life thanks to robust construction and fully automatic lubrication.

You will find technical details on page 7 of this leaflet.

### Mode of operation of the automatic infeed

The mode of operation is identical to model trim-tec 45 i. The higher speed of the 56 i requires, however, respective technical means.





# Three-Knife Trimmer trim-tec 56 o

## with automatic infeed

### Field of operation

- as self-contained unit with manual feeding, or
- inline in any kind of production line, and in a splitting and trimming flowline with Wohlenberg Book-Splitter TS 12
- manual feeding is also possible even when the 56 o is part of an inline.

### Capacity

up to 56 cycles/min.  
= 3360 single copies or  
6720 products in piles of 2,  
10080 products in piles of 3.

Because of the unique automatic infeed this model 56 o is considered the most versatile Three-Knife Trimmer. For piling products inline, a separate Counter-Stacker is necessary, f.i. Wohlenberg ZS 12. The construction of this model 56 o is the same as of its sister model 56 i, the only difference being in the automatic infeed and consequently in the field of operation.

### Features

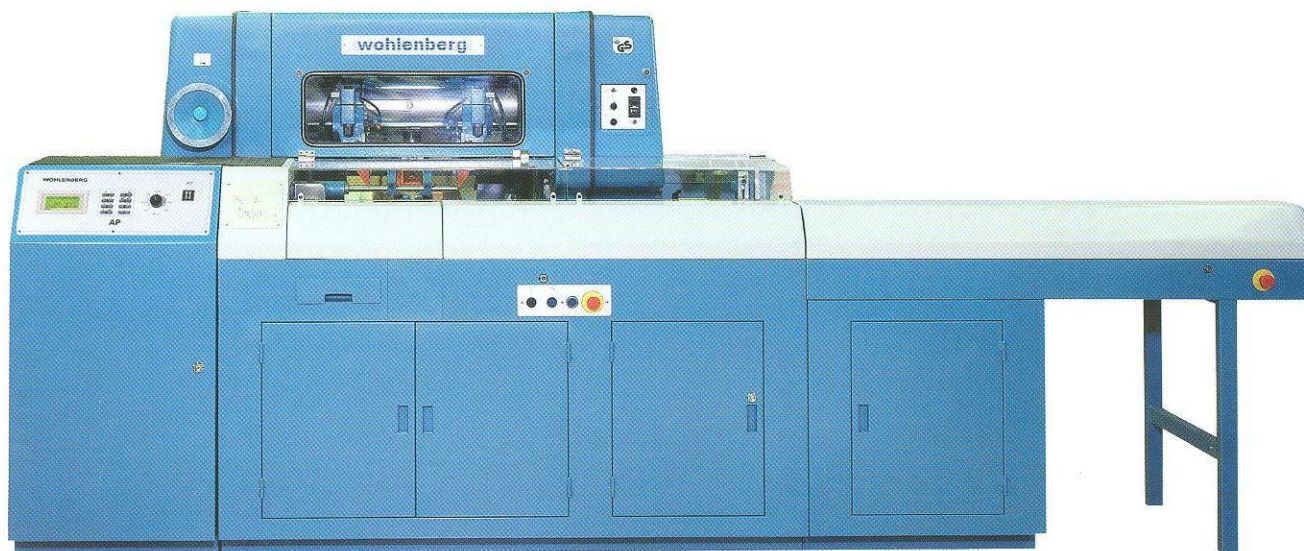
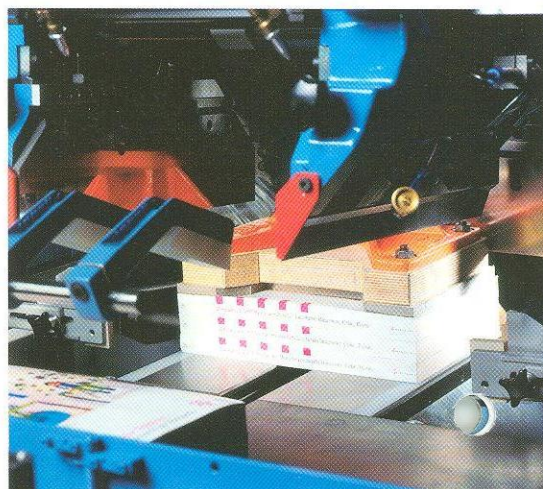
- Same as trim-tec 56 i:
- superior Wohlenberg trimming technology,
  - extremely short make-ready for higher productivity
  - transport system for gentle handling of products
  - safety for operator and machine, GS and CE conform
  - long life.

You will find technical details on page 7 of this leaflet.

### Mode of operation of the automatic infeed

A 1500 mm (5 ft.) long conveyor transports the manually fed or inline arriving products into the synchronisation station. Here, the products are synchronised into the cycling of the machine, gently brought into the infeed gauge and into the trimming station, clamped, trimmed and delivered. Single copies or piles.

Trim-tec 56 o handles everything: small or large, thin or thick products, single or in piles.





# Technical details

## trim-tec 45 i, 56 i and 56 o

### The trimming technology

- swinging shear cut on all three knives against cutting sticks
- precise, ripple-free cut for single copies or piles
- product-flow depending automatic speed control
- programmable cut- and production-counters
- compression-spring clamp mechanism, pressure adjustable during operation
- offcut disposal system: offcut blower with wide air jets on all knives, offcut deflector, steep offcut chute.

### The transport system

More sensitive materials and at the same time higher quality demands require new solutions:

- stainless pearl-lustre finish table-surfaces and airfilm in order to avoid marking of products
- gentle movements of all transport mechanisms
- lifting of products in the infeed gauge in order to avoid markings
- two-speed transport (slow infeed, fast return) and a hold-down system avoid covers tilting upward
- precise positioning of products before they reach the trimming station
- after trimming: four-sided gripper-system for smooth delivery
- synchronised speed of machine and delivery conveyor.

### Extremely short make-ready

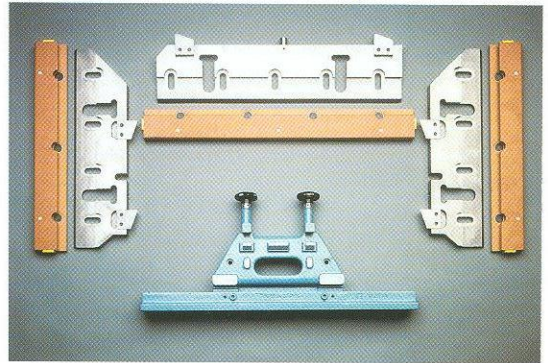
The benefit: More productivity.

- AP Autopositioning: motorized automatic indexing into size and knife change positions,
- Quickset: micro adjustment to digital scales for book height, width, head trim and pile height – even when the machine is running without interruption of production (only for 56 i and 56 o)
- plate table system for preparation outside of machine, plate change in two minutes
- change of all three knives in three minutes with quick-change cassettes which are prepared outside of machine
- device for preadjustment of ejectors, outside of machine (only for 56 i and 56 o).

### Stability and machine life

- robust machine frame cast in one piece,
- hardened and ground gears running in an oilbath, Computer-engineered hardened cams for noiseless running and minimal wear
- most modern AC drive, frequency controlled
- fully automatic lubrication, there is not a single manual greasing point on the machine.

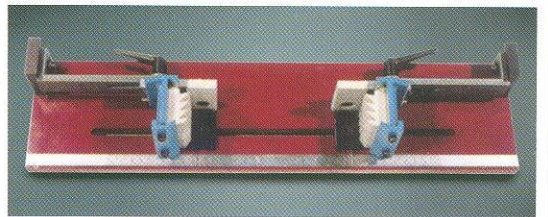
Even as second-hand machines Wohlenberg Three-Knife Trimmers enjoy high value because of their long-lasting stability and their modern technology.



Knife-changing system



Plate-table system



Ejector presetting system

### The safety system

- the machines conform to german GS and european CE regulations
- fully enclosed construction, however well accessible through large doors and plexiglas covers
- emergency switches around the machine with optical indication
- several overload devices avoid breaking of parts.



# Three-Knife Trimmer 30 o

## with manual feeding

### Field of operation

- for the production of small and medium runs, for books, booklets, brochures, magazines, single sheets etc.
- for difficult products, very large or small, thick or thin.

### Capacity

- 20-30 cycles/min  
mechanical speed

The model trim-tec 30 o is a three knife trimmer for the finishing of short and medium editions. The over-all design of this Wohlenberg Three-Knife Trimmer is for free-standing, manual hand feeding only.

### Features

Particular advantages of the model trim-tec 30 are

- longevity
- superior Wohlenberg trimming technology
- fully automatic central lubrication
- extremely short make-ready time for higher productivity

Technical details are listed on page 9

### Mode of operation with manual feeding

The products are manually fed directly into the infeed carriage. The exact positioning is registered by a photocell. The infeed gripper closes with low safety pressure so that the product pile is not distorted..

With two hands (safety regulation) the following automatic cycle is released: preclamping, feeding into the machine, main clamp, trimming and delivery by a gripper system onto a conveyor belt.





# Technical Details

## trim-tec 30 o

### The trimming technology

- swinging shear cut on all three knives against cutting sticks, precise, ripple-free cut for single copies or piles
- programmable cut- and production counters inclusive
- cam-controlled double spring clamping for gentle pressure application
- trimming station free from off-cuts
- precise positioning in the trimming station – no extra adjustment elements required

### Stability and lifetime

- rigid machine frame cast in one piece
- hardened and ground gears in oil bath, computer-designed cams for low-noise running and reduced wear
- fully automatic central lubrication, no manual greasing point.

### Extremely short make-ready times

The benefit: higher productivity

- AP autopositioning: motorized automatic indexing for size and knife change positions
- change of all three knives in three minutes with quick-change cassettes which are prepared outside of the machine

### The transport system

More sensitive materials and at the same time higher quality demands require new solutions:

- two-speed transport (slow infeed, fast return)
- delivery conveyor 1,6 m

### The safety system

- the machine conforms to German GS safety regulations with CE-certificate
- fully enclosed construction, however well accessible through interlocked perspex covers
- emergency switches around the machine with centralised optical indication
- several overload devices avoid breaking of parts

### Optional Equipment

- two-up device: for splitting and final trimming of two-up books up to a product thickness of 10 mm
- off-cut blower
- silicon spraying device
- pneumatic head gauge
- spine clamping and cutting device
- small size execution

Additional equipment upon request



Top solution: change of all three knives in three minutes only



# Wohlenberg Three-Knife Trimmers

in systems



Wohlenberg Splitting and Trimming Line



Wohlenberg Perfect Binding System with Three-Knife Trimmer

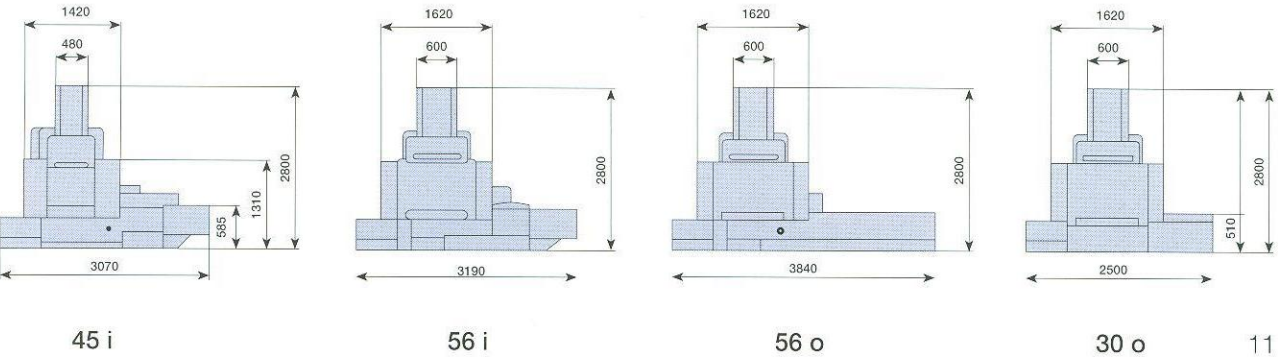


# Three-Knife Trimmers trim-tec

## Standard and optional equipment

Modell	trim-tec	45 i	56 i	56 o	30 o
Complete electrical equipment for 400 volts, 50 cycles		●	●	●	●
Complete electrical equipment for other specifications		○	○	○	○
Interior illumination		●	●	●	●
2 sets of knives in protection box		●	●	●	●
Spare knives		○	○	○	○
2 set knife protection bars		●	●	●	●
Knife-changing device		●	●	●	○
3 sets of plastic cutting sticks		●	●	●	●
Spare cutting sticks		○	○	○	○
1 set cutting tables (flash tables) in box		●	●	●	●
Quickset		—	●	●	—
Auto-Positionierung (AP)		●	●	●	●
1 set clamp plates and holders		●	●	●	●
1 set two-side usable infeed grippers		●	●	●	●
Cutting table extension for extreme wide front-cut		●	●	●	●
Air valves at the knife bars		●	●	●	●
Pneumatic cover hold-down for connection to compressed air		●	●	●	—
Exit rollers/offcut trap		○	○	○	○
Tool cabinet		○	○	○	○
Tilttable side gauge		○	○	○	○
Automatically compensating head gauge		—	—	○	○
Spine clamping and cutting device <sup>1)</sup>		○	○	○	○
No book – no cut control		●	●	●	●
Silicone spraying device for inner and outer side of knives, programmable		○	○	○	○
Special device for folded signatures		—	—	○	—
Compressor (obligatory if no central air available)		○	○	○	○
Delivery conveyor (1,6 m/63")		●	●	●	●
Delivery conveyor (1,2 m/47" oder 3 m/128")		○	○	○	○
Stepless adjustment of delivery conveyor speed		○	●	●	●
Destacker for trimmed piles		○	○	○	○
Special small size I (3 <sup>15</sup> / <sub>16</sub> x 2 <sup>9</sup> / <sub>16</sub> ins) trimmed		○	○	○	—
Special small size II (2 <sup>9</sup> / <sub>16</sub> x 2 <sup>9</sup> / <sub>16</sub> ins) trimmed		—	—	○	○
Cutting height 125 mm/5" instead of 100 mm/4"		—	—	○	—
Special chute for offcut suction		○	○	○	○
Special grippers for difficult material		○	○	○	○
Operating tools		●	●	●	●
Operating instructions and spare parts list		●	●	●	●

● = standard equipment ○ = optional — = not available  
<sup>1)</sup> Pile height reduced to 2 1/2". Equipment may differ in various countries.





# Three-Knife Trimmers trim-tec

## Technical Data

Model		trim-tec	45 i	56 i	56 o	30 o
Mech. speed, steplessly adjustable	p. min.		12-45	20-56	20-56	20-30
Table height	mm		900	900	900	900
	ins		35 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>
Power requirements	kVA		8	11	10	7
Air requirements at 6 bar (80 lbs/in <sup>2</sup> )	m <sup>3</sup> /h		16	23	23	16
	yd <sup>3</sup> /h		21	30	30	21
Net weight, approx.	kg		3600	4400	3800	2980
	lbs		7900	9700	8360	6570
<b>Sizes</b>						
max. height of pile	mm		100	100	100/125*	100
	ins		4	4	4/5*	4
min. height of pile	mm		10	10	10	10
	ins		3/8	3/8	3/8	3/8
max. clamp opening	mm		130	130	130/165	130
	ins		5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub> /6 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>8</sub>
infeed gripper stroke	mm		40	40	40	40
	ins		1 <sup>9</sup> / <sub>16</sub>	1 <sup>9</sup> / <sub>16</sub>	1 <sup>9</sup> / <sub>16</sub>	1 <sup>9</sup> / <sub>16</sub>
min. book thickness	mm		2	2	2	1
	ins		5/64	5/64	5/64	3/64
max. untrimmed size	mm		410 x 310	410 x 310	410 x 310	460 x 315
	ins		16 <sup>1</sup> / <sub>8</sub> x 12 <sup>3</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>8</sub> x 12 <sup>3</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>8</sub> x 12 <sup>3</sup> / <sub>16</sub>	18 <sup>1</sup> / <sub>8</sub> x 12 <sup>3</sup> / <sub>8</sub>
max. trimmed size	mm		380 x 300	380 x 300	380 x 300	440 x 300
	ins		15 x 11 <sup>13</sup> / <sub>16</sub>	15 x 11 <sup>13</sup> / <sub>16</sub>	15 x 11 <sup>13</sup> / <sub>16</sub>	16 <sup>5</sup> / <sub>16</sub> x 11 <sup>13</sup> / <sub>16</sub>
min. trimmed size	mm		145 x 100	145 x 100	145 x 90	80 x 70
	ins		5 <sup>3</sup> / <sub>4</sub> x 4	5 <sup>3</sup> / <sub>4</sub> x 4	5 <sup>3</sup> / <sub>4</sub> x 3 <sup>9</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub>
<b>Small size I (optional)</b>						
min. untrimmed size	mm		105 x 70	105 x 70	105 x 70	—
	ins		4 <sup>1</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub>	—
min. trimmed size	mm		100 x 65	100 x 65	100 x 65	—
	ins		4 x 2 <sup>1</sup> / <sub>2</sub>	4 x 2 <sup>1</sup> / <sub>2</sub>	4 x 2 <sup>1</sup> / <sub>2</sub>	—
<b>Small size II (optional)</b>						
min. untrimmed size	mm		—	—	70 x 70	70 x 70
	ins		—	—	2 <sup>3</sup> / <sub>4</sub> x 2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub> x 2 <sup>3</sup> / <sub>4</sub>
min. trimmed size	mm		—	—	65 x 65	65 x 65
	ins		—	—	2 <sup>9</sup> / <sub>16</sub> x 2 <sup>9</sup> / <sub>16</sub>	2 <sup>9</sup> / <sub>16</sub> x 2 <sup>9</sup> / <sub>16</sub>

\* 125 mm/5" max. height of pile = optional

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The pioneers of precision trimming

**wohlenberg**

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