

W+D 320 BE

Flexible, short-run
envelope production system



W+D

The ideal investment for short-run and in-house envelope production

The **W+D 320 BE** envelope production system is the perfect solution for those commercial printers, direct mailers, on-line print and envelope distribution businesses looking to in-source envelope production as well as for envelope manufacturers looking for a highly flexible, short-run production better suited for rapidly changing customer demand and job mix.



Features

- / In-line cutting, foil patching, scoring and perforating capabilities
- / All types of envelopes and pockets for a wide size range
- / Speed up to 21,000 envelopes per hour
- / Quality prioritized production
- / EasyCut magnetic cylinder technology as a standard component
- / Inserting-style envelopes with inside / outside flap
- / All types of seal gumming: Seal flaps with remoistenable gumming, self-seal gumming and hot-melt pressure-sensitive gumming
- / Ideal for converting pre-printed material
- / Single or multiple windows

Advantages

- / The perfect get-started envelope machine
- / Space-efficient compact footprint
- / Easy to learn and operate
- / Superior product quality
- / Cost efficient in-line process
- / Low cost individual size tools
- / Hot-melt pressure-sensitive gumming available
- / Real-time remote diagnostic support
- / Odd size product shapes and special windows
- / Capability to work from rectangular sheets



Touch-screen for system control

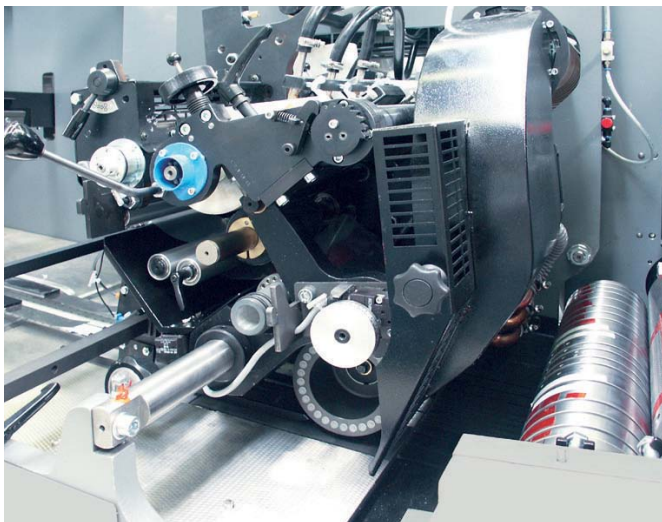


Blank feeder for blanks or rectangular sheets

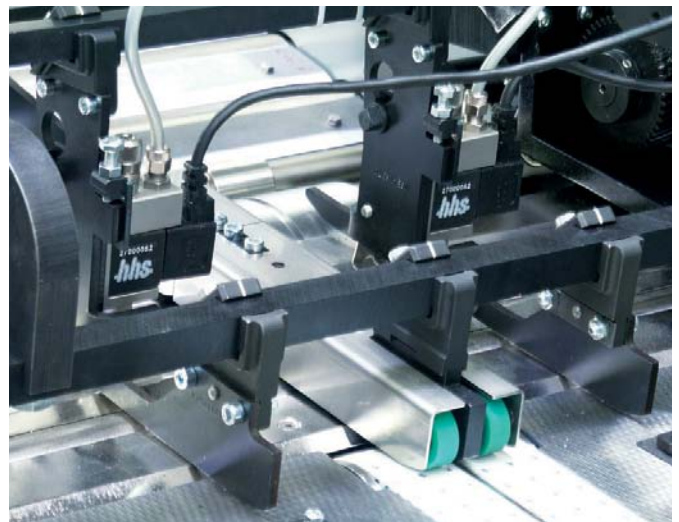
Standard components

- / Blank feeder for blanks or rectangular sheets
- / Scoring section
- / Side flap folding section for booklets
- / Window material patching section
- / Collating and seal flap gumming section for remoistenable and self seal gumming

- / Nozzle gumming for side flaps when producing booklets
- / EasyCut magnet cylinder technology
- / Display for entries, inspections, information and integrated pre-selection counter



Window material patching section



Nozzle gumming for side flaps when producing booklets



Flexo printing unit for blanks or rectangular sheets



Hot-melt pressure-sensitive gumming

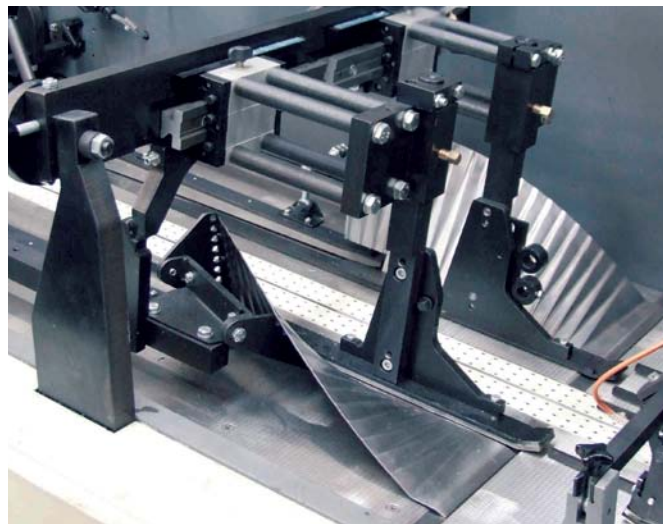
Optional components

- / Gumming section for envelope side flaps and pocket bottom flap
- / Section to apply hot-melt pressure-sensitive gumming
- / Back-folding section for envelopes with latex application

- / Pocket component
- / Auxiliary parts: vacuum pumps, exhauster, compressor, etc.
- / Flexo printing unit for inside and outside printing



Gumming section for bottom flap and side flaps

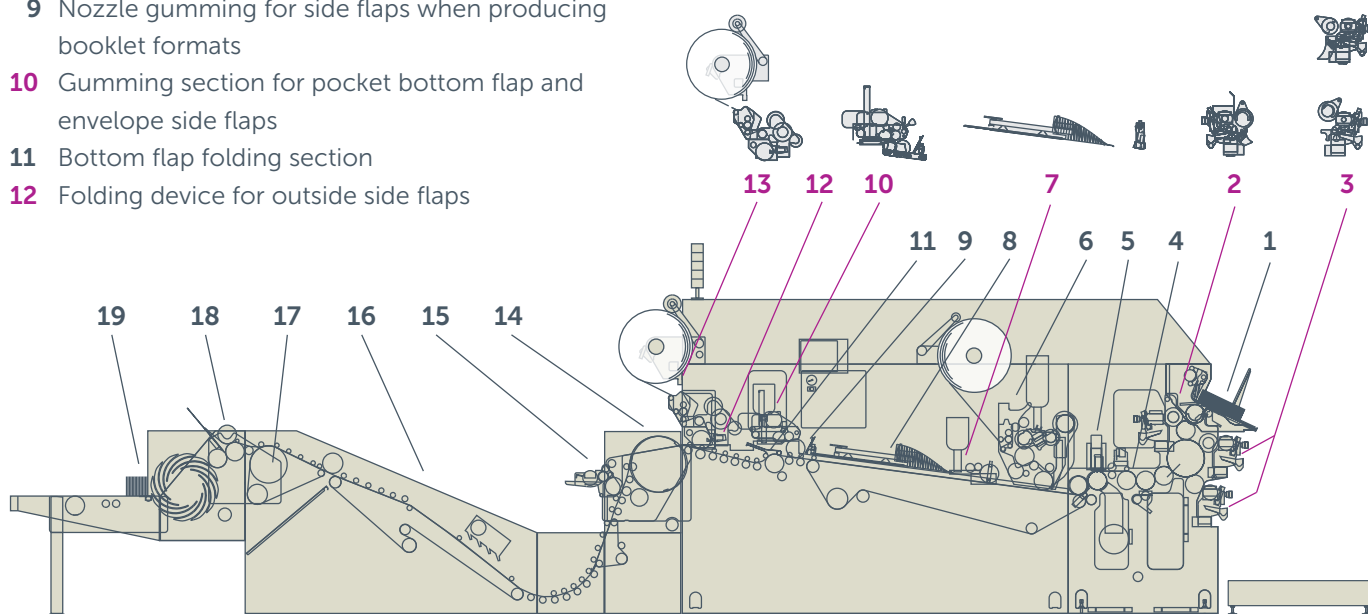


Folding device to fold the side flaps for pockets

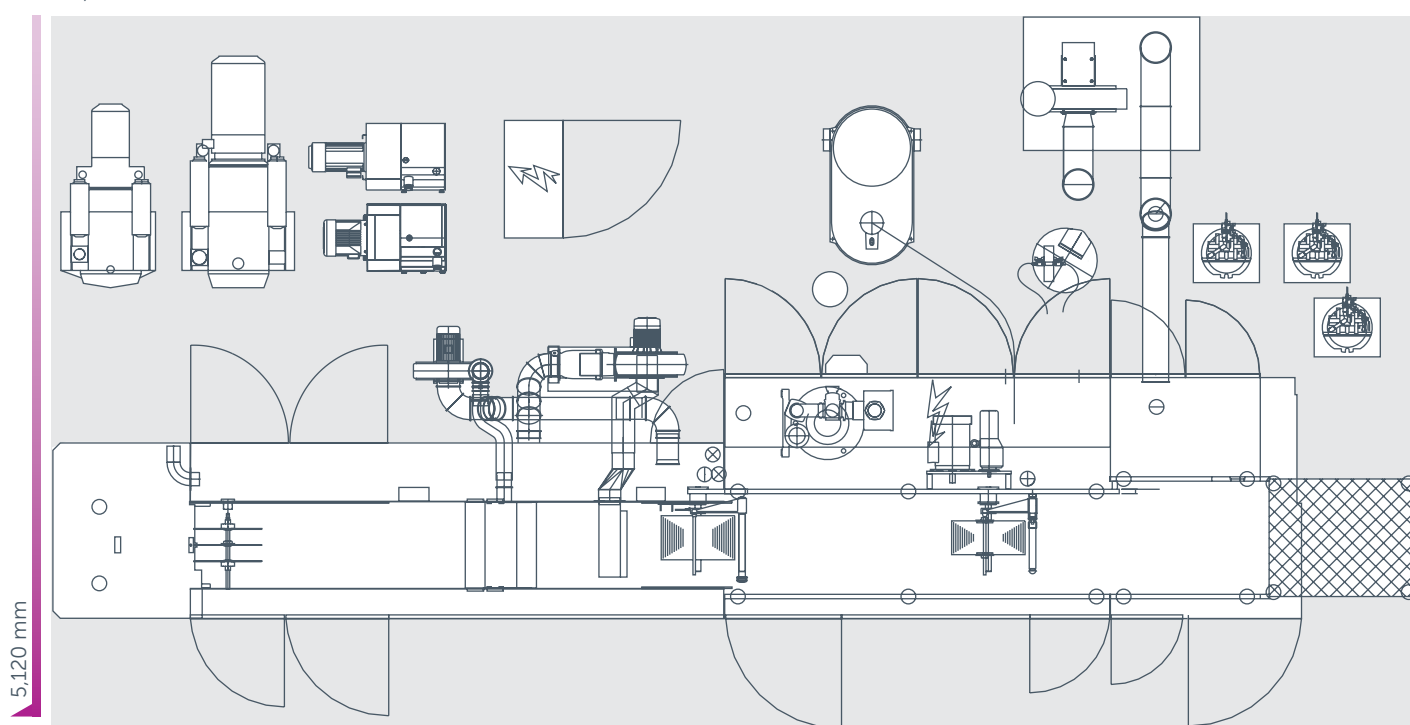
Machine layout components

- | | |
|---|--|
| 1 Blank feeder | 13 Hot-melt pressure-sensitive gumming section |
| 2 Flexo printing unit for inside printing | 14 Staggering section |
| 3 Flexo printing units for outside printing | 15 Seal flap gumming section |
| 4 Longitudinal and cross scoring section | 16 Drying section |
| 5 Cutting section for window cut and complete cut | 17 Aligner section |
| 6 Window material patching section | 18 Seal flap folding section |
| 7 Nozzle gumming and folding device for side flaps when producing pockets | 19 Delivery |
| 8 Side flap folding section | |
| 9 Nozzle gumming for side flaps when producing booklet formats | |
| 10 Gumming section for pocket bottom flap and envelope side flaps | |
| 11 Bottom flap folding section | |
| 12 Folding device for outside side flaps | |

● optional machine components



9,258 mm



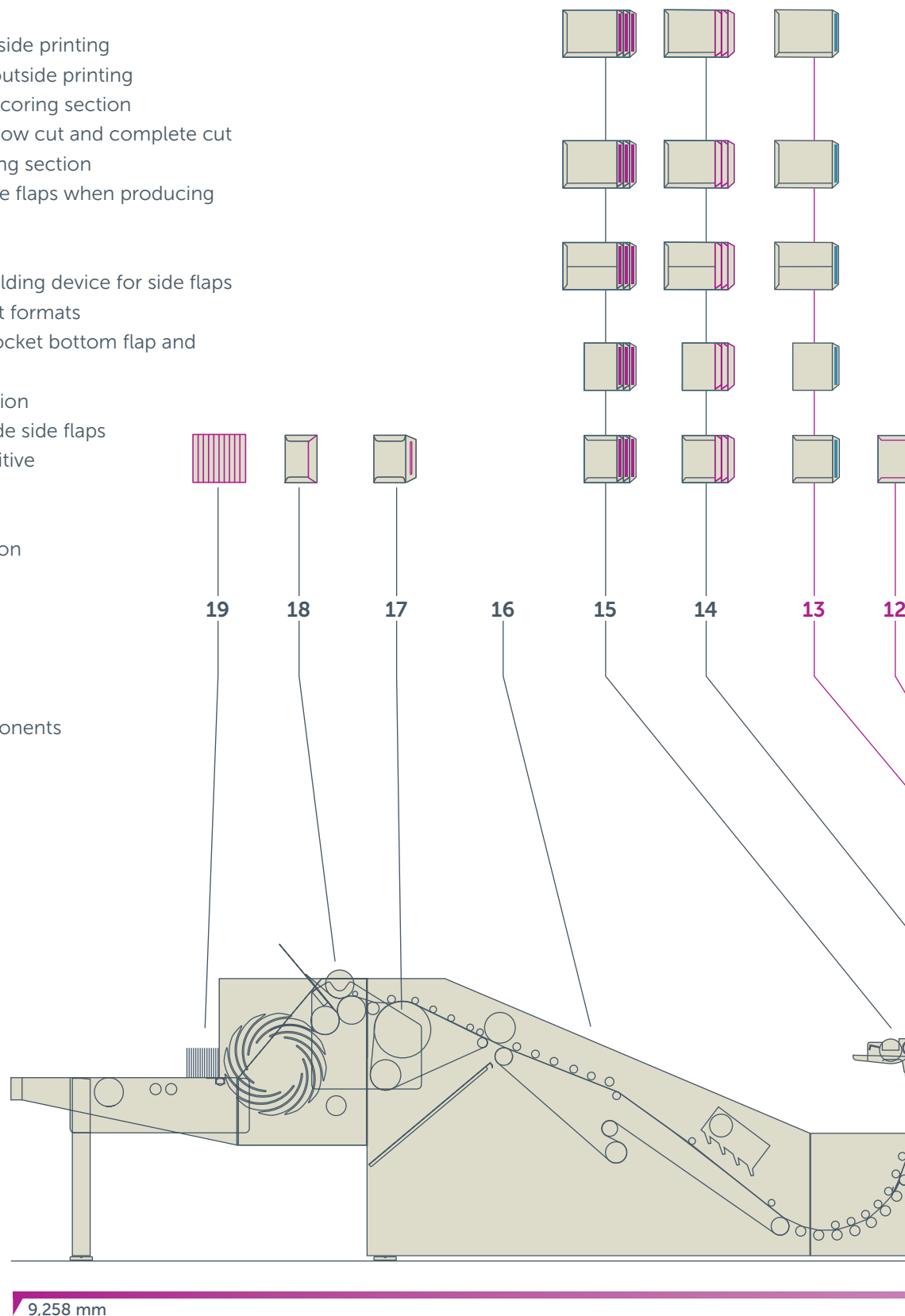
5,120 mm

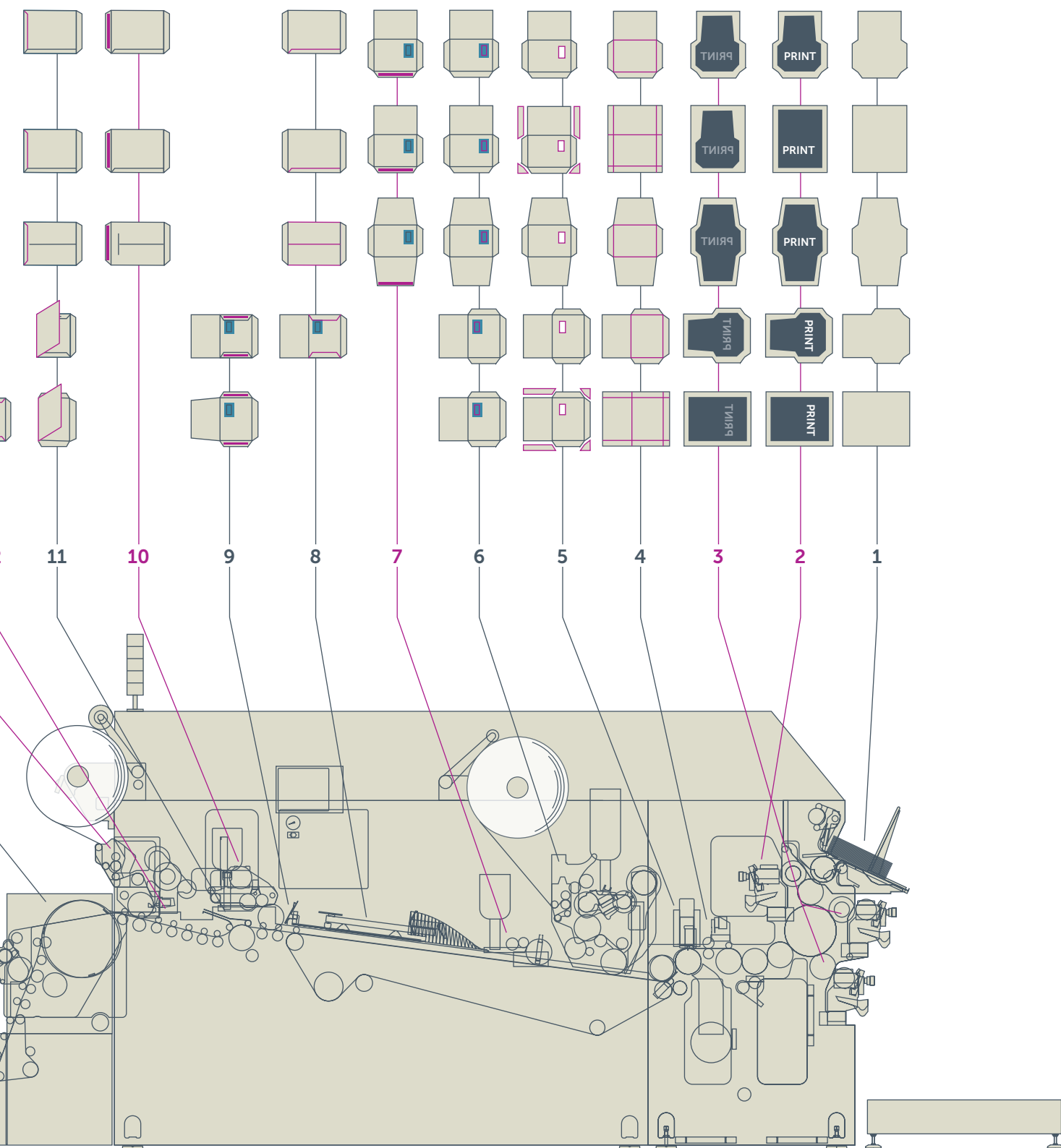
9,258 mm

Machine layout

- 1 Blank feeder
- 2 Flexo printing unit for inside printing
- 3 Flexo printing units for outside printing
- 4 Longitudinal and cross scoring section
- 5 Cutting section for window cut and complete cut
- 6 Window material patching section
- 7 Nozzle gumming for side flaps when producing pockets
- 8 Side flap folding section
- 9 Nozzle gumming and folding device for side flaps when producing booklet formats
- 10 Gumming section for pocket bottom flap and envelope side flaps
- 11 Bottom flap folding section
- 12 Folding device for outside side flaps
- 13 Hot-melt pressure-sensitive gumming section
- 14 Staggering section
- 15 Seal flap gumming section
- 16 Drying section
- 17 Aligner section
- 18 Seal flap folding section
- 19 Delivery

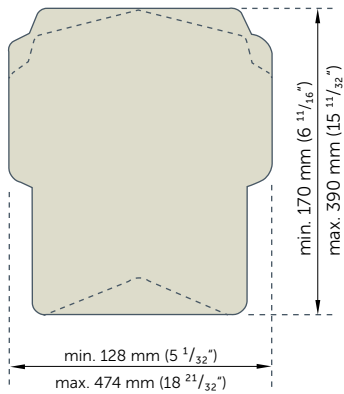
● optional machine components



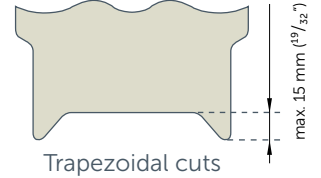
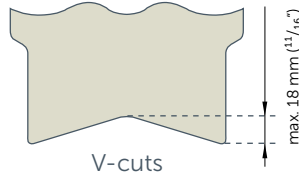


Dimensions and Formats

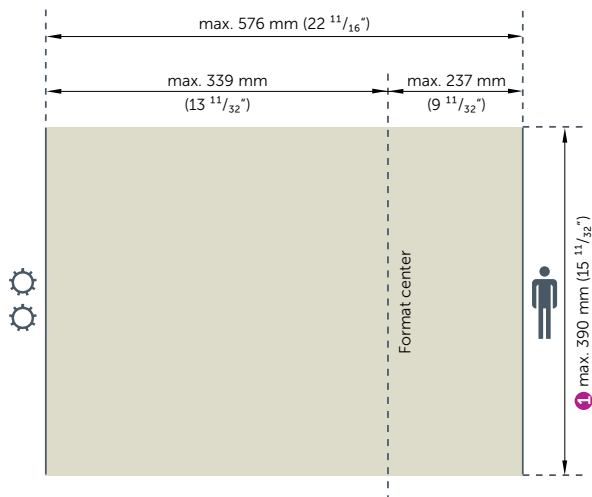
Blank format



Cut-out depth

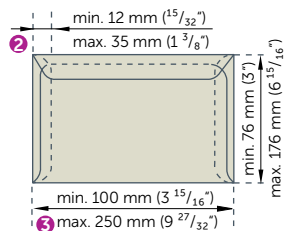


Complete cut

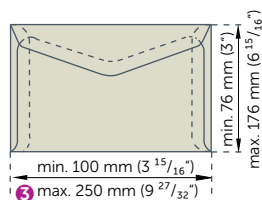


End format

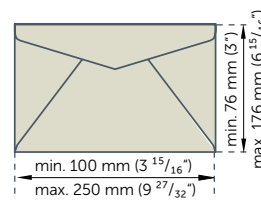
Envelopes



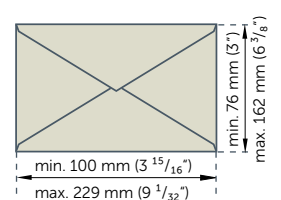
Booklet



Inserting-style



Commercial-style ④



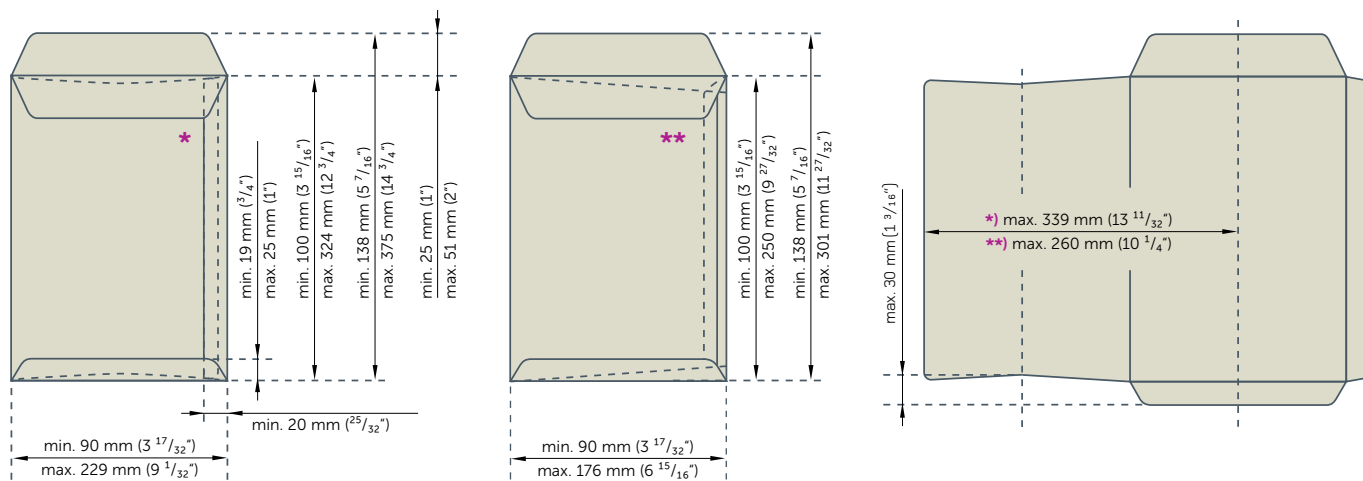
Diamond-style ④

- ① In case of a complete cut from a rectangular sheet with circumferential contour the cut-out height will be reduced to 373 mm (14 11/16")
- ② Outside side flaps are possible with 25 mm (1") – special folding tools
- ③ Maximum size width in respect to the width of the side flaps
- ④ Only with option „Gumming section for bottom flap and side flaps“

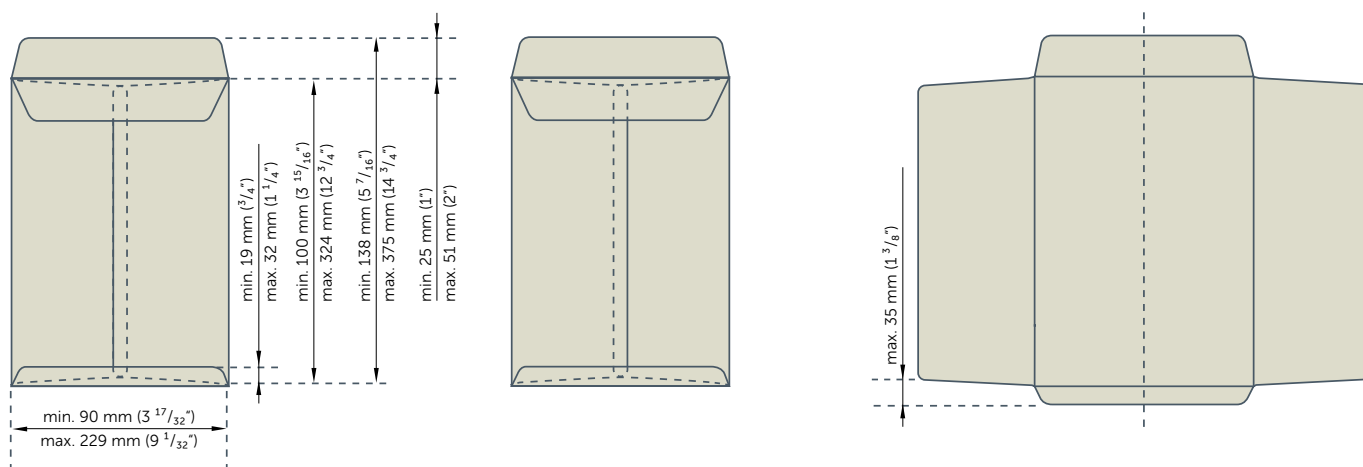
All binding data concerning the dimensions and formats for each machine type can be found in the performance data sheet.

End format

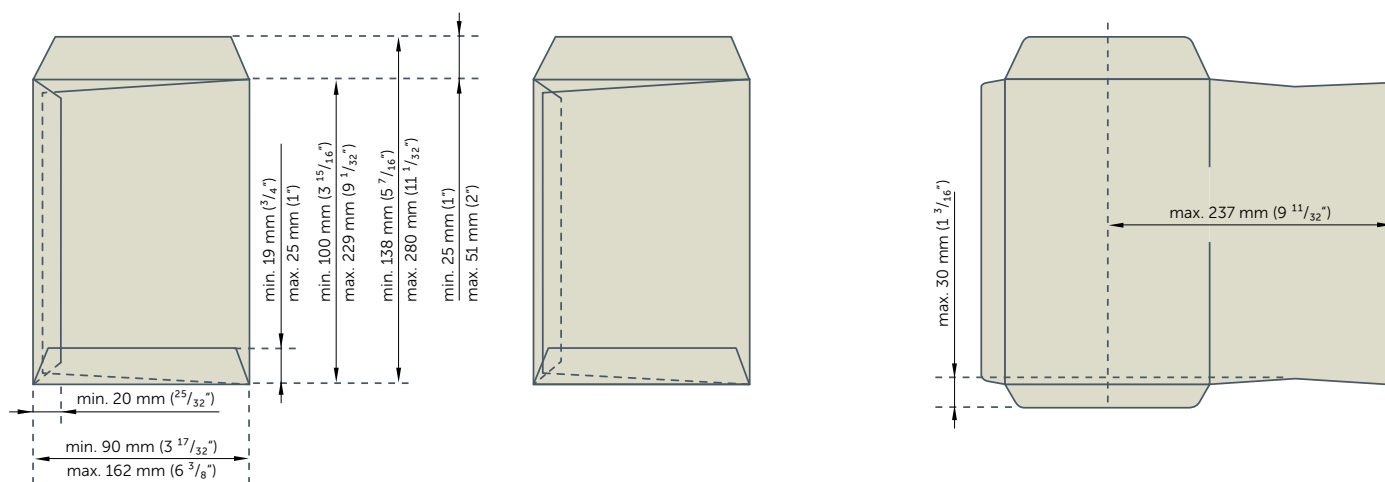
Pockets



Side seam right hand side



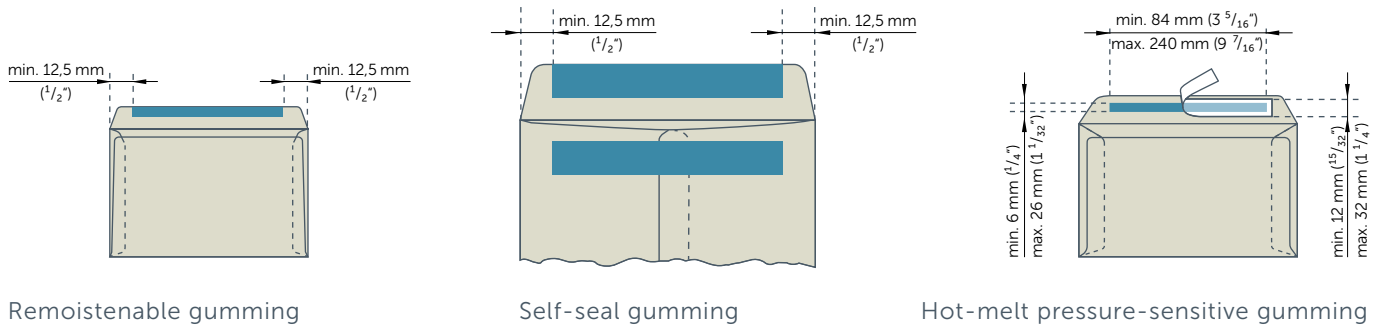
Center seam



Side seam left hand side

Dimensions and Formats

Seal flap gumming

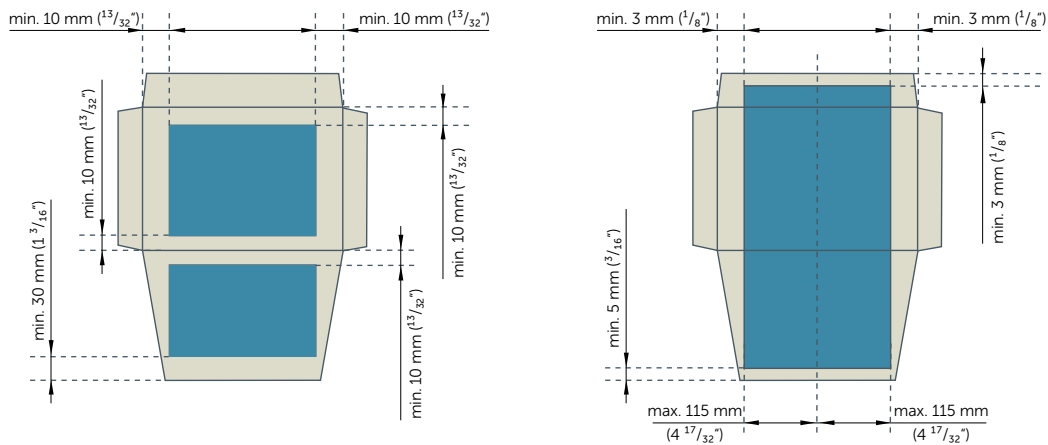


Remoistenable gumming

Self-seal gumming

Hot-melt pressure-sensitive gumming

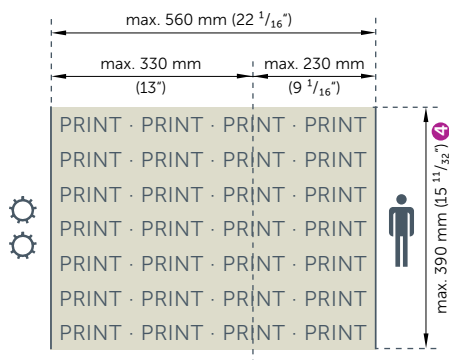
Window range



Cutting area

Patching area

Printing range



Flexo printing units for inside and outside printing

④ Seamless plate cylinders – when using plate cylinder with mounting system, the printing length is reduced to 370 mm ($14 \frac{9}{16}$ ")

All binding data concerning the dimensions and formats for each machine type can be found in the performance data sheet.

Technical Specification

Type			BE	
Maximum output per min	Envelopes with remoistenable gumming or hot-melt pressure-sensitive gumming		350 pieces	
	Envelopes with self-seal gumming		250 pieces	
	Pockets size up to B5		250 pieces	
	Pockets size larger than B5		150 pieces	
Paper weight	Envelopes		60 – 120 g/m ² (16 – 32 lb) ❶	
	Pockets		80 – 120 g/m ² (21 – 32 lb)	
Size ranges envelopes	Booklet		min. 76 mm (3") x 100 mm (3 15/16") – max. 176 mm (6 15/16") x 250 mm (9 27/32")	
	Commercial-style		min. 76 mm (3") x 100 mm (3 15/16") – max. 176 mm (6 15/16") x 250 mm (9 27/32")	
	Diamond-style		min. 76 mm (3") x 100 mm (3 15/16") – max. 162 mm (6 3/8") x 229 mm (9 1/32")	
Size height	Envelopes with open seal flap		min. 100 mm (3 15/16") – max. 375 mm (15 3/4")	
Size ranges pocket	Side seam right hand side		min. 100 mm (3 15/16") x 90 mm (3 17/32") – max. 324 mm (12 3/4") x 229 mm (9 1/32") ❷	
	Center seam		min. 100 mm (3 15/16") x 90 mm (3 17/32") – max. 324 mm (12 3/4") x 229 mm (9 1/32")	
	Side seam left hand side		min. 100 mm (3 15/16") x 90 mm (3 17/32") – max. 229 mm (9 1/32") x 162 mm (6 3/8")	
Blank dimensions	Total length		min. 170 mm (6 11/16") – max. 390 mm (15 11/32")	
	Total width		min. 128 mm (5 1/32") – max. 474 mm (18 21/32")	
Window material	Window material reel	Diameter	max. 500 mm (20")	
		Width	min. 45 mm (1 25/32") – max. 230 mm (9 1/16")	
	Winding core inner diameter		70 – 77 mm (2 3/4" – 3 1/32")	
	Cut-off length		min. 36 mm (1 13/32") – max. 176 mm (6 15/16")	
Silicone paper	Silicone paper reel	Diameter	max. 500 mm (20")	
		Width	min. 90 mm (3 17/32") – max. 250 mm (9 27/32")	
	Winding core inner diameter		70 – 77 mm (2 3/4" – 3 1/32")	
	Protective strip cut-off length		min. 12 mm (15/32") – max. 32 mm (1 1/4")	
Printing length / blank	With full seamless cylinder		max. 390 mm (15 11/16")	
	With mounting system		max. 370 mm (14 9/16")	
Printing width / blank	Inside and outside printing		max. 560 mm (22 1/16")	
Dimensions and weight	Length		8,470 mm (27.8 ft)	
	Width		3,100 mm (10.2 ft)	
	Height		2,150 mm (7.1 ft)	
	Net weight		7,500 kg (16,535 lb)	
Compressed air	6 bar	with flexo printing units	max. 48 m ³ /h	
		without flexo printing units	max. 17 m ³ /h	
Vacuum requirement	0.6 bar		max. 890 m ³ /h	
Blowing air	0.8 bar		max. 140 m ³ /h	
Connected load (50Hz)	Basic machine		max. 42.5 kVA	
	Material suction		max. 7.5 kVA	
	Vacuum pumps		max. 42 kVA	
	Hot-melt pressure-sensitive gumming section		max. 6.25 kVA	
Noise emission	According to specification EN 15023		86.5 dB (A)	

❶ Complete cut from 80 g/m² (21 lb) and material thickness of 0,085 mm (0,0033")

❷ max. 250 mm (9 27/32") x 176 mm (6 15/16"), see page 9

All performance data published refers to the production of a defined reference product under certain circumstances reflecting a possible practice of use. The performances achieved in practice depend on a multitude of parameters which are beyond our control. This includes, amongst other factors, the condition of the raw materials to be processed, the shapes of the products, the air humidity and the ambient temperature. W+D reserves the right to make design changes and changes to the performance values.

Winkler+Dünnebier GmbH (W+D), part of global equipment manufacturer Barry-Wehmiller and its BW Converting Solutions platform of five industry leading brands, specializes in the design and manufacture of high-performance converting machinery for the tissue, nonwovens, hygiene, package-printing and bag-converting industries worldwide.

With more than 100 years of experience, W+D is the only engineering company to cover the entire envelope mail production value chain: from converting, printing and value ad enhancement systems for the manufacturing of envelopes to highly intelligent mail inserting technology. All with the aim to produce the most complex and personalized letter mail packages for postal system intake.

For more about W+D, visit w-d.de.

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BW Converting Solutions



ONE Global Team - Better Together



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