

WINKLER+ DÜNNEBIER

WD

349



Modular Envelope Machine





Modular Envelope Machine

HELIOS 349



The basic version of the W+D 320 allows the manufacture of booklets from blanks. Spraying nozzles for side flap gumming are installed.

The following options are available to increase the function of the machine

- * Flexo printing doctor blade units
- * Cutting section
- * Window patching section
- * Roller gumming unit for bottom and side flaps
- * Folding tools for outside side flaps
- * Seal flap gumming section with collating, drying run and aligning
- * Additional parts for the production of pockets
- * Pressure-sensitive gumming section

Products

- * Envelopes in booklet and wallet style with inside side flaps
- * Envelopes in diamond and commercial shape
- * Pockets with centre or side seam gumming up to format C4
- * Single or multiple windows
- * Envelopes with outside side flaps
- * Seal flaps with remoistenable- and self seal gum application
- * Hot melt pressure-sensitive gumming with protection strip

Flexibility and performance

- * Up to 350 envelopes/minute
- * Up to 250 pockets/minute (up to B5)
- * Up to 150 pockets/minute (larger than B5)
- * 2 flexo outside and 1 flexo inside print unit with W+D doctor blade chamber system
- * Cutting section for window cut or complete cut in 2 working widths. Equipped with patented EasyCut magnetic cylinder technology for flex dies.
- * Flexible and easy-to-operate window patching section for cut off lengths up to 176 mm

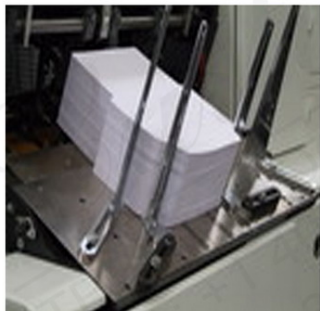




Product quality and operation

- * Display for entries, controls and information and integrated pre-selection counter
- * Manual format set-up and fine adjustment
- * Non-wearing and size-independent aligner section
- * Designed for multi shift operation
- * Compact and ergonomic design with integrated control cabinet
- * Modern for remote diagnostics
- * Easy access to all sections

Standard Components



Blank feed

Field proven blank feeder with reciprocating blowing nozzles for an optimized processing of different paper grades and blanks



Scoring section

Longitudinal- and cross scoring



Side flap folding section

With folding tools for booklets and suction belt transport for exactly folded envelopes



Nozzle gumming

Nozzle gumming for side flaps of booklets





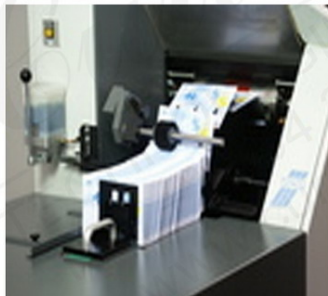
Modular Envelope Machine

HELIOS 320



Display

Display for entries, controls and information and integrated pre-selection counter

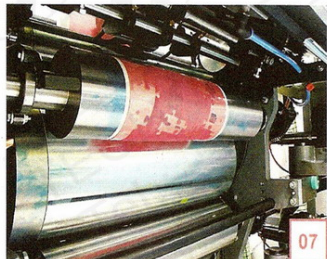


Delivery

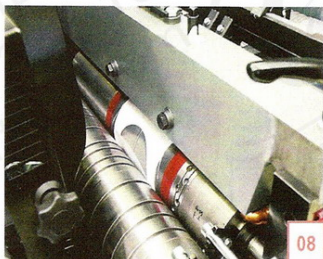
Multi slit disc delivery with ejector



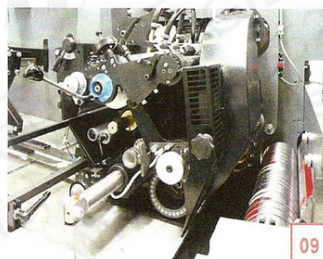
Optional modules



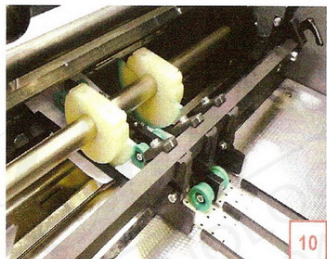
07



08



09



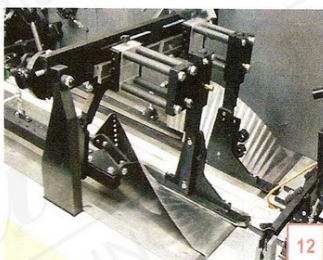
10



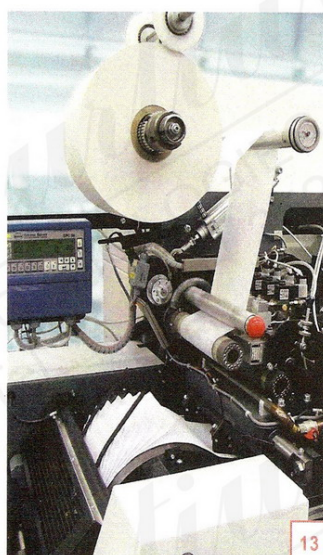
11/1



11/2



12



13

07 Flexo printing doctor blade units for inside and outside printing

08 Cutting section with patented **EasyCut** magnetic cylinder technology for flex dies for window and complete cut

09 Window material patching section

10 Roller gumming section for envelope

side flaps and pocket bottom flaps

11 Staggering and seal flap gumming section for remoistenable and self seal gumming (open seal flaps)

12 Folding tools to fold the side flaps for pockets

13 Section to apply pressure-sensitive strips (hot-melt)

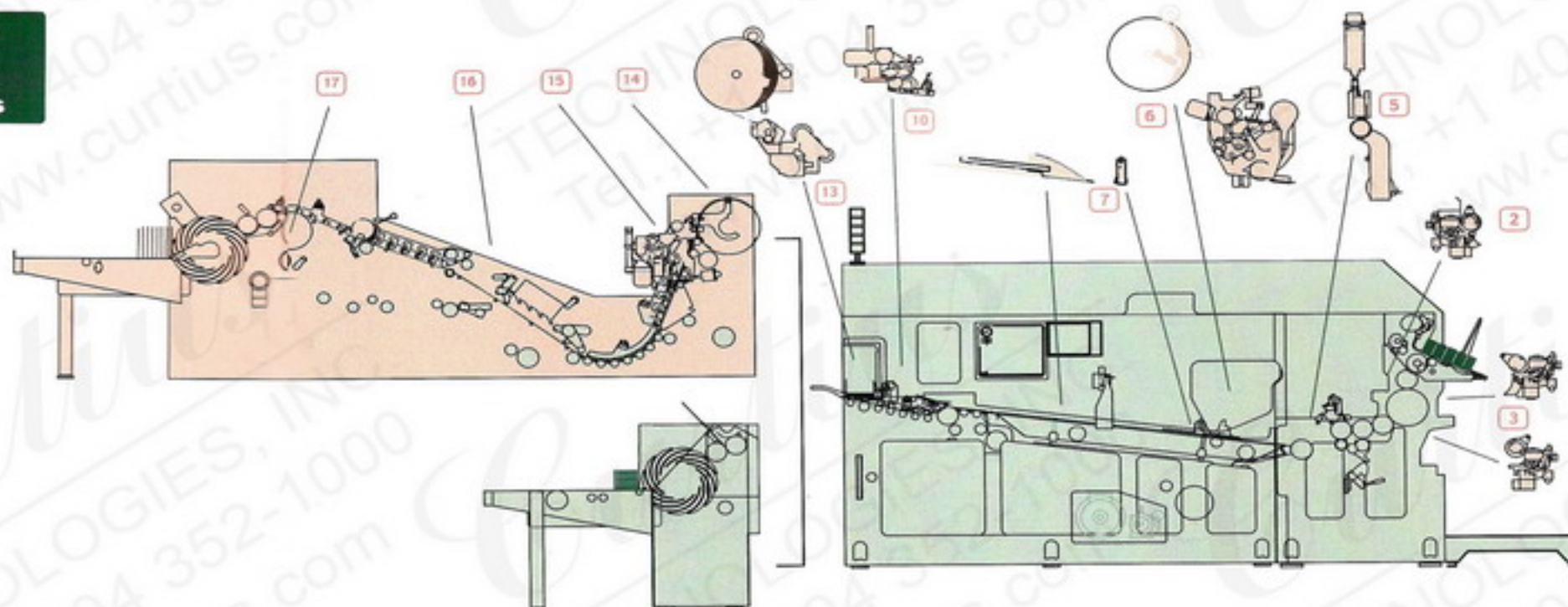




Modular Envelope Machine

HELIOS 320

W+D 320
basic
version
+ options

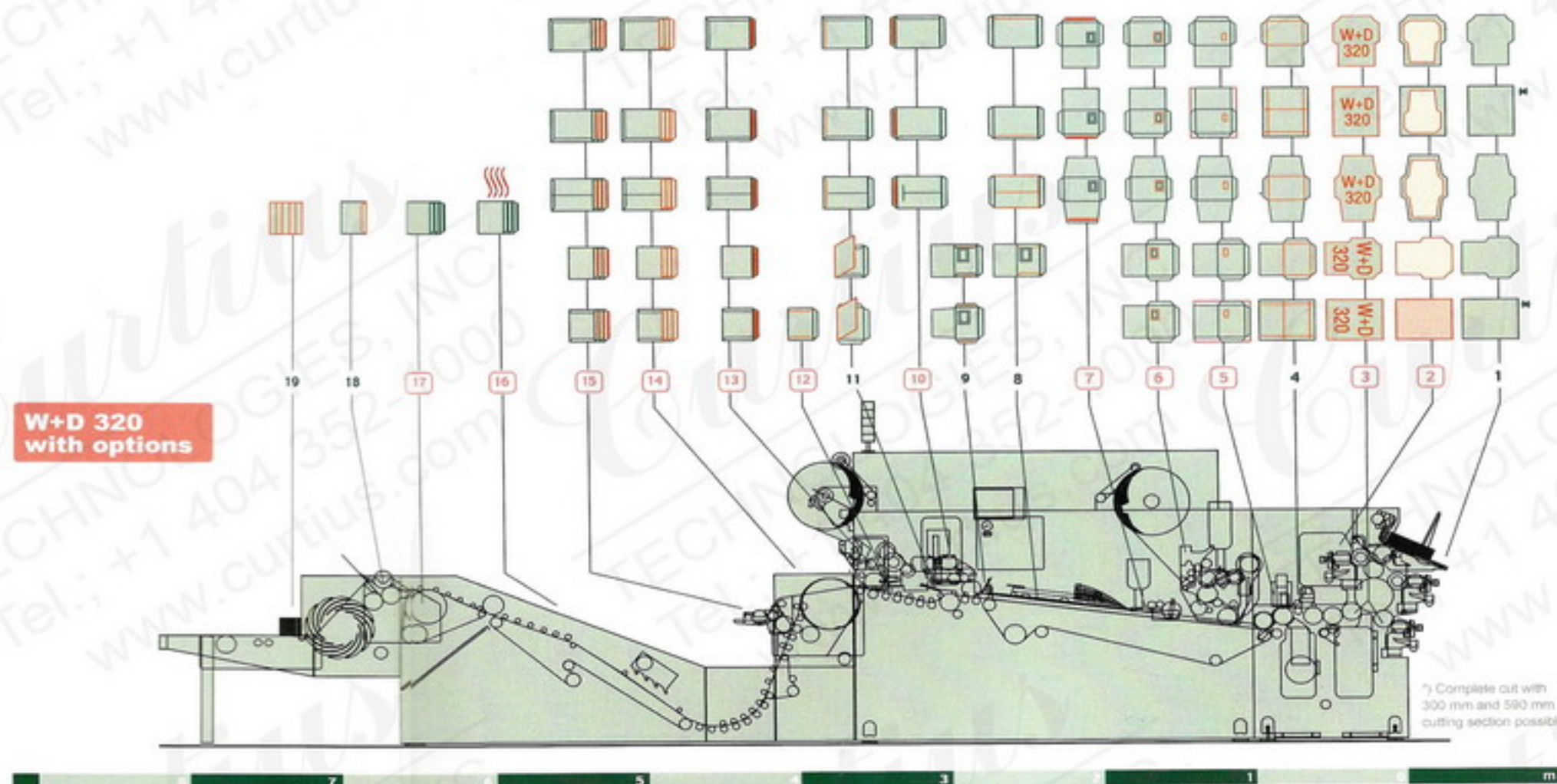


Standard components +

Optional machine modules

- 01 Blank feeder
- 02 Flexo doctor blade printing unit for inside printing
- 03 Flexo doctor blade printing units for outside printing
- 04 Longitudinal and cross scoring section
- 05 Cutting section for window cut or complete cut
- 06 Window patching section
- 07 Nozzle gumming for side flaps when producing pockets
- 08 Side flap folding section
- 09 Nozzle gumming for side flaps when producing booklet formats
- 10 Bottom and side flap gumming section for pockets, diamond and commercial style envelopes
- 11 Bottom flap folding section
- 12 Folding tools for outside side flaps
- 13 Hot-melt pressure-sensitive gumming section
- 14 Staggering section
- 15 Seal flap gumming section
- 16 Drying run
- 17 Aligner section
- 18 Seal flap folding section
- 19 Delivery

W+D 320
with options



* Complete cut with
300 mm and 590 mm
cutting section possible

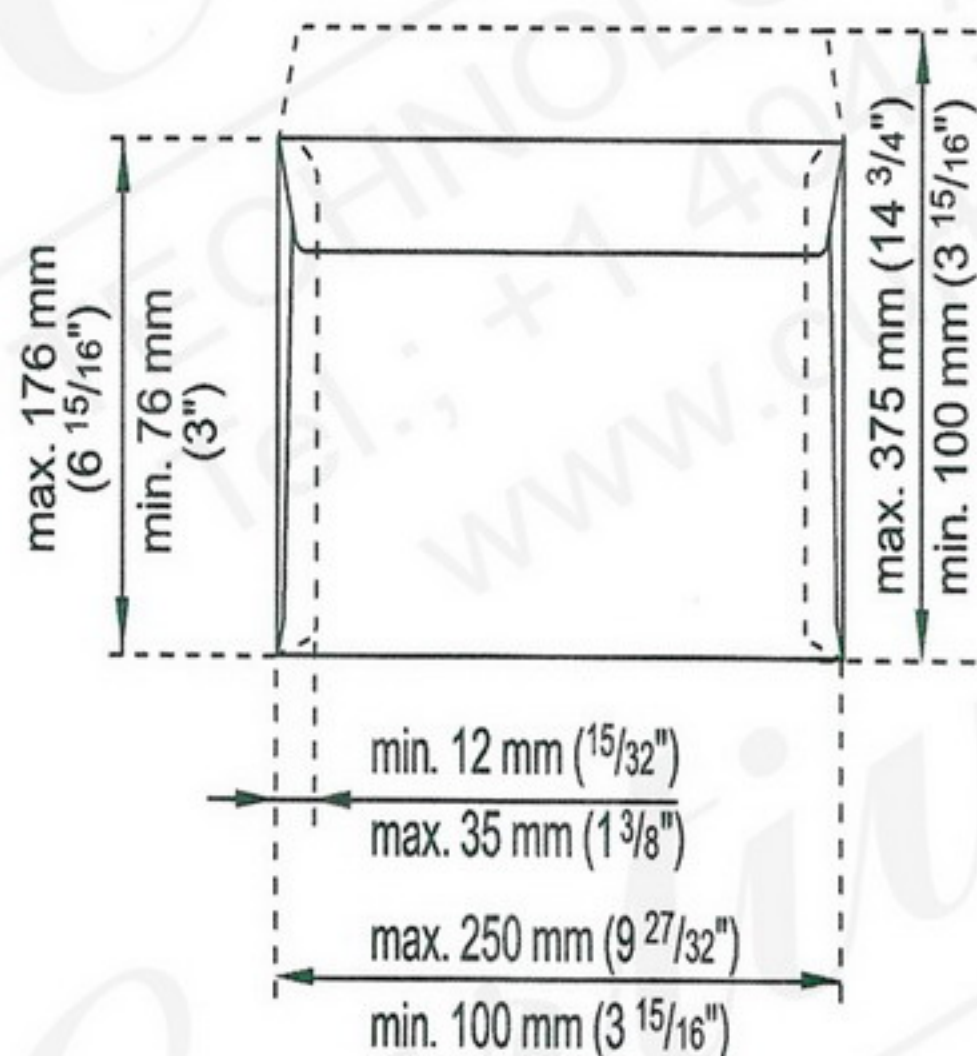




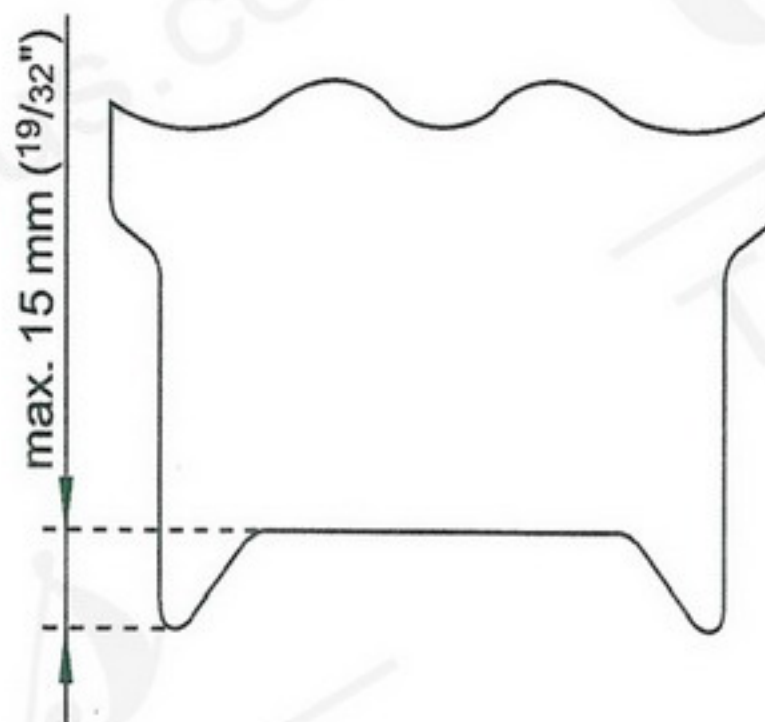
Modular Envelope Machine

HELIOS 320

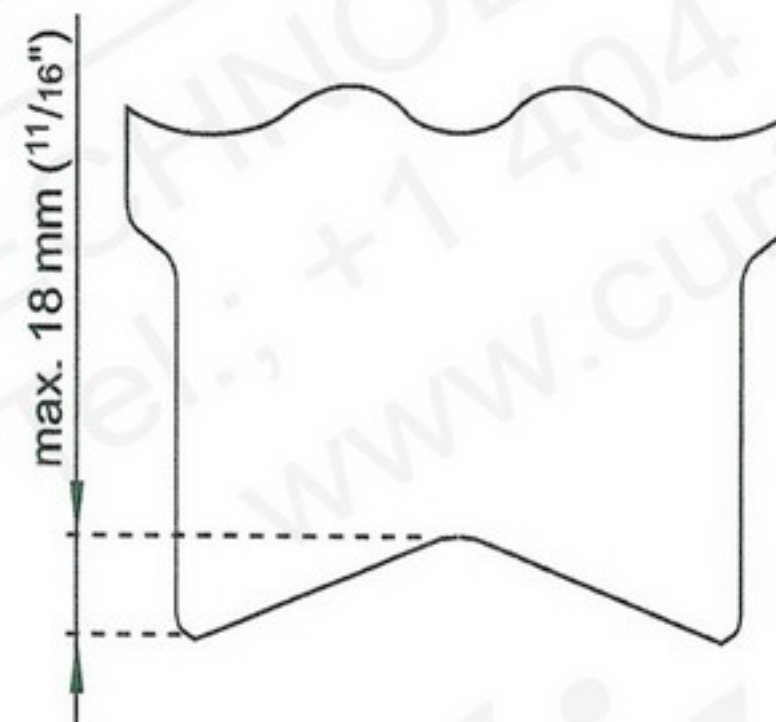
Size range of the basic design



Booklet

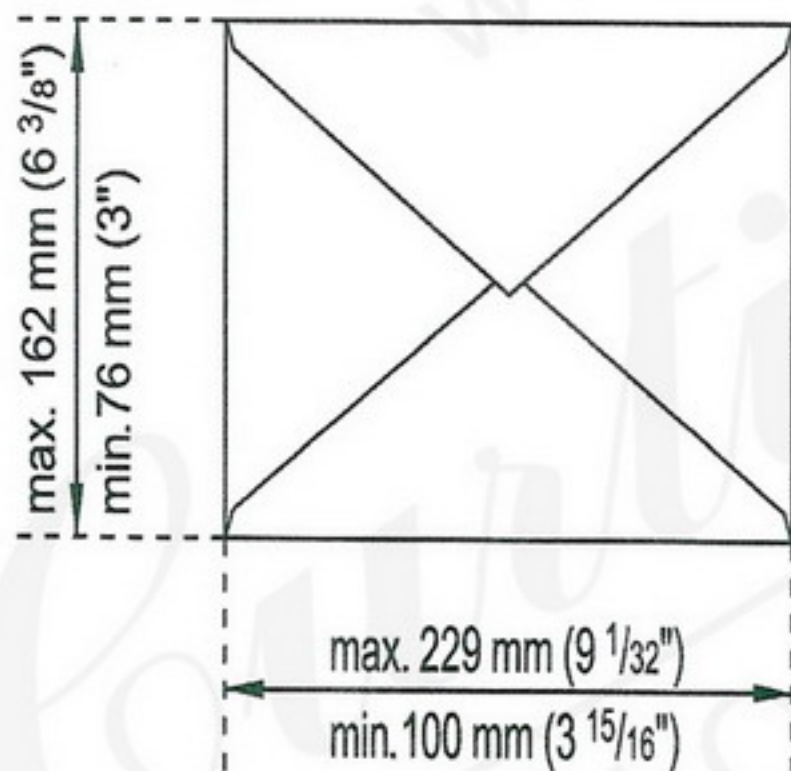


Cut-out depth with
trapezoidal cuts

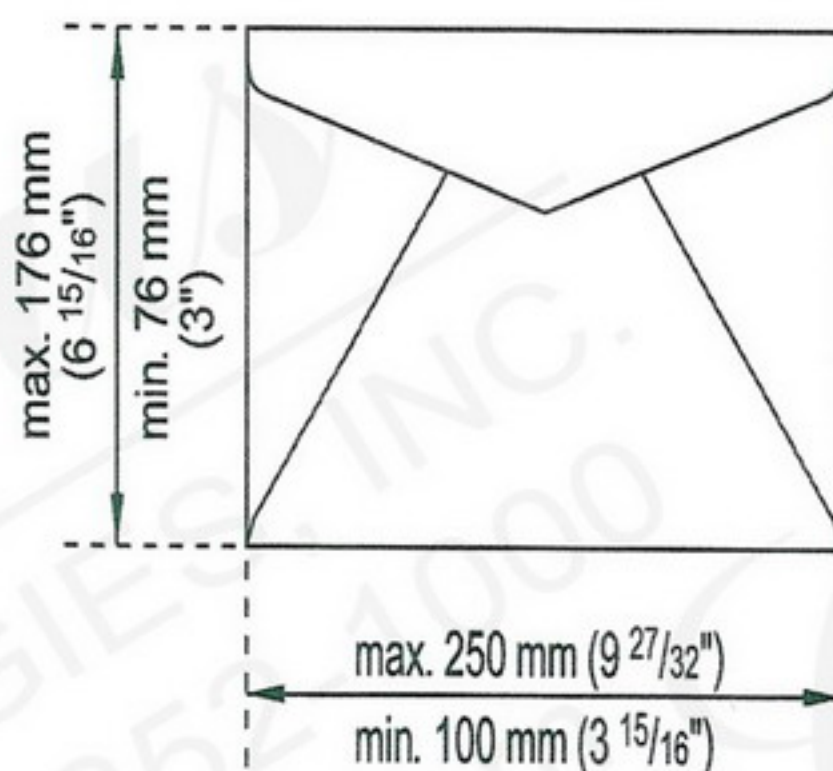


Cut-out depth
with V cuts

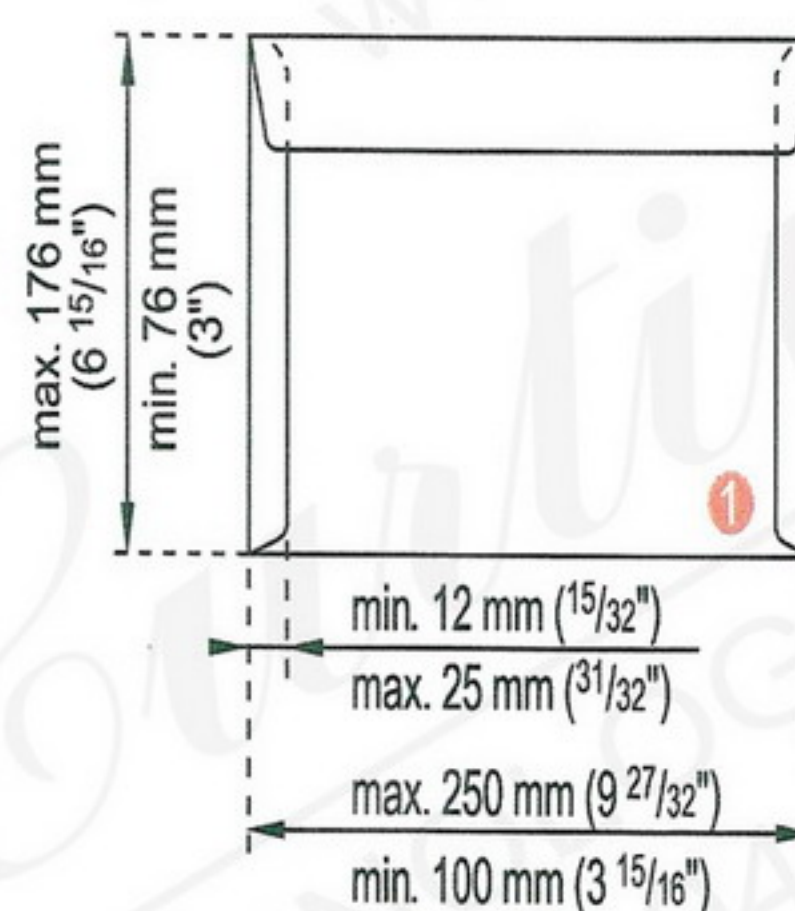
Size range for envelopes



Diamond-style



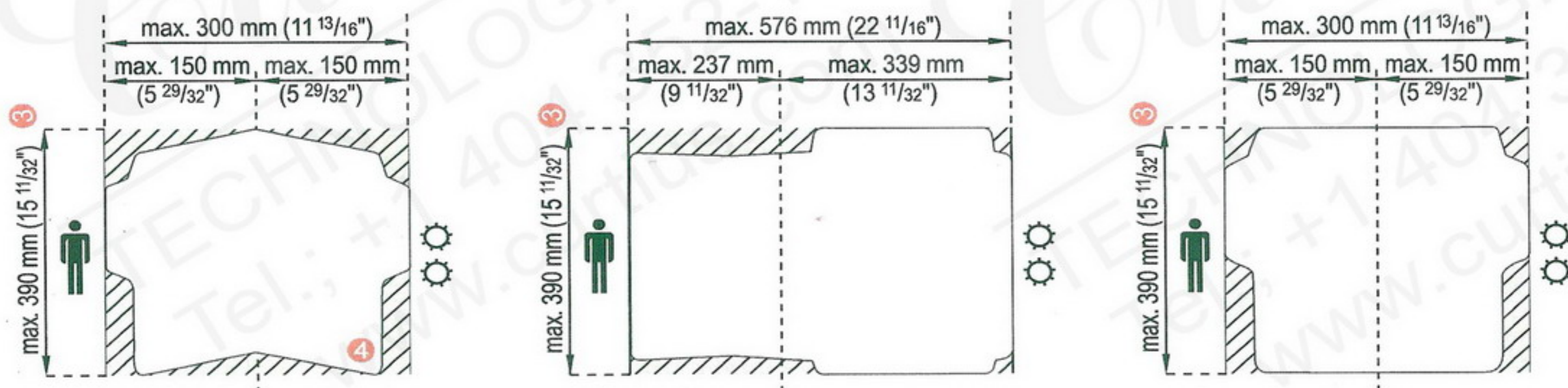
Commercial-style



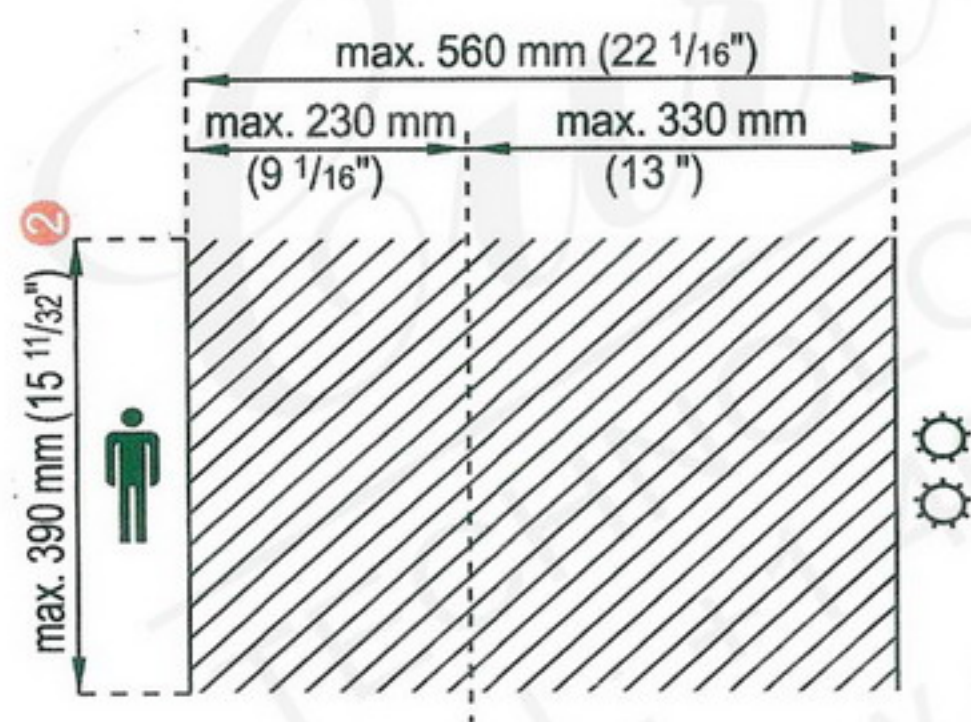
Booklet with outside side flaps



Complete cut

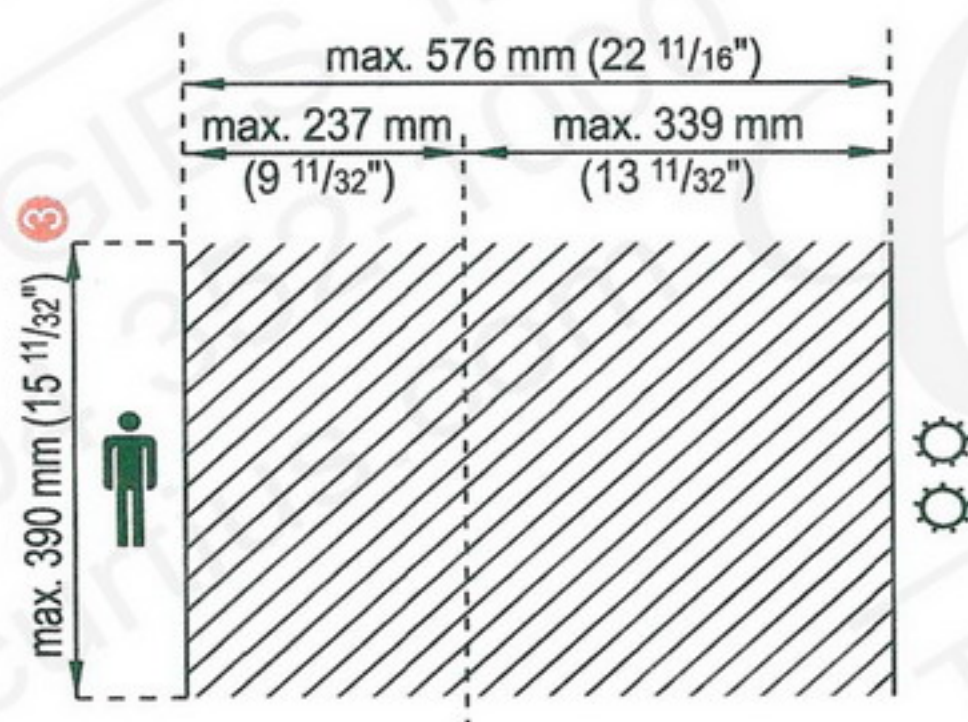


Printing range

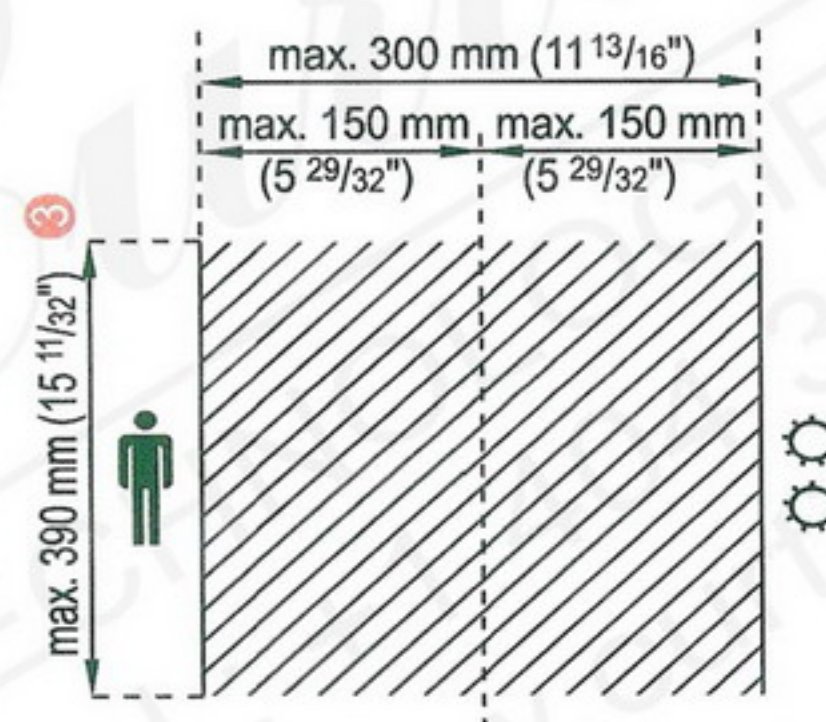


Blank printing units for inside and outside printing

Cutting area

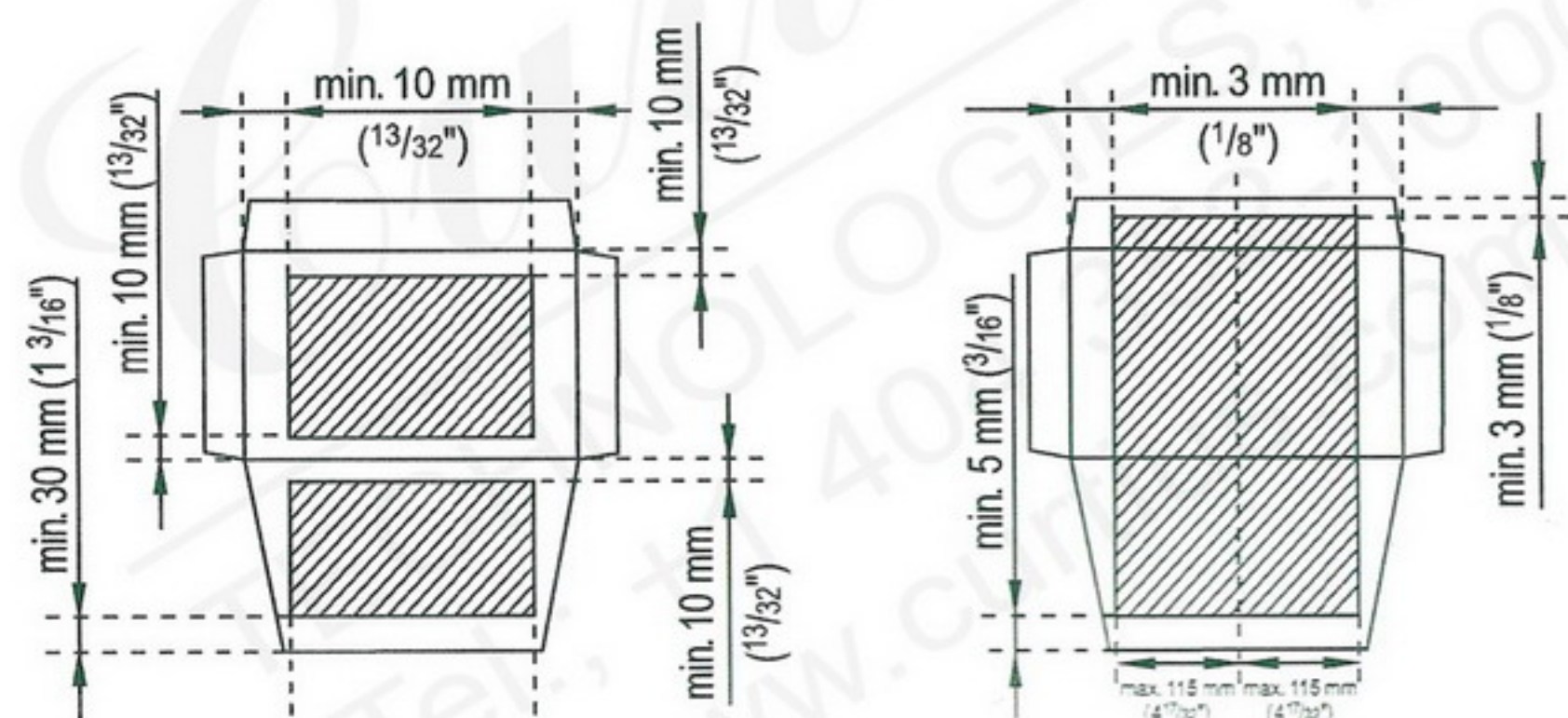


Complete cut with wide cutting section



Complete cut with small cutting section

Window range



Cutting area

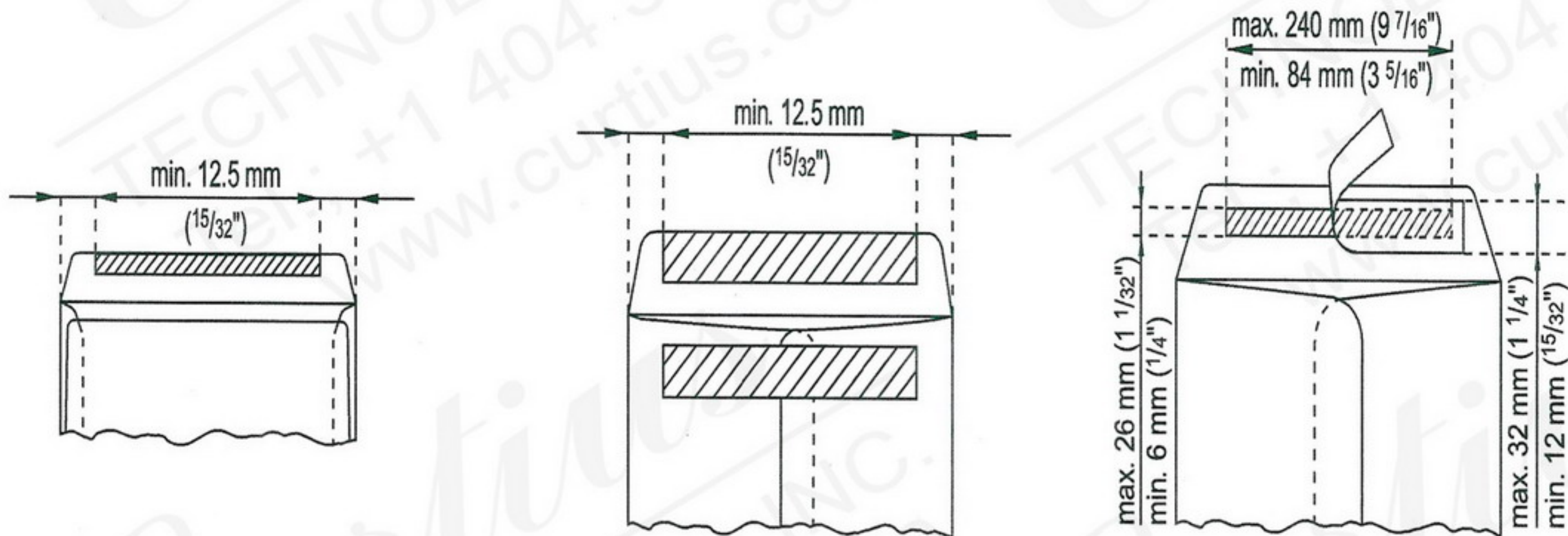
Patching area

Optional formats and functions

- ① Special folding tools necessary
- ② For plate cylinders with a clamping device, the printing length will be reduced to 370 mm (14 9/16")
- ③ For a complete cut, the cutting height will be reduced to 373 mm (14 11/16")
- ④ Possible on principle, has to be checked in individual cases



Seal flap gumming

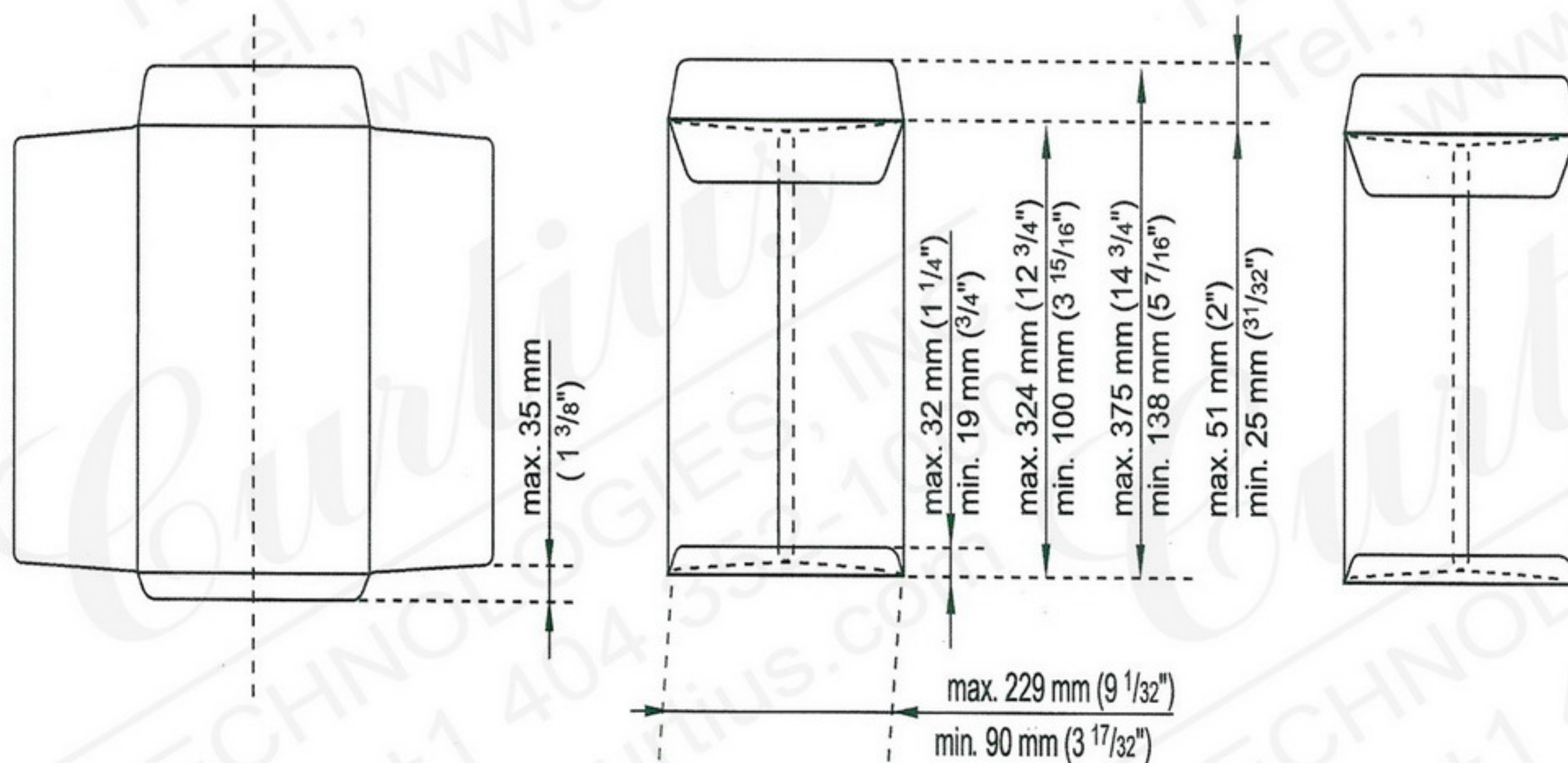


Remoistenable gumming

Self seal gumming

Pressure-sensitive gumming
with protective strips

Size range for pockets

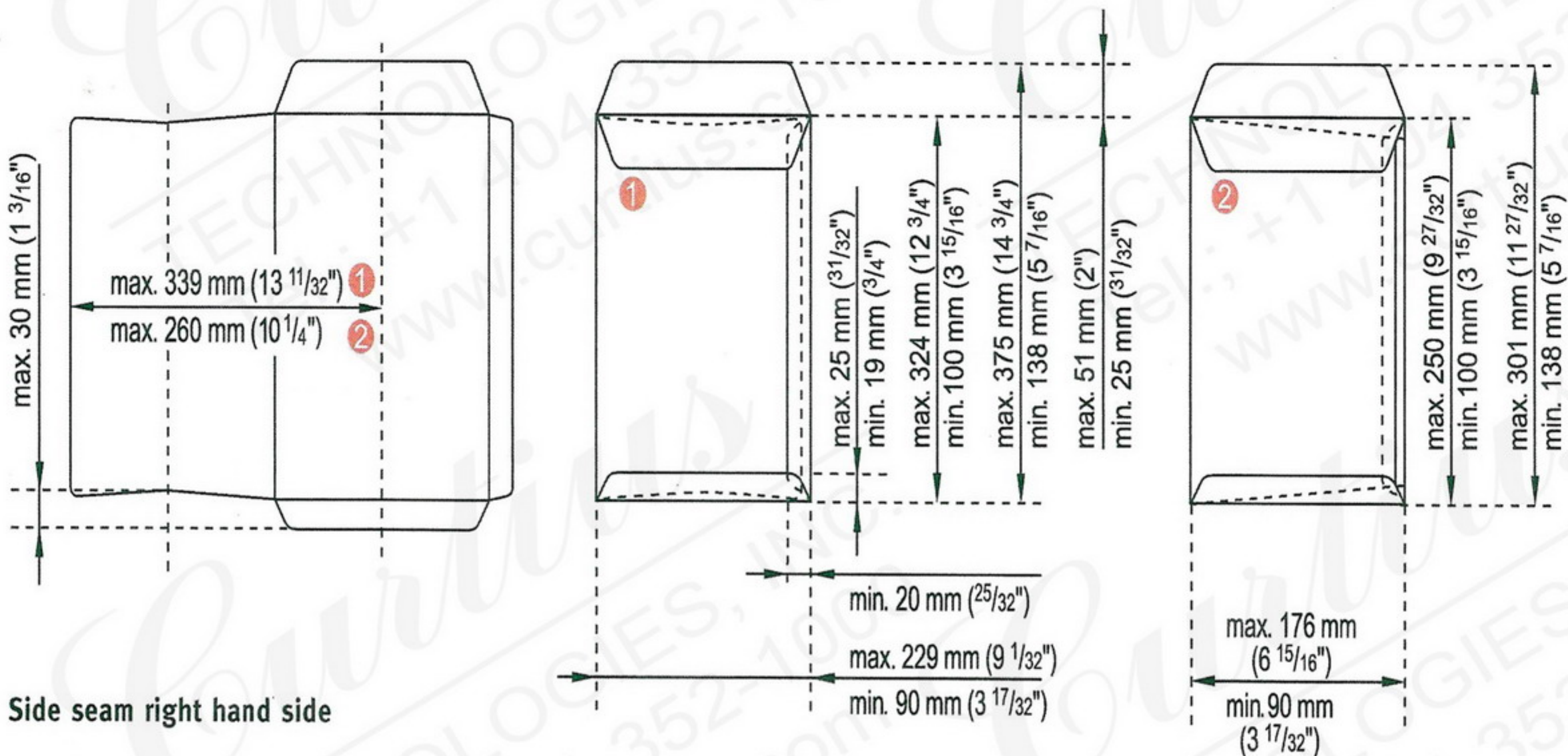




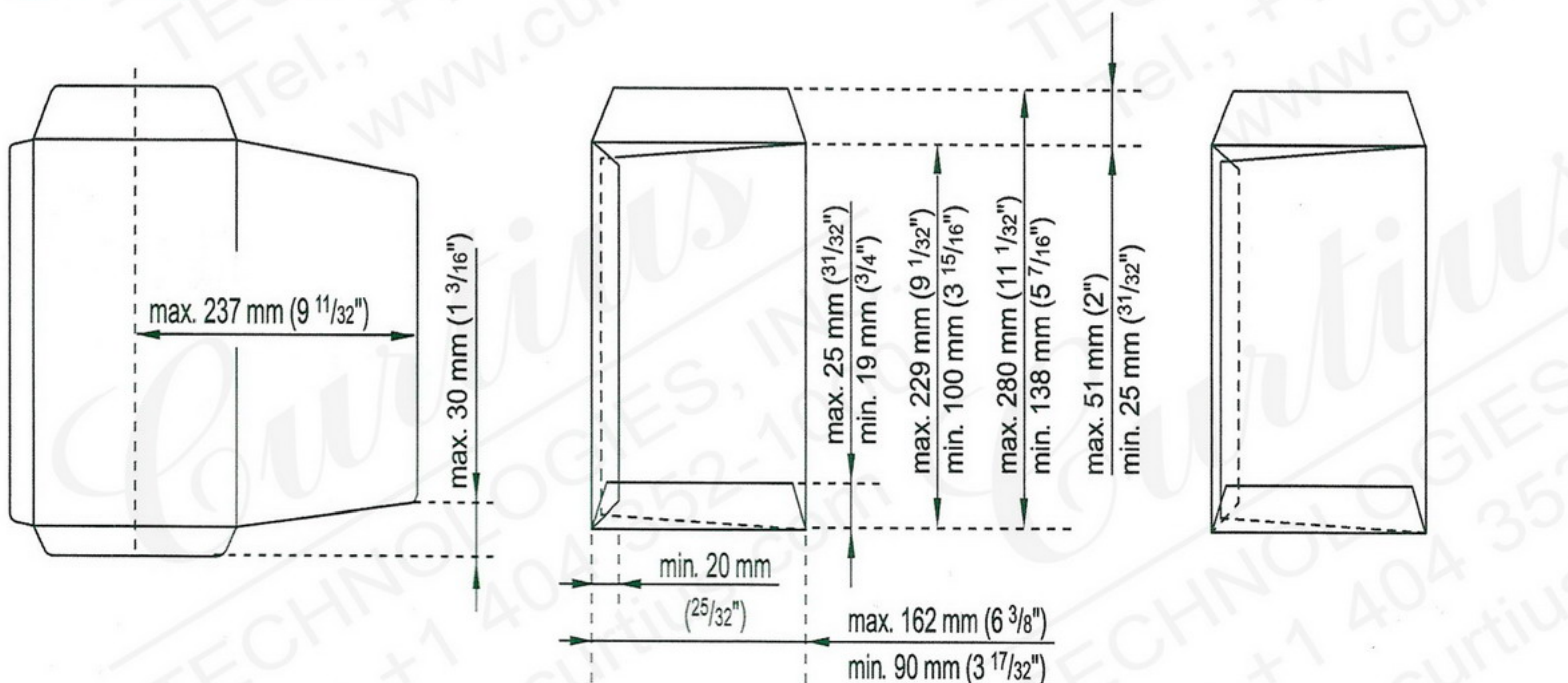
Modular Envelope Machine

HELIOS 320

Size range for pockets



Size range for pockets





Modular Envelope Machine

HELIOS 320

Window material dimensions

- * Window material reel diameter
max. 500 mm (20")
- * Window material reel width
max. 230 mm (9 1/16")
min. 45 mm (1 25/32")
- * Basis weight
30–50 g/m² (8–13,3 substance)
- * Winding core
70 mm (2 3/4")
- * Material thickness
30–50 µm
- * Cut-off length
max. 176 mm (6 15/16")
min. 36 mm (1 13/32")

Pressure-sensitive gumming

- * Diameter silicone paper reel
max. 500 mm (20")
- * Width silicone paper reel
max. 250 mm (9 27/32")
min. 90 mm (3 17/32")
- * Winding core - inner diameter
70 mm (2 3/4")
- * Gumming width
max. 240 mm (9 7/16")
min. 84 mm (3 5/16")
- * Gumming Height
max. 26 mm (1 1/32")
min. 6 mm (1/4")
- * Application weight hot-melt
max. 20 g/m²
recommended 15 g/m²
- * Protective strip cut-off length
max. 32 mm (1 1/4")
min. 12 mm (15/32")

Maximum output per minute

- * Envelopes
60–120 g/m² (16–32 substance)
350 pieces
- * Pockets up to size B5
80–120 g/m² (21–32 substance)
250 pieces
- * Pockets larger than size B5
80–120 g/m² (21–32 substance)
150 pieces

Blank dimensions

- * Blank length
max. 390 mm (15 11/32")
min. 170 mm (6 11/16")
- * Blank width
max. 474 mm (18 21/32")
min. 128 mm (5 1/32")

Flexo print units

- * Printing length with seamless plate cylinder
max. 390mm (15 11/32")
- * Printing length of plate cylinder with
clamping device
max. 370mm (14 9/16")
- * Printing width inside- and outside printing
max. 560 mm (22 1/16")





Modular Envelope Machine

HELIOS 320

Connected load (standard equipment)

- * Drying section
max. 9,0 kW
- * Material suction
max. 3,6 kVA
- * Vacuum pumps
max. 38,5 kVA
- * Total excl. drying run with material suction
and pumps
max. 71,2 kVA
- * Compressed air consumption 6 bar
(with blank printing units)
max. 48 m³/h
- * Compressed air consumption 6 bar
(without blank printing units)
max. 17 m³/h
- * Vacuum requirement 0,6 bar
max. 790 m³/h
- * Blowing air requirement 1,0 bar
max. 140 m³/h

Dimensions and weight

Basic machine

- * Length
5.540 mm
- * Width
2.550 mm
- * Height
2.150 mm

Machine with options (1*)

- * Length
8.470 mm
- * Width
2.550 mm
- * Height
2.150 mm
- * Net weight
ca. 6.750 kg

(1*) As shown in the machine layout

