

C28-E

TAILORED TO YOUR TASTE



C28-E THE IDEAS TAKE SHAPE

EXPRESSLY CLOSE TO CUSTOMERS' NEEDS THE NEW MACHINE MODEL BASED ON THE REVOLUTIONARY KNOT TECHNOLOGY, FOR A HIGH QUALITY, ECOLOGICAL TEA BAG RUNS AT A SPEED OF 210 BAGS PER MINUTE.

A SMALL, COMPACT MACHINE THAT ENCOMPASSES HIGH TECHNOLOGY AND SIMPLE OPERATION IN A VERSATILE, FLEXIBLE AND EFFICIENT SOLUTION.

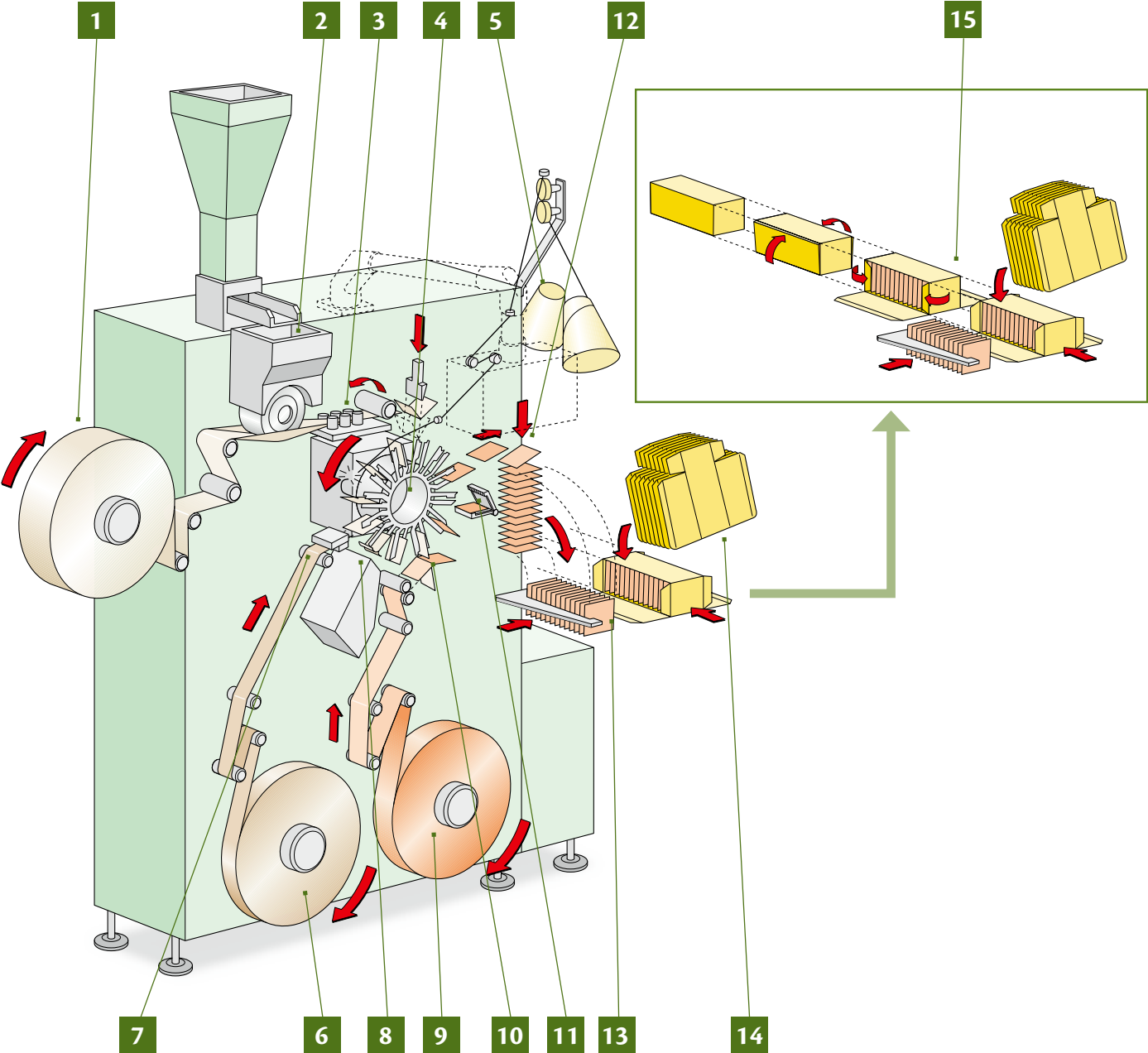
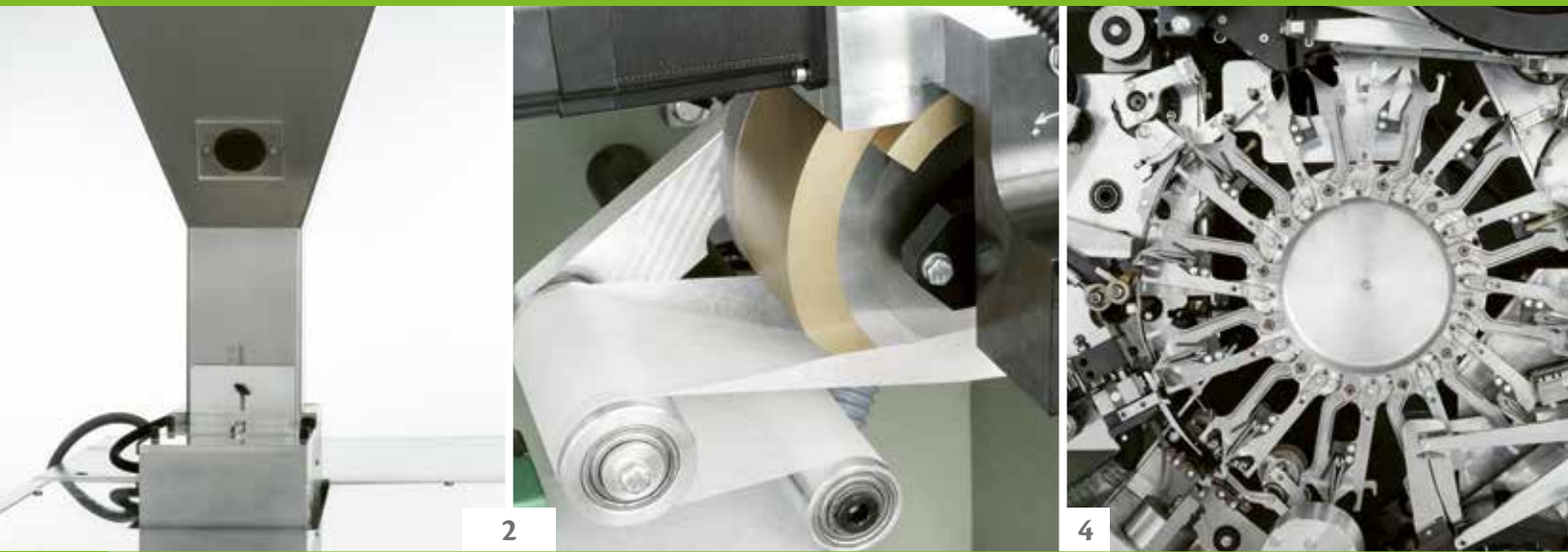
- NO METAL STAPLE
- NON HEATSEALABLE FILTER PAPER
- PRODUCTION SPEED : 210 BAGS PER MINUTE
- HARD TAG
- SPECIAL VIBRATING FEEDING SYSTEM
- FILTER BAG CONFORMITY CONTROL
- PC (PROGRAMMABLE CONTROL)
- NO LUBRICATION
- COMPACT LAY-OUT





TODAY, THE DOUBLE CHAMBER FILTER BAG PRODUCED ON THE C28-E IS HIGHLY COMPETITIVE AND EXTREMELY POPULAR ON THE WORLD-WIDE MARKET. IMA SUPPORTS CUSTOMERS GUARANTEEING THE POSSIBILITY TO UP-GRADE THEIR PRODUCTION CAPACITY BY OFFERING MACHINE MODELS BASED ON THE SAME TECHNOLOGICAL CONCEPTS FOR AN IDENTICAL FILTER BAG STYLE.

C28-E THE TEABAG STEP BY STEP





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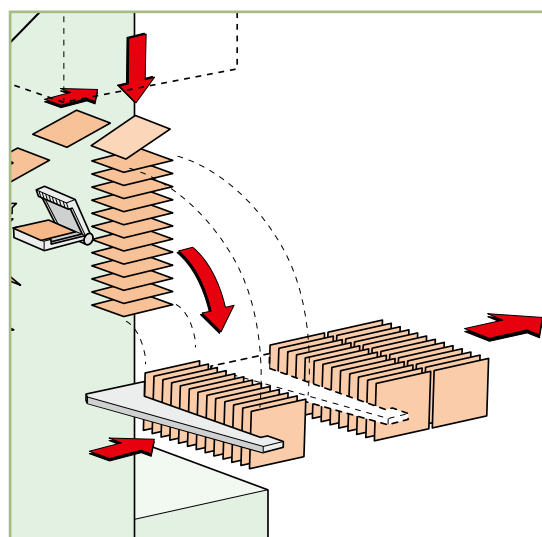


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MAIN FUNCTIONS

1. FILTER PAPER REEL
2. PRODUCT FEEDING AND DOSING
3. FILTER PAPER TUBE FORMING AND CUTTING
4. BAG FORMING WHEEL
5. COTTON THREAD COIL
6. TAG PAPER REEL
7. TAG PAPER UNWINDING AND CUTTING
8. KNOT GROUP
9. OUTER ENVELOPE PAPER REEL
10. OUTER ENVELOPE PAPER CUTTING AND FILTER BAG INSERTION
11. OUTER ENVELOPE HEATSEALING STATION
12. FILTER BAG/ENVELOPE STACKING AND COUNTING
13. STACK FEEDING INTO THE CARTON
14. PRE-GLUED CARTON MAGAZINE
15. CARTON CLOSING

- KNOT TECHNOLOGY
- ELECTRONIC COUNTING AND STACKING
- CARTONING ATTACHMENT AND HAND REMOVAL VERSIONS



Hand removal version

C28-E SIMPLY ECOLOGICAL

KNOT TECHNOLOGY

The C28-E filter bag is based on a traditional non heatsealable double chamber bag and guarantees optimum infusion efficiency enabling the natural tea aroma to flow out.

No metal staple or additional packaging materials are required to fix the bag to the tag and the cotton thread. Fixing is achieved by two simple knots – one to fix the cotton thread to the filter bag head and the other to fix the cotton thread to the tag. This innovative feature avoids the presence of metals during infusion, whilst guaranteeing, at the same time, a discerning and functional filter bag.

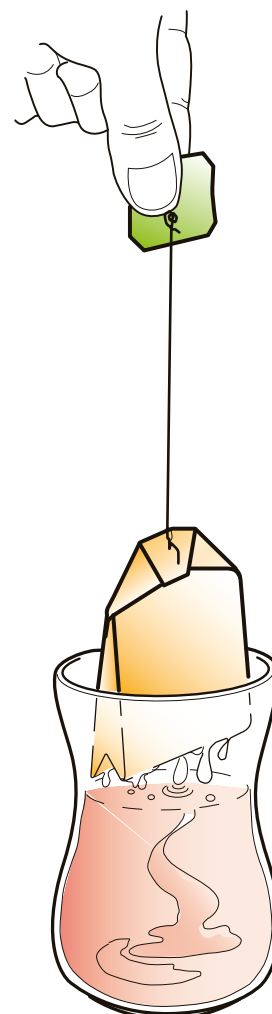
The C28-E flexibility allows the production of a small size filter bag (width) especially suitable to respond to dedicated market trends.



THE TAG

The C28-E offers the possibility to run different octagonal Hard Tag sizes.

The machine runs octagonal tag paper already cut by the supplier and therefore easy to find on the world-wide market.





THE PROCESS

The simple knots that allow the fixing of cotton thread to filter bag and tag are performed by a group that has been designed and tested by the IMA Research & Development Department.

Both knots, on the filter bag and on the tag, are performed simultaneously on the same station and are achieved through synchronised movements of three mechanical elements controlled by cams. The successful knotting is controlled by a video camera.



C28-E THE OUTER ENVELOPE

CRIMPED AND HEATSEALED OUTER ENVELOPE

Despite of the simple machine structure, the C28-E offers the possibility to individually wrap the filter bag in either heatsealed or crimped outer envelopes. The latter resulting in a hygienic, tasteful and functional solution, and the former in an airtight and waterproof outer envelope guaranteeing the preservation of herbs, flavoured teas and pharmaceutical infusions.

The C28-E is available in three different versions, for naked bags, crimped or heatsealed outer envelopes.



EASY OPENING

To facilitate the heatsealed outer envelope opening, the machine performs either one or two lateral cuts on the envelope top sealing.

FLEXIBILITY

A variety of packaging materials can be used on the C28 production of heatsealed outer envelopes, such as α oriented polypropylene (OPP), paper PE, paper Alu Foil.



C28-E TO COMPLETE THE CYCLE



CARTONING ATTACHMENT

The simple but efficacious design of the C28-E also foresees a completely automatic cartoning attachment from pre-glued cartons capable of packing from a minimum of 8 to a maximum of 28 naked bags or enveloped bags on one row.

The cartoning attachment automatically erects cartons, fills them with filter bags and finally closes them.

Finally, it can be completed with an additional embossing carton coding unit.

VERSATILITY IN STYLE

The C28-E cartoning attachment permits the packaging of filter bags in two different final carton styles :

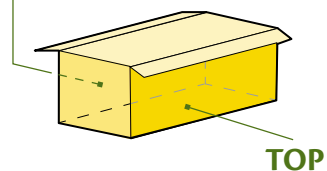
- standard tuck-in carton for a simpler solution
- Kurzlaschen carton for a tamper proof security as well as re-closable solution (double closing lids-top and bottom). Lid glueing is not performed on the machine. This carton style does not need overwrapping, therefore guaranteeing additional cost saving.



KURZLASCHEN CARTON STYLE

Double closing lids for top and bottom glueing.

BOTTOM



TOP



ELECTRONIC COUNTING

The C28-E achieves the greatest versatility in the design of its counting and stacking unit. The electronic count change over is simple and fast and avoids completely the need of any part replacement.

HAND REMOVAL

As an alternative to the cartoning attachment, the C28-E can be easily equipped with a hand removal system for counted naked bags, crimped or heatsealed outer envelopes, from a minimum of 8 to a maximum of 30 bags.

The reduced production speed of the C28-E perfectly combines with the manual packaging of bags in pre-formed cartons.



C28-E GENERAL TECHNICAL DATA



SPECIAL PRODUCT VIBRATING FEEDING SYSTEM

The handling of delicate products such as herbs, requires particular care both in terms of protection and feeding. For this reason, the C28-E has been equipped with an innovative product vibrating feeding system allowing the packaging of non free-flowing products.

PROGRAMMABLE CONTROL

The working cycle logic and quality control are achieved by a system with high programmable logic. All main machine stations have been provided with a specific product control device to guarantee the maximum product quality.

The revealed defects might also be translated into rejection signals that might help achieving a final carton rejection.

HIGH PRECISION VIDEO CAMERA

The successful filter bag and tag knotting is controlled by a video camera, whose detection also contributes to the rejection signals collection.

OPERATOR PANEL

The C28-E is equipped with an operator panel able to display messages almost in all languages, including for example standard Arabic, Japanese, Chinese, Thai and Korean.



**Machine speed:**

- Up to 210 bags or envelopes per minute

**Teabag capacity:**

- Up to approximately 3.0 grams
- Filter bag maximum volume : 9.0 cubic centimetres

**Power required:**

- Total installed power : 8,5 kw
- Average power consumption : 2 kw (with hot melt gluing unit)
- Maximum power consumption : 2,5 kw (with hot melt gluing unit)

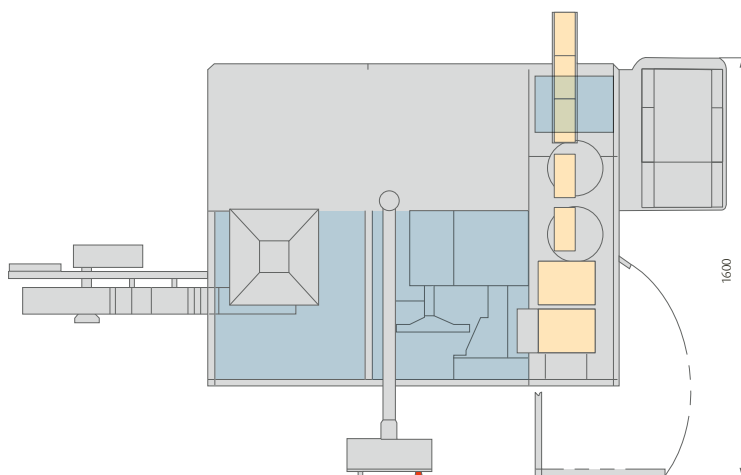
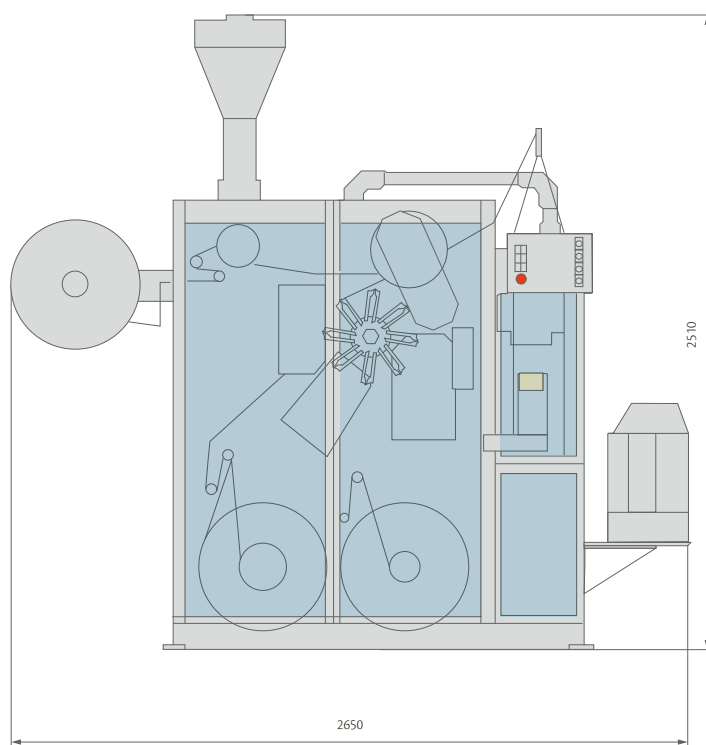
note : consumption depends on the thermic groups fitted on the machine

**Compressed air:**

- Exercise pressure: 6 bar
- Consumption: up to max. 10 NI/min

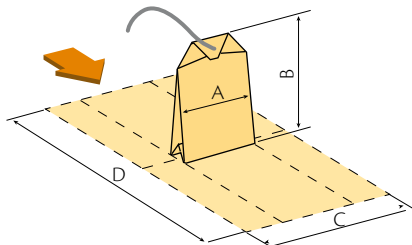
**Machine net weight:**

- Max. 2200 kg



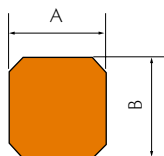
C28-E GENERAL TECHNICAL DATA

FILTER BAG SIZE



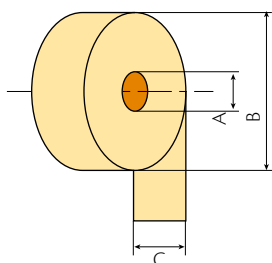
A	B	C	D
36	60	86	149
40	60	94	149
45	60	103	149

TAG SIZE



A	B
26	28
28	28
28	32

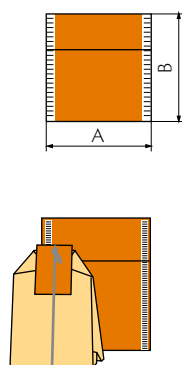
NON-HEATSEALABLE
FILTER PAPER REEL



A	B	C
76	MAX 500	86
76	MAX 500	94
76	MAX 500	103
WEIGHT 12 gr./m ²		

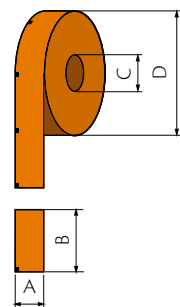
CRIMPED OUTER ENVELOPE SPECIFICATIONS

CRIMPED OUTER ENVELOPE



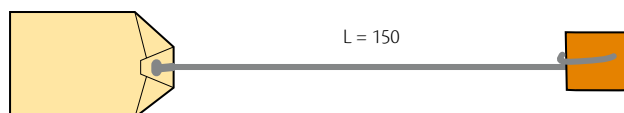
BAG TYPE	A	B
36x60	55	67
40x60		
45x60	63	72

CRIMPED OUTER ENVELOPE
PAPER REEL SIZE

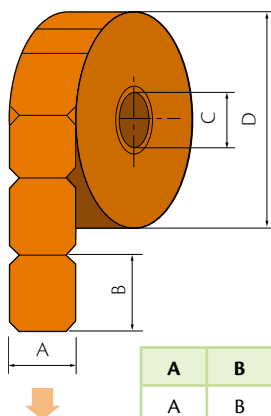


A	B	C	D
55	145	76	MAX 500
63	157,5	76	MAX 500
WEIGHT 60 ÷ 70 gr./m ²			
THICKNESS 70 ÷ 80 micron			

COTTON THREAD LENGTH ON EACH FILTER BAG

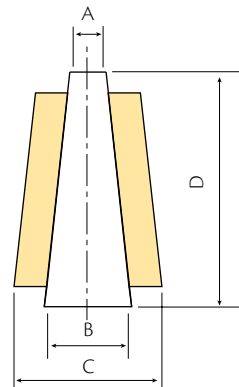


TAG PAPER REEL



A	B	C	D
A	B	152	500
WEIGHT gr./m ²		THICKNESS (micron)	
MIN	MAX	MIN	MAX
180	200	190	200

COTTON THREAD COIL SIZE

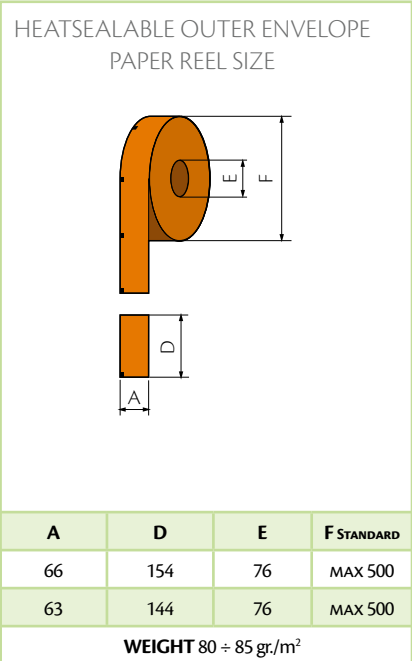
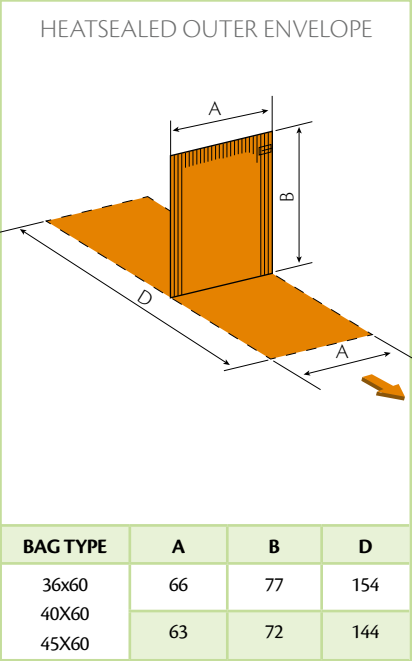


Ends' number: 3 (without knots)
Average title: 20 Ne.

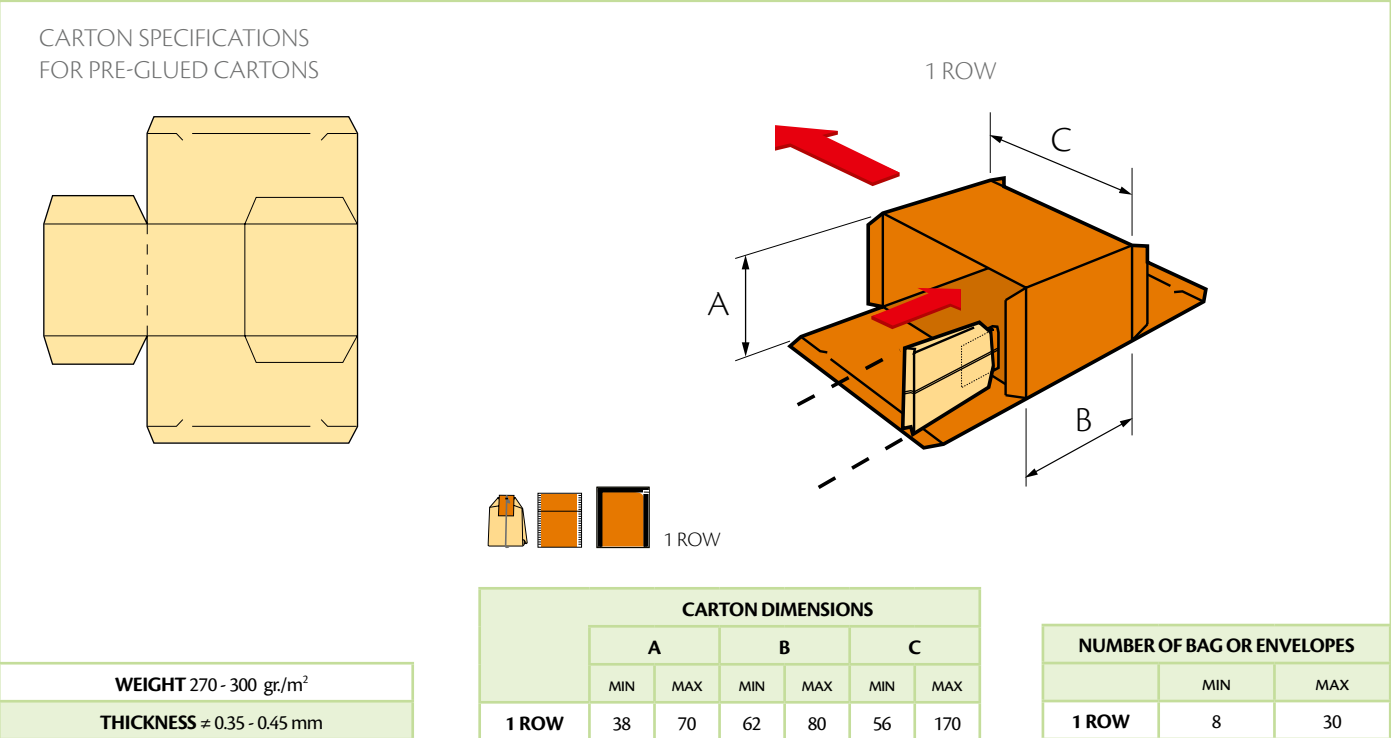
Ø			
A	B	C	D
MAX 31	MAX 64	MAX 220	140÷180

Data subject to possible technical modifications and not necessarily definitive.

HEATSEALED OUTER ENVELOPE SPECIFICATIONS



CARTONING ATTACHMENT FOR 1 ROW OF BAGS OR OUTER ENVELOPES



Technical data for tuck-in cartons only.

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