

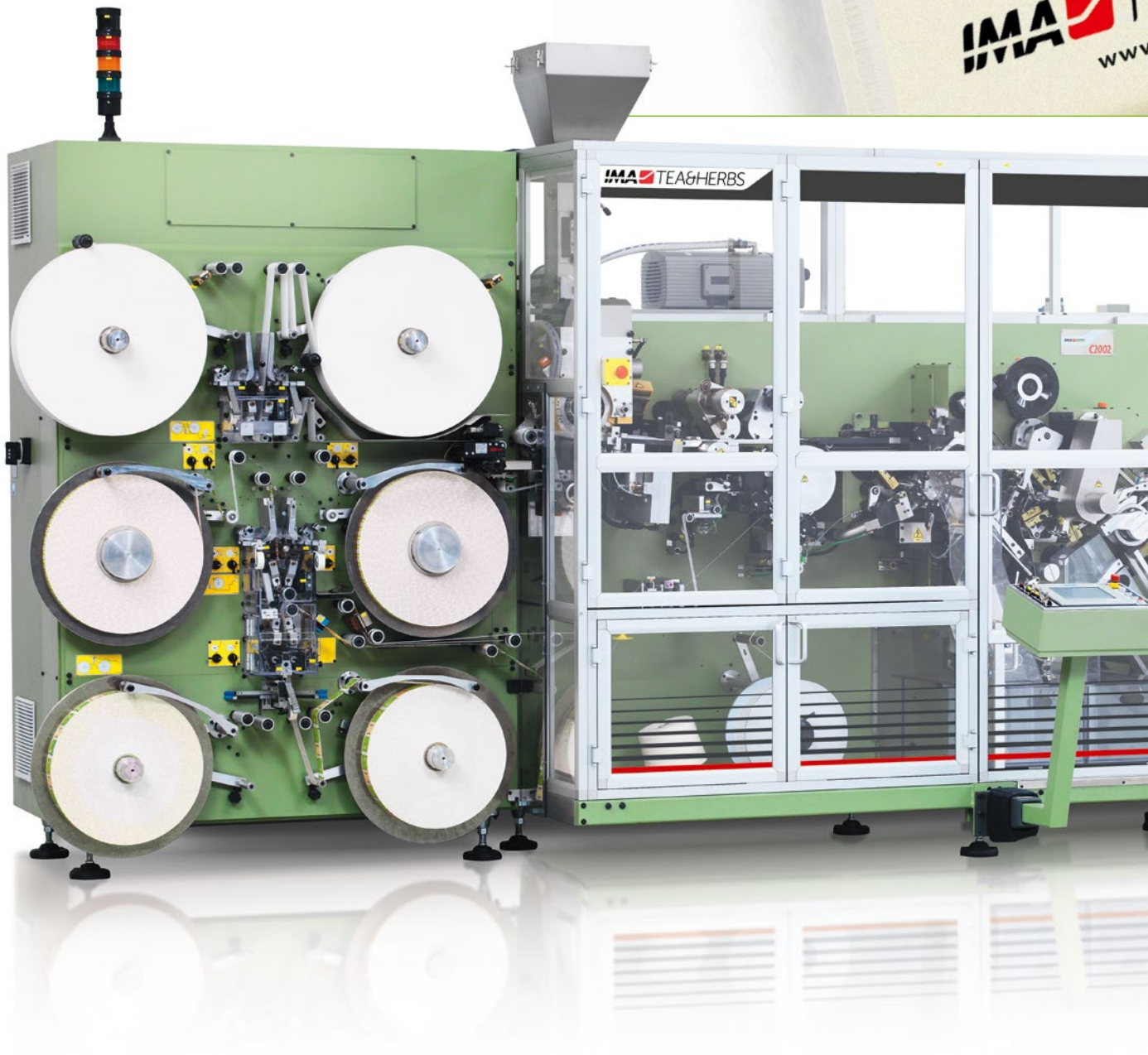
C2002

ALL-ROUND EFFICIENCY



C2002 THE IDEAS TAKE SHAPE

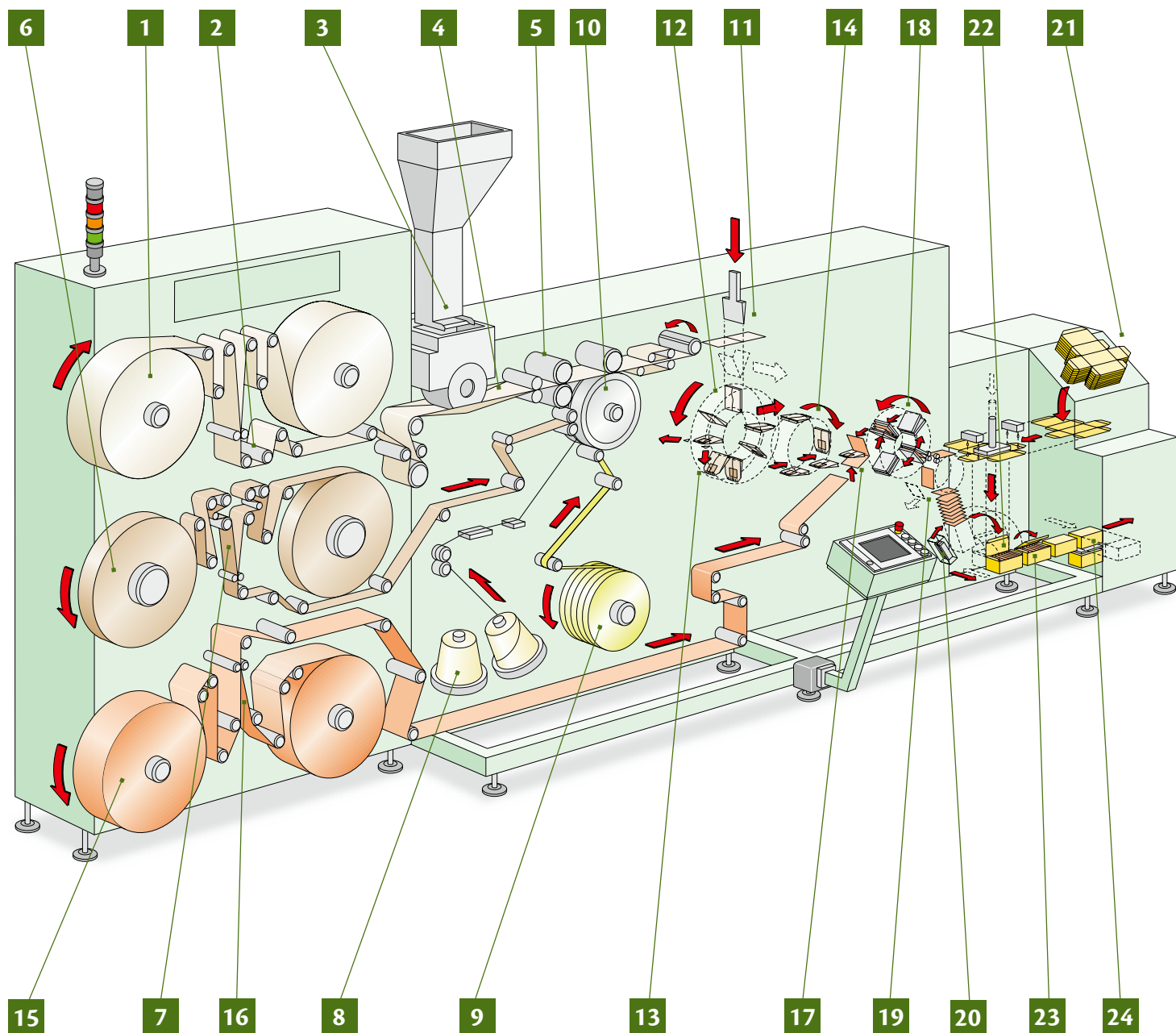
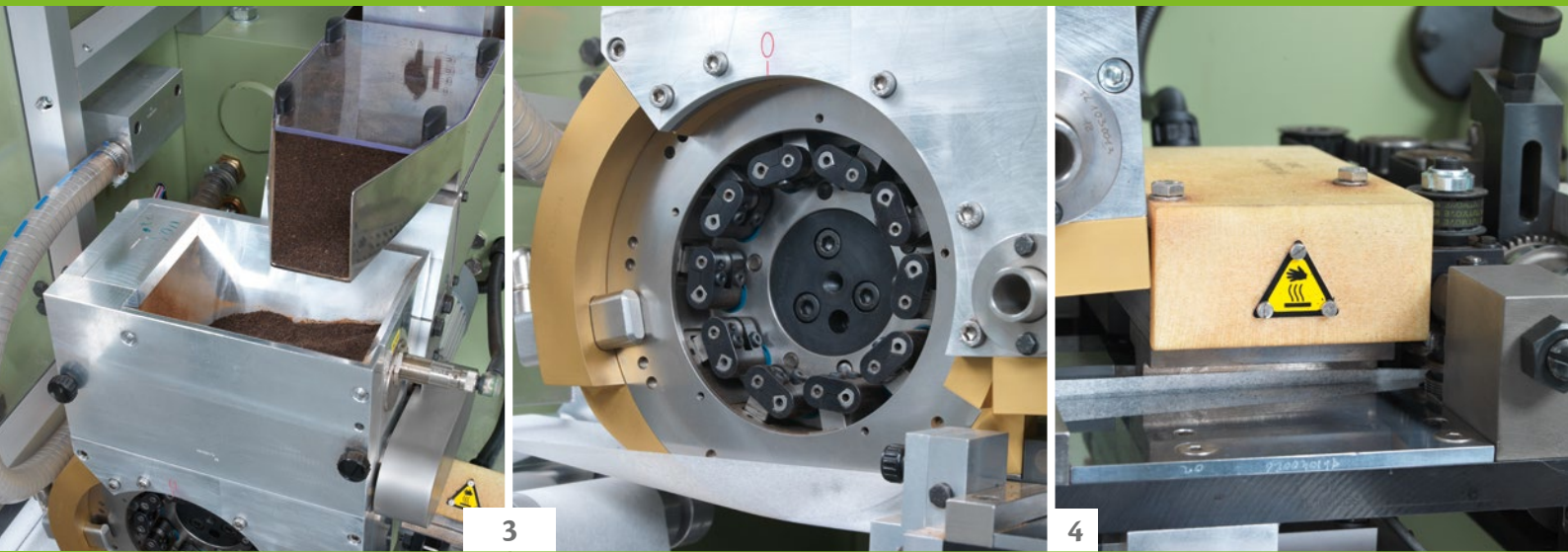
IMA RESPONDS TO THE INCREASING MARKET DEMAND FOR HIGH EFFICIENCY, HIGH QUALITY AND RELIABILITY WITH THE NEW C2002, THE RESULT OF IMA'S EXPERIENCE AND KNOW-HOW COMBINED WITH THE HIGHEST LEVELS OF TECHNOLOGY CURRENTLY AVAILABLE. THE C2002 REFLECTS THE BEST POSSIBLE SOLUTION FOR HIGH CAPACITY, PRODUCT PROTECTION AND INCOMPARABLE FLEXIBILITY.

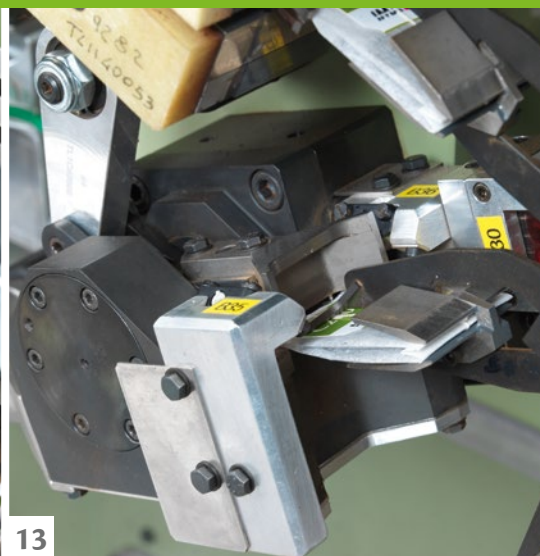




- HIGH PRODUCTION SPEED : 600 ENVELOPED BAGS PER MINUTE
- NO ALUMINIUM STAPLE
- NAKED BAG, CRIMPED OUTER ENVELOPE, HEATSEALED OUTER ENVELOPE CAPABILITY ON THE SAME MACHINE
- HIGHLY FLEXIBLE
- AUTOMATIC SPLICING OF PACKAGING MATERIAL
- TOTAL PROCESS CONTROL
- SINGLE BAG AND OUTER ENVELOPE REJECTION
- CARTON REJECTION
- MOTORIZED FLAT BLANK MAGAZINE
- NO LUBRICATION
- EASY ACCESS TO MACHINE OPERATING GROUPS
- SAVING IN PACKAGING MATERIALS
- REDUCED SPARE PARTS CONSUMPTION

C2002 THE TEABAG STEP BY STEP





MAIN FUNCTIONS

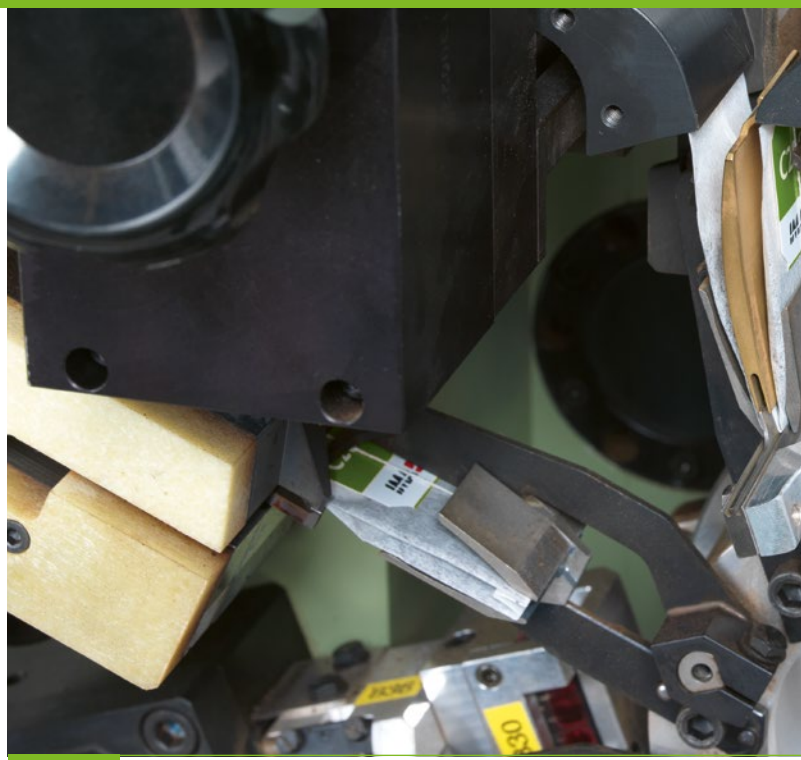
1. FILTER PAPER REELS
2. AUTOMATIC FILTER PAPER SPLICING
3. PRODUCT FEEDING AND DOSING UNIT
4. FILTER PAPER PRE-HEATING STATION
5. FILTER PAPER TUBE SEALING
6. TAG PAPER REELS
7. AUTOMATIC TAG PAPER SPLICING
8. COTTON THREAD COILS
9. ADHESIVE PAPER JUMBO REEL
10. COTTON THREAD SEALING ON THE TAG AND FILTER BAG
11. FILTER BAG FORMING
12. FILTER BAG TRANSFER TO ROTATING WHEEL
13. DOME SHAPE FILTER BAG CUTTING
14. FILTER BAG TRANSFER TO SEALING GROUP
15. OUTER ENVELOPE PAPER REELS
16. AUTOMATIC OUTER ENVELOPE PAPER SPLICING
17. OUTER ENVELOPE CUTTING
18. OUTER ENVELOPE SEALING
19. ENVELOPED BAG COUNTING AND STACKING
20. CARDBOARD DIVIDER INSERTION
21. FLAT-BLANK CARTON ERECTION AND FORMING
22. STACKING TRANSFER INTO FORMED CARTON
23. CARTON CLOSING
24. CARTON WEIGHT CONTROL AND REJECTION

- SPECIAL VIBRATING FEEDING SYSTEM FOR HERBS
- JUMBO ADHESIVE PAPER REEL FOR HIGHER EFFICIENCY
- MOTORIZED FLAT BLANK MAGAZINE
- PC MACHINE CONTROL

C2002 TRADITIONALLY EFFICIENT

THE FILTER BAG

The practical, discerning and already well known heatsealable double chamber filter bag without aluminium staple is now produced on the C2002 at a higher speed – 600 bags per minute. The C2002 allows the production of either standard or Dome Shaped filter bags, with string, HARD TAG and with a small piece of food grade adhesive paper which fixes the tag and the thread to the bag thereby avoiding the presence of metals during infusion. The Dome Shaped filter bag is processed on the machine and the paper corners are cut and removed by means of vacuum suction avoiding interference with the machine mechanical process.



THE TAG

The C2002 offers the possibility to run either square, rectangular or octagonal Hard Tags. Following IMA's tradition of flexibility and versatility, the C2002 offers a wide range of tag sizes to suit all product specifications.



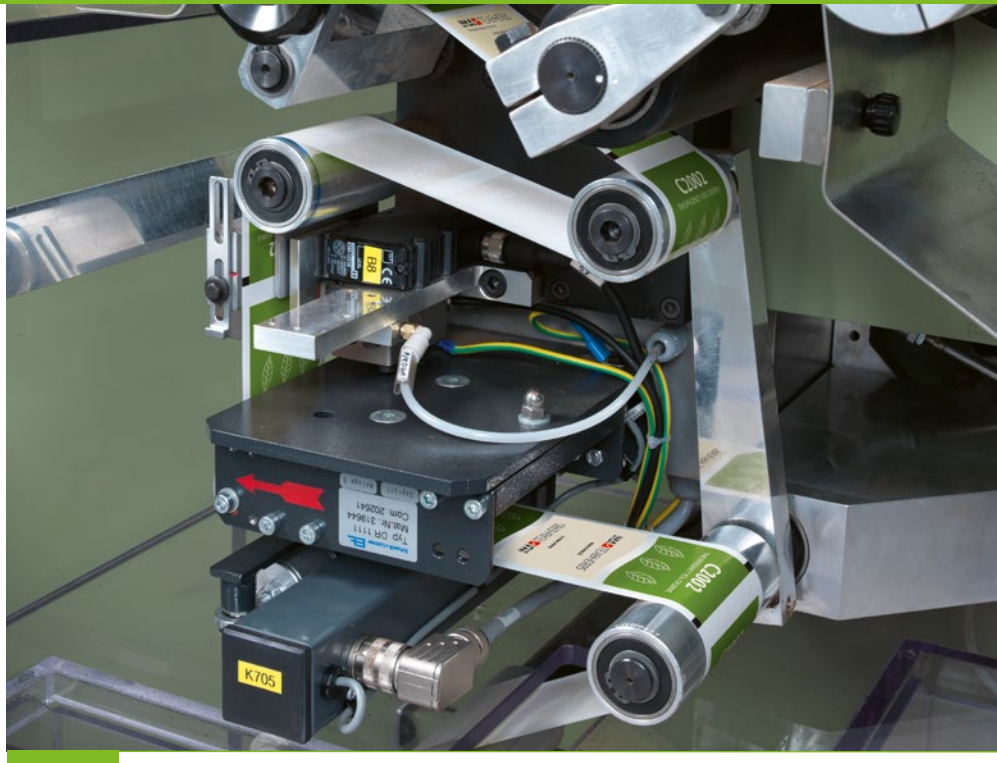


JUMBO ADHESIVE PAPER REEL

The C2002 is equipped with a jumbo adhesive paper reel holder that allows a longer uninterrupted production cycle (almost 26 hours at a production speed of 600 bags per minute) before reel change over thus contributing to an increase in the machine production efficiency.



C2002 EFFICIENT PROTECTION



UNIQUE IN FLEXIBILITY

The C2002 is the only solution available on the market to produce, on the same machine, naked bags, crimped and heatsealed outer envelopes at a production speed of 600 cycles per minute. Respectful of the evolving market trends and production diversification, the machine configuration can be adapted quickly and easily according to the type of packaging required.

IMA offers the option of individually wrapping the C2002 filter bag in either crimped or heatsealed outer envelopes. The latter resulting in a hygienic, tasteful and functional solution, the former in an airtight and waterproof outer envelope guaranteeing the preservation of herbs and flavoured teas.

A variety of packaging materials can be used on the C2002 for the production of heatsealed outer envelopes, such as cellophane, oriented polypropylene (OPP), paper PE, paper Alu Foil.

Flexibility is ensured by the wide range of outer envelope sizes available.





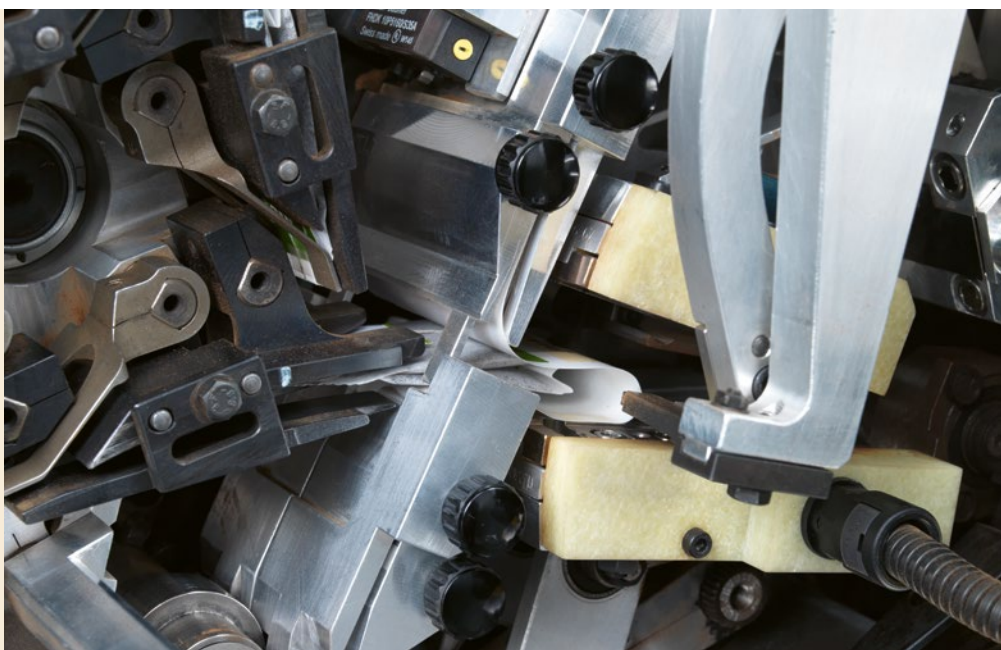
Heatsealed outer envelope version

SPECIAL PRODUCT VIBRATING FEEDING SYSTEM

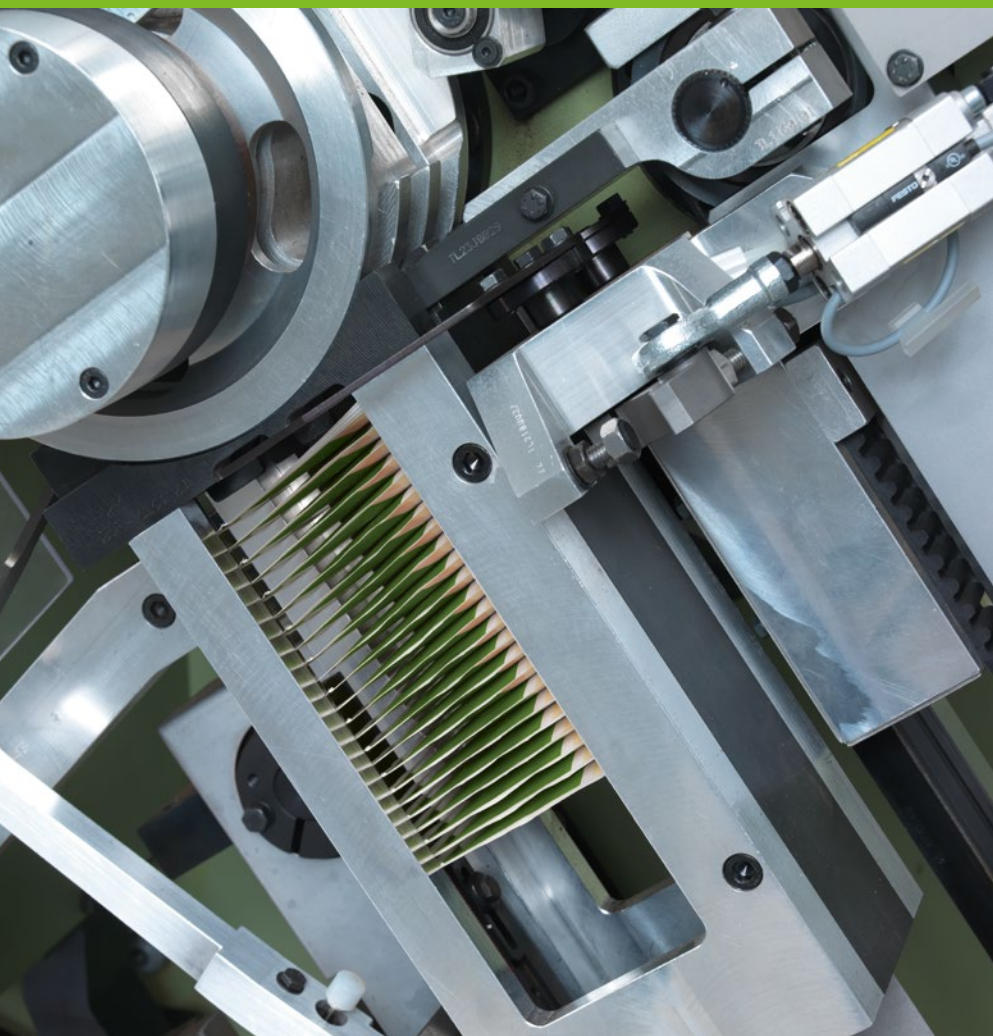
The handling of delicate products such as herbs, requires particular care in terms of both protection and feeding. For this reason, the C2002 has been equipped with an innovative product vibrating feeding system allowing the packaging of non free-flowing products.

HIGH SPEED SEALING

The C2002 guarantees an excellent product quality in terms of protection, by performing a top quality outer envelope sealing at a production speed of 600 bags per minute, due to a rotating sealing wheel that runs for a suitable dwell time even for the most delicate packaging materials.



C2002 TO COMPLETE THE CYCLE



CARTONING ATTACHMENT

To complete the whole production cycle, the C2002 is equipped with an automatic cartoning attachment from flat blanks and is available in two different versions:

- From 1 to 2 rows (T11 cartoning attachment)
- From 1 to 3-4 rows (T12 cartoning attachment)

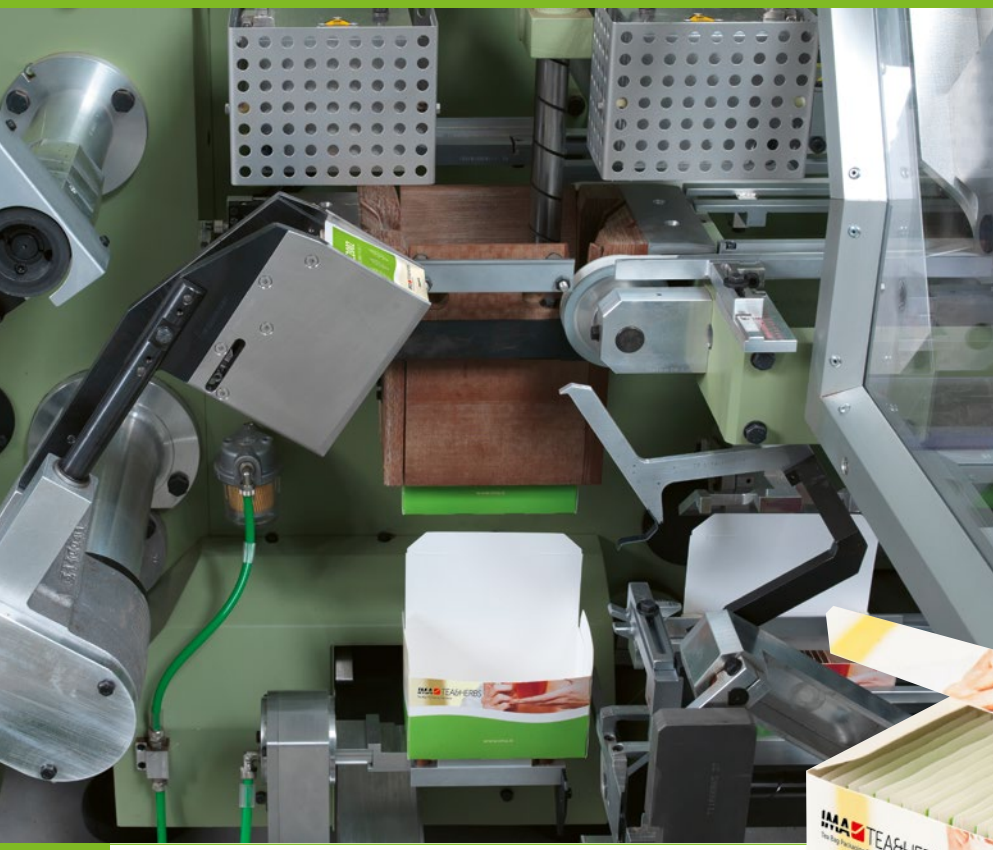
The cartoning attachment automatically erects cartons from flat blanks, fills the carton with filter bags (with or without envelope) and finally closes the carton.

The cartoning attachment can be completed with the following additional groups:

- Cardboard divider unit
- Embossing carton coding unit
- Leaflet inserting group
- Checkweighing unit complete with carton rejection and automatic dose regulator
- Motorized flat blank magazine

LEAFLET INSERTION

Simple and reliable. The C2002 can also be equipped with an information or promotional leaflet insertion group. In fitting a dedicated group, complete with magazine, on the machine, a pre-folded leaflet can easily be placed into each carton.



MOTORIZED FLAT BLANK MAGAZINE

To guarantee the highest production efficiency rate, the C2002 can be equipped with a motorized flat blank magazine capable of holding three times the quantity of flat blanks compared to that of the standard magazine and automatically feeds them into the cartoning attachment, assisting the operator by avoiding continuous manual feeding which would be necessary due to the high speed of the machine.



THE ADVANTAGE OF ELECTRONICS : FROM COUNT TO COUNT

The IMAC 2002 achieves the greatest versatility in the design of its counting and stacking units. Stacking is controlled by two independent motors which allow a swift electronic count change over avoiding completely the need of any part replacement and guaranteeing always the correct number of bags or envelopes in the stacking unit.

QUICK CARTON SIZE CHANGE OVER

The carton size change over can be easily carried out at anytime and as frequently as required according to packaging needs.



C2002 FLEXIBILITY IN STYLE

The C2002 cartoning attachment permits the packaging of filter bags in different final carton styles according to such criteria as product integrity, personalisation, style and cost saving.

As well as the standard tuck-in closure cartons, three further options are also available:

- Tear Strip Closure carton
- Kurzlaschen Closure carton
- Caddy Closure carton



The Tear Strip Closure carton offers a tamper proof security as well as a re-closable solution.

This carton style requires no overwrapping, therefore guaranteeing additional cost saving.



The Kurzlaschen Closure carton offers a tamper proof security as well as a re-closable solution.

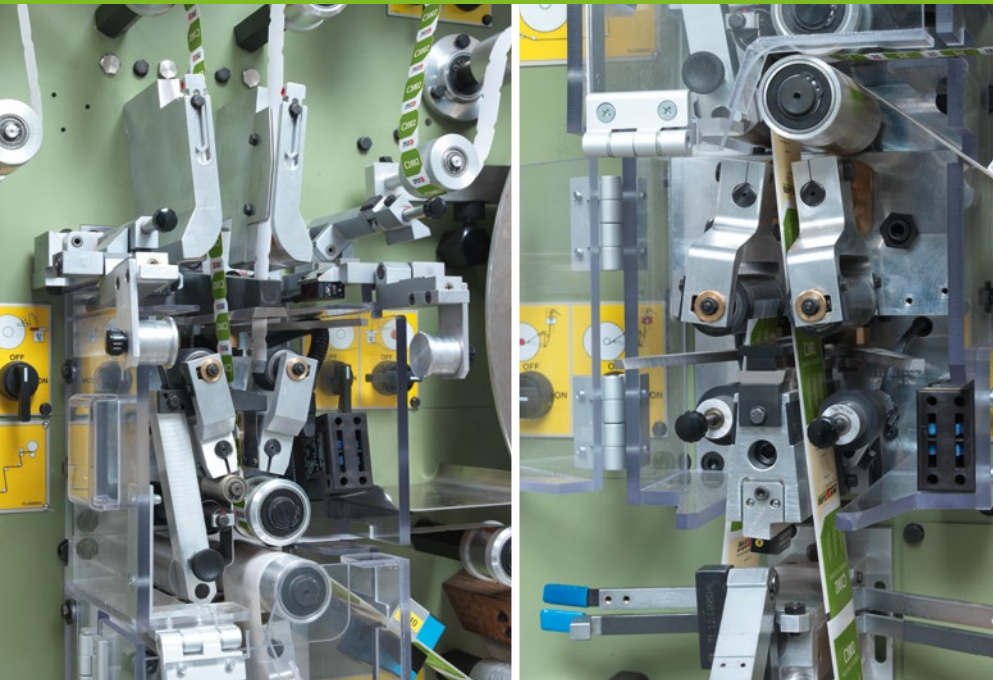
This carton style reduces cardboard consumption and does not need overwrapping, therefore guaranteeing additional cost saving.

The Caddy Closure carton represents the perfect solution for a more stylish and appealing final package.

This carton is re-closable and remains intact after opening. It is completely ideal for personalization.

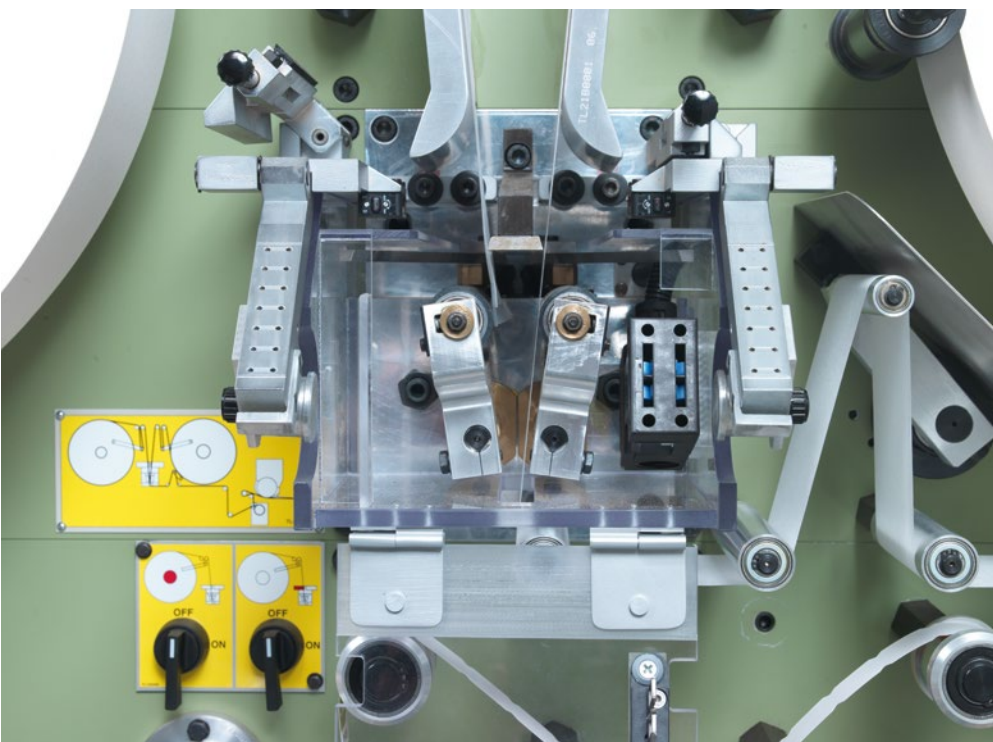


C2002 ALL ROUND EFFICIENCY



PACKAGING MATERIAL AUTOMATIC SPLICING

The C2002 is fitted with an advanced automatic splicing system for all packaging materials such as filter paper, tag and outer envelope paper. Packaging material splicing is performed smoothly during machine production at a speed of 600 bags per minute (no reduction in speed is required). It has been statistically proven that this sophisticated system and the use of increased packaging material reel diameter save time in the replacement of packaging materials thereby contributing to the user-friendliness of this machine.



SINGLE BAG REJECTION

The C2002 is equipped with a sophisticated detection system that constantly controls the teabag production cycle and allows the rejection of single bags and enveloped bags which do not correspond to the predefined quality standards.

To facilitate material recycling, there are two rejection units which discharge into two separate collecting boxes (one for naked bags and one for enveloped bags).

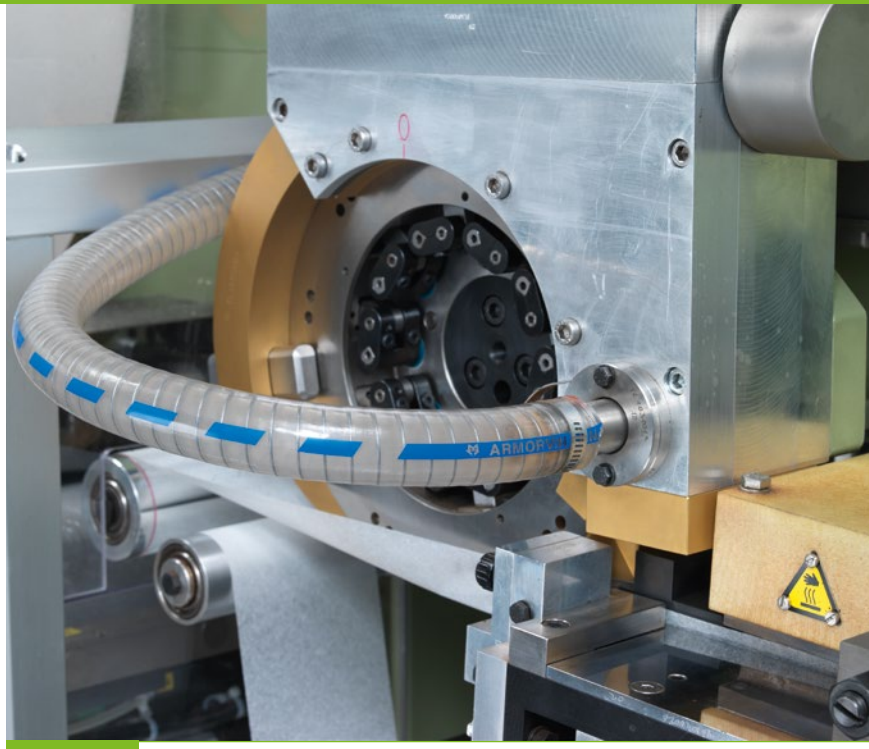
The innovative independent motorisation system allows the counting of filter bags to stop automatically and a correct bag to be retrieved to complete the required count, production flow proceeds smoothly without any interruption.

This unique system guarantees the highest product quality and at the same time contributes to savings in packaging material and an increase in machine efficiency.

C2002 ALL ROUND EFFICIENCY

DOSING BOWL EMPTYING DEVICE

To facilitate and speed up the production of different products and the change from one product to another, the C2002 is equipped with an emptying device that sucks up the remaining product in the dosing bowl allowing the immediate feeding and packaging of a different product.



AUTOMATIC WEIGHT CONTROL AND ADJUSTMENT

The C2002 offers the possibility to fit an automatic weight adjustment group on the product feeding and dosing unit. This attachment, connected to a checkweigher integrated in the cartoning unit, rejects automatically out of weight cartons which do not comply with the weight previously selected by the operator. The weight is controlled on the checkweigher, and automatically adjusted to the required dosage.





PRODUCT CONTROL

In order to guarantee maximum packaging reliability, all stations of the C2002 functional cycle have been provided with a specific product control device. Furthermore, production efficiency is kept at the highest level as all controls (except for those where it has not been possible), do not stop the machine, but generate an automatic rejection of the faulty carton.

PC

The whole working cycle logic and quality control are achieved by a PC, software compliant with the IEC 1131-3 standards.

The use of a PC as an alternative to a PLC system, represents a great advantage towards the risk of obsolescence and consequent need for spare part replacement and software update.

All main machine stations have been equipped with a specific product control device to guarantee the maximum product quality. All main functions can be easily controlled by the operator on the push-button panel. Production efficiency is kept at the highest level as most of the controls do not stop the machine, but automatically reject the faulty product (single filter bag or carton).



C2002 GENERAL TECHNICAL DATA

**Machine speed:**

- Up to 600* bags or envelopes/minute
- *According to suitable packaging material specifications*

**Teabag capacity:**

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

**Power required:**

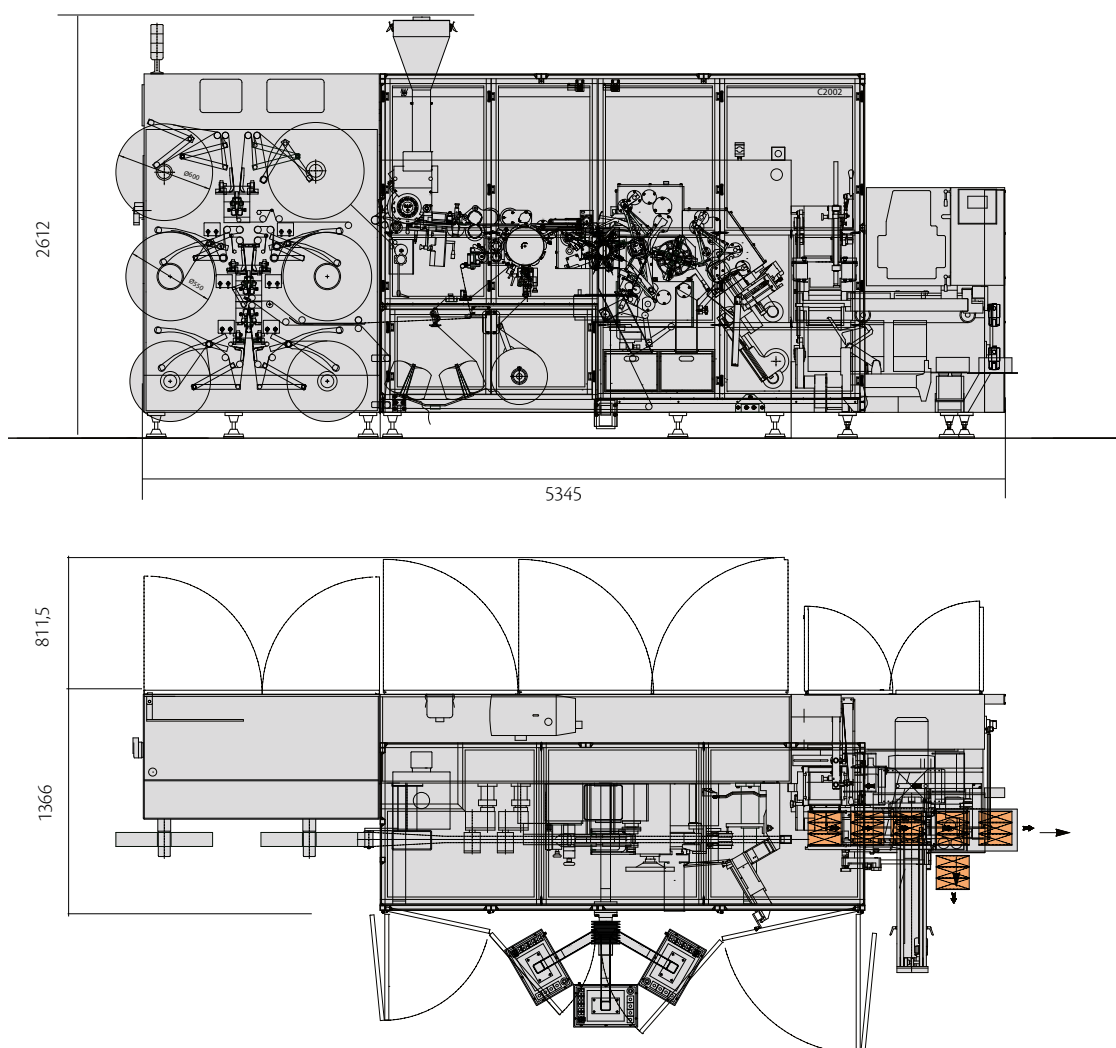
- Total installed power: 23 KW
- Maximum power consumption: 18.8 KW
- Note: consumption depends on the thermic groups fitted on the machine*

**Compressed air:**

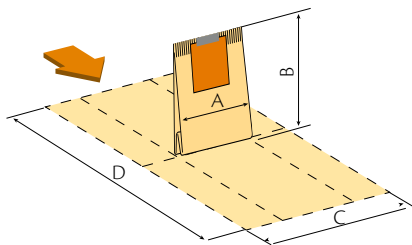
- Exercise pressure: 6 bar
- Consumption: up to max. 750 NI/min

**Machine net weight:**

- Max. 6000 kg.

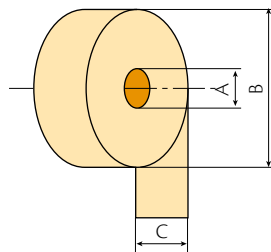


FILTER BAG SIZE



A	B	C	D
40	58	87	131
45	58	97	131

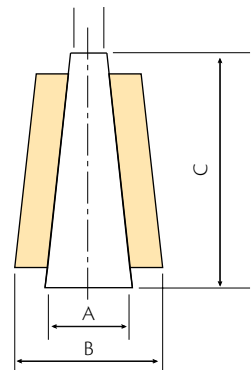
HEATSEALABLE
FILTER PAPER REEL



A	B	C
76	MAX 600	87
76	MAX 600	97

WEIGHT 16 gr./m²

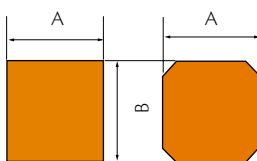
COTTON THREAD COIL SIZE



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

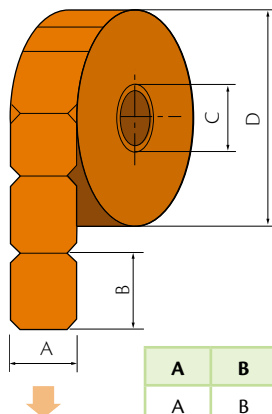
Ø		
A	B	C
MAX 36	MAX 260	200

TAG SIZE



A	B
25	25
25	30
26	28
28	32

TAG PAPER REEL



A	B	C	D
A	B	152	600

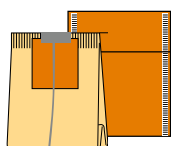
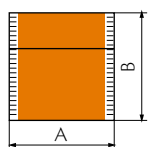
WEIGHT gr./m ²		THICKNESS (micron)	
MIN	MAX	MIN	MAX
100	200	120	200

Data subject to possible technical
modifications and not necessarily definitive.

C2002 GENERAL TECHNICAL DATA

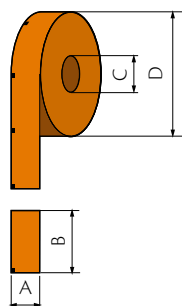
CRIMPED OUTER ENVELOPE SPECIFICATIONS

CRIMPED OUTER ENVELOPE



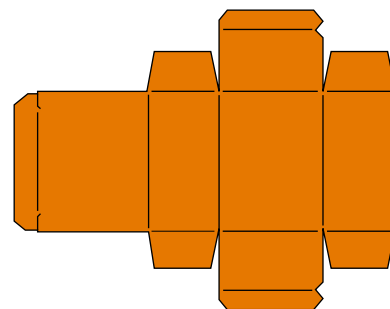
BAG TYPE	A	B
40x58	55	63
	57	67

CRIMPED OUTER ENVELOPE
PAPER REEL SIZE



A	B	C	D
55X63	132	76	MAX 550
57X67	140	76	MAX 550
WEIGHT 60 ÷ 70 gr./m ²			
THICKNESS 70 ÷ 80 micron			

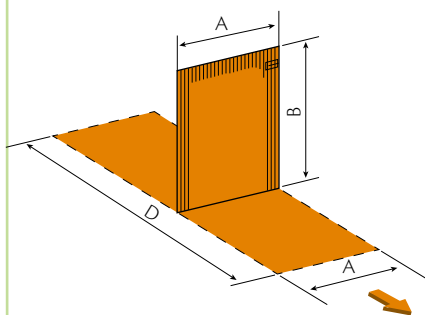
CARTON SPECIFICATIONS
FOR FLAT BLANK



WEIGHT 270 - 320 gr./m ²
THICKNESS ± 0.35 - 0.45 mm

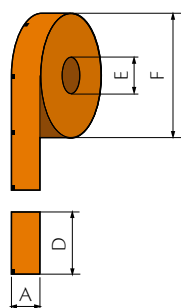
HEATSEALED OUTER ENVELOPE SPECIFICATIONS

HEATSEALED OUTER ENVELOPE



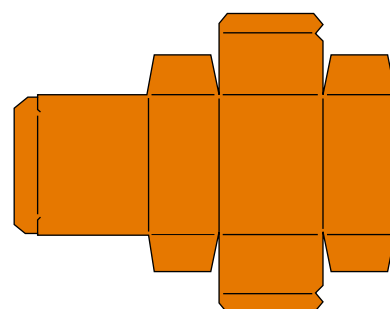
BAG TYPE	A	B	D
40x58	66	77	154
45x58	63	72	144

HEATSEALABLE OUTER ENVELOPE
PAPER REEL SIZE



A	D	E	F STANDARD
66	154	76	MAX 500
63	144	76	MAX 500
WEIGHT 80 ÷ 85 gr./m ²			

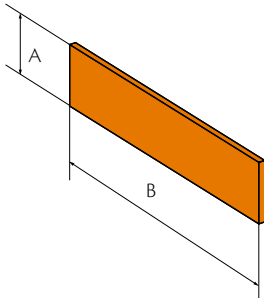
CARTON SPECIFICATIONS
FOR FLAT BLANK



WEIGHT 270 - 320 gr./m ²
THICKNESS ± 0.35 - 0.45 mm

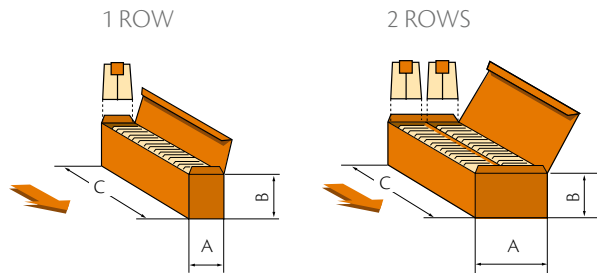
CARTONING ATTACHMENT FROM 1 TO 2 ROWS OF BAGS OR OUTER ENVELOPES

CARTON SPECIFICATIONS FOR CARDBOARD DIVIDERS



B = carton width - 8 mm

A STANDARD	30
B	80 ÷ 160
WEIGHT 350 gr./m ²	
THICKNESS ± 0.40 - 0.50 mm	



1 and 2 ROWS

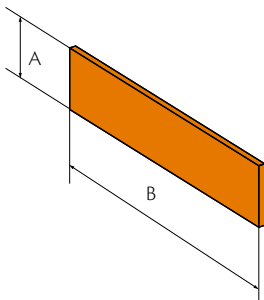
	CARTON DIMENSIONS					
	A		B		C	
	MIN	MAX	MIN	MAX	MIN	MAX
1 ROW	42	72	61	85	56	170
2 ROWS	84	145	61	85	90	170

	NUMBER OF ENVELOPES	
	MIN	MAX
1 ROW	8	34
2 ROWS	30	68

Technical data for tuck-in cartons only.

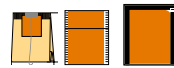
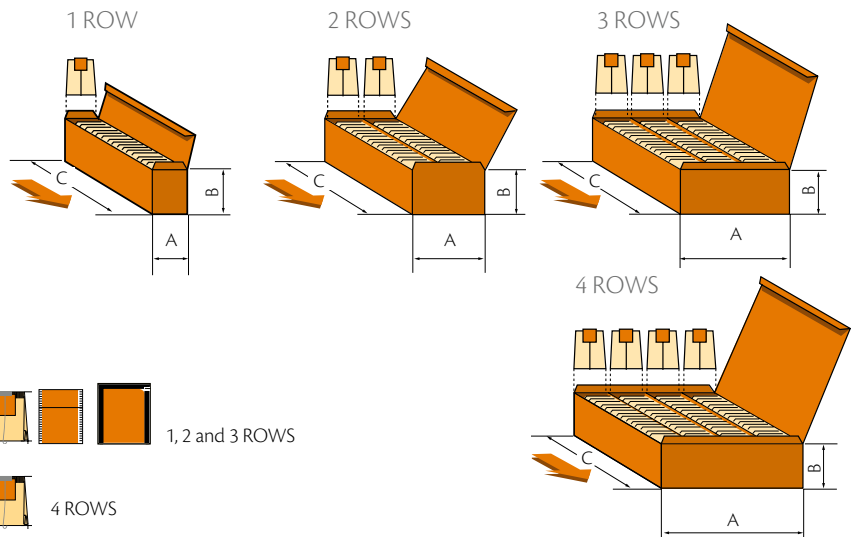
CARTONING ATTACHMENT FROM 1, 2, 3 TO 4 ROWS OF BAGS OR OUTER ENVELOPES

CARTON SPECIFICATIONS FOR CARDBOARD DIVIDERS



B = carton width - 8 mm

A STANDARD	30
B	80 ÷ 195
WEIGHT 350 gr./m ²	
THICKNESS ± 0.40 - 0.50 mm	



1, 2 and 3 ROWS



4 ROWS

	CARTON DIMENSIONS					
	A		B		C	
	MIN	MAX	MIN	MAX	MIN	MAX
1 ROW	42	72	61	85	56	205
2 ROWS	84	145	61	85	90	205
3 ROWS	126	212	61	85	100	205
4 ROWS	165	200	61	72	100	205

	NUMBER OF BAGS OR ENVELOPES	
	MIN	MAX
1 ROW	8	34
2 ROWS	30	68
3 ROWS	45	100
4 ROWS	60	100

Technical data for tuck-in cartons only.

ima.it



IMA S.p.A. - **TEA & HERBS division**
mktg.tea@ima.it • ima.it/beverage/brands/tea-herbs
FOLLOW IMA  