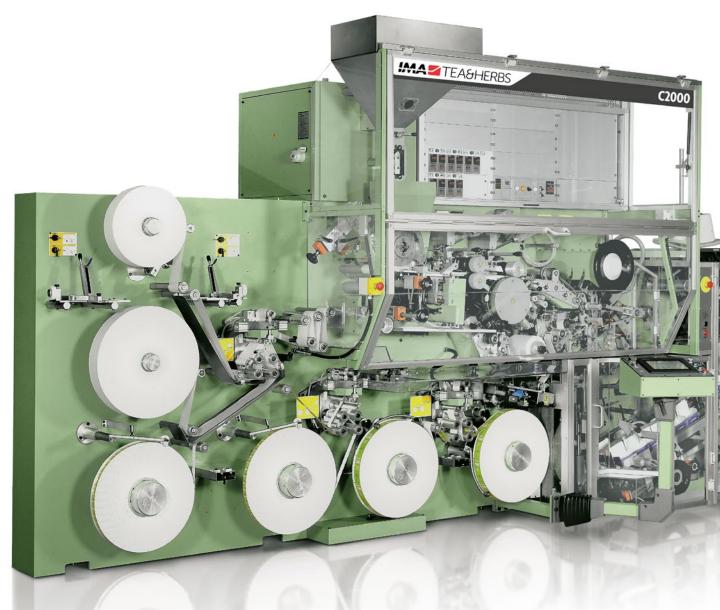




## C2000 THE IDEAS TAKE SHAPE

THE IMA C2000 COMBINES THE MOST ADVANCED TECHNICAL LEVEL TOGETHER WITH THE SIMPLE AND TRADITIONAL CONCEPT OF DOUBLE CHAMBER FILTER BAG WITH STRING AND TAG.



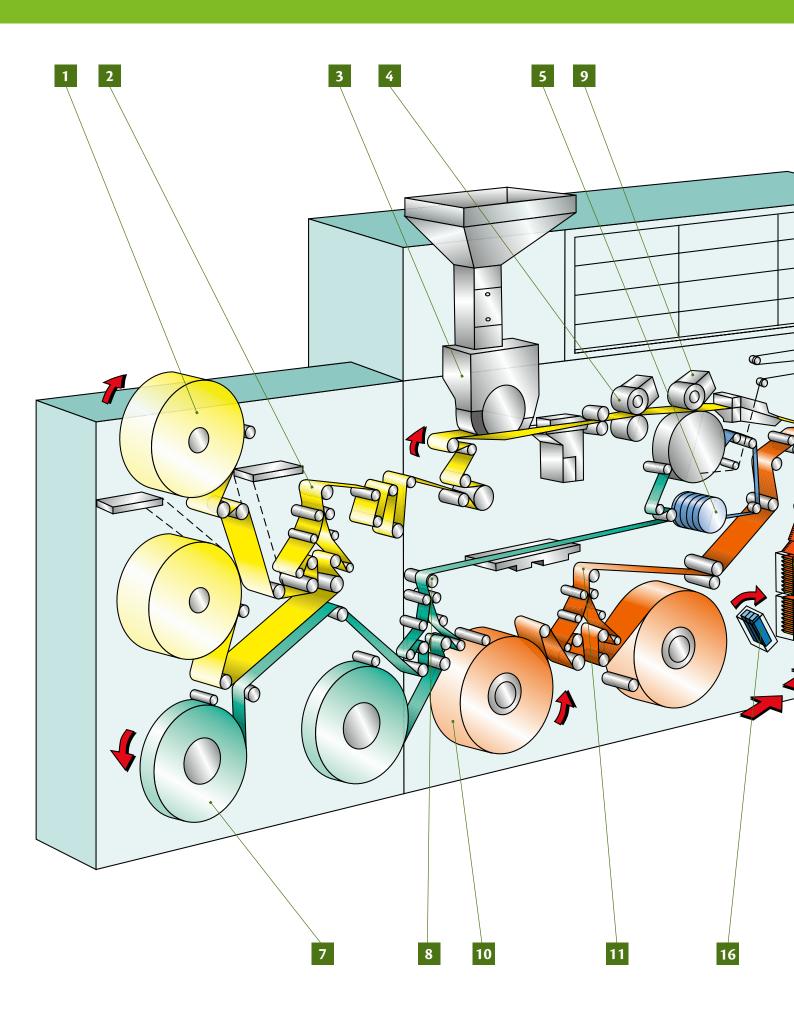


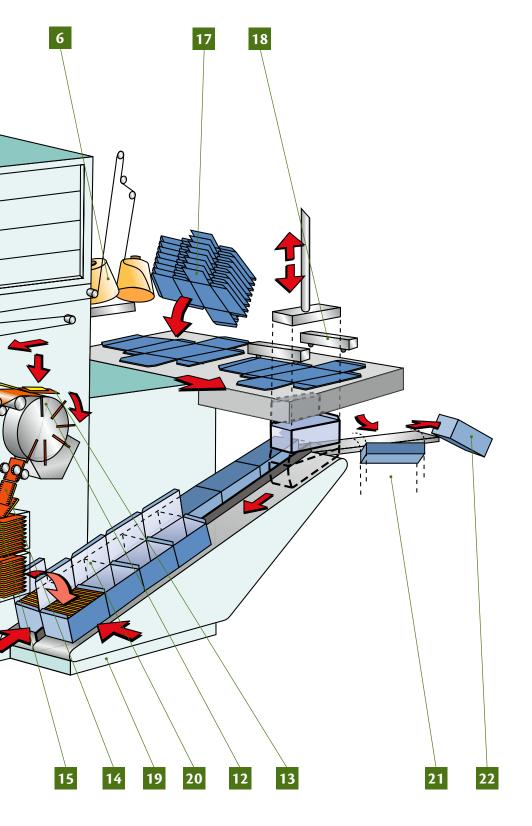




- HARD TAG
- PACKAGING MATERIAL AUTOMATIC SPLICING
- HIGH PRODUCTION SPEED: 450 BAGS/MINUTE
- HIGH RELIABILITY
- High production efficiency
- LOWER PRODUCTION COSTS
- REDUCED MAINTENANCE
- HIGH PROCESS CONTROL
- LOWER NUMBER OF OPERATORS REQUIRED
- REDUCED SPARE PARTS CONSUMPTION
- PACKAGING MATERIAL SAVING



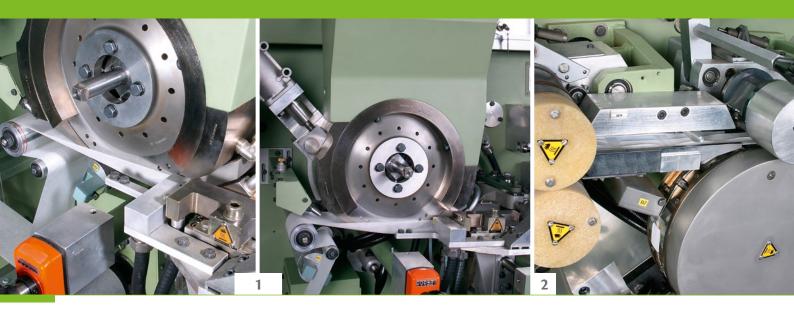




## **MAIN FUNCTIONS**

- 1. FILTER PAPER REELS
- 2. AUTOMATIC FILTER PAPER SPLICING
- 3. PRODUCT DOSING UNIT
- 4. FILTER BAG SEALER
- 5. ADHESIVE PAPER REEL
- **6.** COTTON THREAD REELS
- **7.** TAG PAPER REELS
- 8. AUTOMATIC TAG PAPER SPLICING
- 9. COTTON THREAD SEALING ON THE TAG AND FILTER BAG
- 10. OUTER ENVELOPE PAPER REELS
- **11.** AUTOMATIC OUTER ENVELOPE PAPER SPLICING
- **12.** FILTER BAG FORMING
- 13. OUTER ENVELOPE FORMING
- **14.** OUTER ENVELOPE CLOSURE
- **15.** TEABAG OR OUTER ENVELOPE STACKING
- **16.** CARDBOARD DIVIDERS FOR STACKING
- 17. FLAT BLANK MAGAZINE
- **18.** CARTON ERECTION
- 19. CARTON FILLING
- **20.** CARTON CLOSURE
- 21. CARTON WEIGHING AND FAULTY
  PACKAGE REJECTION
- 22. CARTON EXIT

## C2000 FILTER BAG



#### **FUNCTIONAL AND VERSATILE**

The practical use of traditional packaging materials and of innovative features, has permitted IMA to obtain a double chamber teabag with thread and tag, based on a new concept aimed to emphasize the special features of this packaging style although reducing the costs sensibly.

The IMA C2000 double chamber filter bag has a large area between the two infusion chambers which are completely separate, enabling a faster infusion and letting the natural tea aroma flow out of the bag. According to IMA's versatility and flexibility traditional concept, the IMA C2000 offers a wide range of filter bag sizes to suit all product specifications and market demand.

The tag as well, has been designed on the same concepts, both in the choice of size and in the choice of shape and thickness.

#### **NO STAPLES**

The IMA C2000 teabag is well folded, resistant and very discerning. One of the advantages of this packaging is the lack of staple necessary to fix the cotton thread to the bag and tag.

This feature avoids the presence of metallic material during the infusion. The staple has been replaced by a totally alimentary product a small piece of adhesive paper.









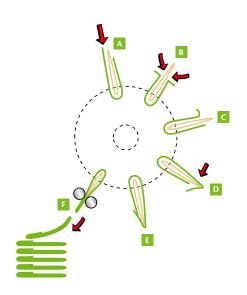
- PRODUCT FEEDING AND DOSING STATION
- 2. Teabag sealing station
- 3. COTTON THREAD AND ADHESIVE PAPER CUTTING STATION
- 4. Tag cutting station and sealing to the teabag
- 5. TEABAG FOLDING AND FINAL CLOSURE STATION



## C2000 OUTER ENVELOPE

#### **CRIMPED OUTER ENVELOPE**

Each single IMA C2000 filter bag can be wrapped individually in a protective paper envelope, which is closed on the sides by means of crimping. Aesthetically very tasteful and functional, the outer envelope opens without difficulty for the easy removal of the filter bag. Versatility and flexibility can of course be realised by counting on the wide range of sizes available. It is also possible to produce filter bags both with or without outer envelope. Changing the packaging style on the machine can be achieved easily, quickly and at any time.



Flow chart of the outer envelope forming and closing



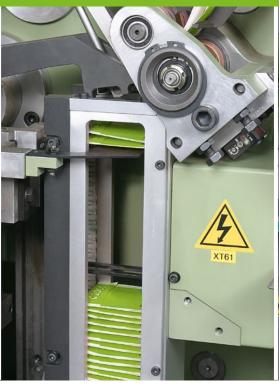
THE IMA C2000 OUTER ENVELOPE TASTEFUL, HYGIENIC, PRACTICAL

## **ECONOMICAL**

Thanks to the reduced dimensions of both the naked bag and the outer envelope, and thanks to the adopted solutions in their design, the IMA C2000 guarantees a sensible saving in the packaging material consumption if compared to traditional machines for the packaging of tea into double chamber teabags.



## C2000 A COMPLETE PRODUCTION CYCLE







Teabag counting and stacking

The IMA C2000 is able to count and stack the filter bags, with or without outer envelope, and put them, automatically, into the cartons formed from flat blanks, reaching the highest level of security and efficiency.

Flat blank collecting and carton erection

AUTOMATIC CARTONING ATTACHMENT FROM FLAT BLANKS

Stack insertion, into the cartons

To complete the whole production cycle, the C2000 is equipped with a multirow automatic cartoning attachment from flat blanks able to count from a minimum of 10 to a maximum, of 100 bags or outer envelopes per carton. The C2000 cartoning attachment may be equipped, for cartons containing bags in one single row, with an easy and efficient motorised magazine, with easy loading. This magazine guarantees a higher operation autonomy.

Carton closure and exit

# EASY AND QUICK CARTON SIZE CHANGEOVER

The carton size change over has been accurately designed to be quick, smooth and univocal, in order to let the machine reach the maximum production speed in a very short time. The carton size change over is achieved by means of hand-wheels with digital indicators. The change part replacement is performed by means of fast blocking levers without the need of particular adjustments necessary to fit the parts in the correct position.



## C2000 FLEXIBILITY IN STYLE

The C2000 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 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.



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.



# C2000 HIGH PRODUCT QUALITY



Filter paper reel automatic splicing

# PACKAGING MATERIAL AUTOMATIC SPLICING

The C2000 is fitted with an advanced automatic splicing system for all packaging materials such as filter paper, tag and outer envelope paper. Splicing is performed smoothly during machine production. It has been statistically proven that this sophisticated system saves time in the replacement of packaging materials thereby contributing to the user-friendliness of this machine, guaranteeing an increase in the machine production efficiency.

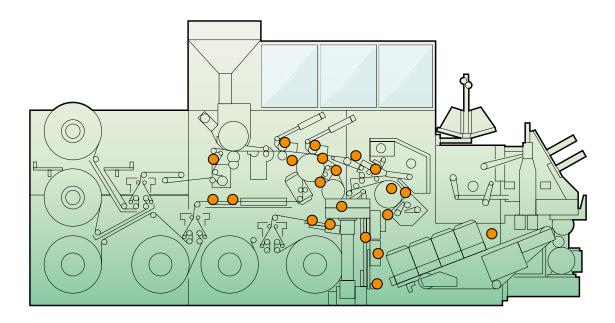




# C2000 HIGH PRODUCT QUALITY

## **PRODUCT CONTROL**

In order to guarantee the maximum packaging reliability, any station of the IMA C2000 functional cycle has been provided with a specific product control device. Furthermore, the production efficiency is kept at the highest level, since all controls (except for those where it has not been possible), do not stop the machine, but cause an automatic faulty package rejection.



The product controls





Outer envelope paper reel automatic splicing



# WEIGHT AUTOMATIC CONTROL AND ADJUSTMENT

The IMA C2000 offers the possibility to fit an automatic weight adjustment group on the product feeding and dosing group.

This attachment, connected to a checkweigher unit at line end, rejects automatically the cartons not reflecting the exact weight, previously selected by the operator.

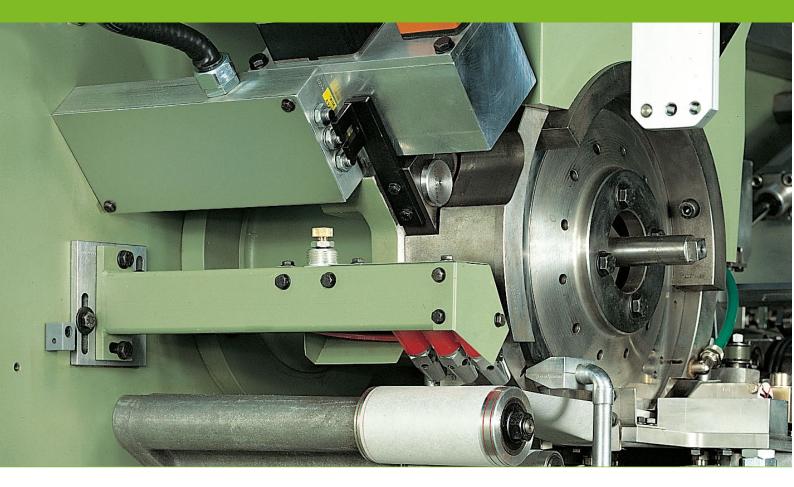
The weight is controlled on the checkweigher, and automatically adjusted to the required dosage.



## **AUTOMATIC SPLICING REJECTION**

All material splicing performed by the IMA C2000 or already present in the reels, are revealed and the machine rejects automatically the carton containing the faulty product.

# C2000 HIGH PRODUCT QUALITY



# SPECIAL FEEDER FOR NON FREE-FLOWING PRODUCTS

The special feeder for herbs is the right answer to the problems faced while packing light and soft herbs into filter bags.



## C2000 HIGH EFFICIENCY GUARANTEED



#### **DRY TRANSMISSION SYSTEM**

A new system has replaced the traditional transmission belts. This system consists of stiffened belts, extremely silent, and which require neither lubrication nor maintenance.

# CYCLE STATIONS

**EASY ACCESS TO ALL FUNCTIONAL** 

The work process of the IMA C2000 has been studied to simplify the relation between the operator and the machine itself, and what is more to obtain the best intervention or control accessibility to any of the stations of the machine's functional cycle.

# REDUCED SPARE PARTS CONSUMPTION AND REDUCED COSTS

The innovative solutions adopted, the reduced number of moving parts, the accurate study for the choice of the materials and the rationalization of the parts construction method, determine a high processing security and are the best way to guarantee a low spare parts consumption and at the same time reduce costs.

## C2000 HIGH EFFICIENCY GUARANTEED

## THE MACHINE COMPUTER CONNECTION

The automatic collection of all information relevant to a machine or line processing is an important element necessary to keep efficiency at a maximum level and production costs to a minimum.

The IMA C2000 machine, can be equipped with a serial interface RS 232, that, connected to a central computer, allows a check on the production position at any given time.



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## **REDUCED MAINTENANCE**

IMA, aware of how the maintenance time spent on the machine affects the production efficiency, has concentrated its efforts to reduce the time spent in order to assure the maximum production efficiency.



## 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.

#### THE ELECTRONICS

The electrical system of the IMA C2000 has been designed and manufactured to guarantee the maximum reliability and a high intervention facility. The electrical system is completely isolated, reducing to a minimum the risk of disturbances due to eventual electromagnetic occurrences.

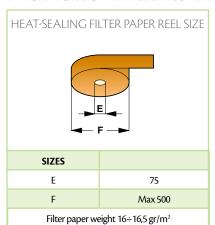
The electronics, based on the microprocessor, responds to all the most complex functions, starting from the heating groups to the quality control, helping the machine size dedication.

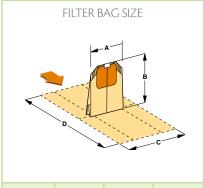
## **ONLY ONE OPERATOR**

The innovative technological solutions, the automatic material splicing, the avant-garde electronics, the constant and complete control on the whole working cycle of the machine, determine a high level of reliability of the C2000 and are the fundamental basis to allow only one operator to handle more than one machine.

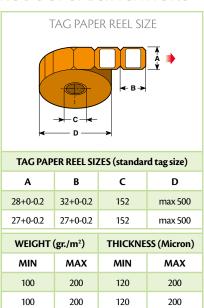
## **C2000** PACKAGING MATERIALS AND PRODUCT SPECIFICATIONS

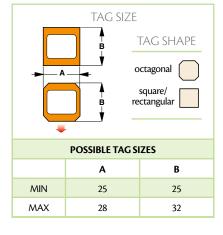
### PACKAGING MATERIALS AND PRODUCT SPECIFICATIONS

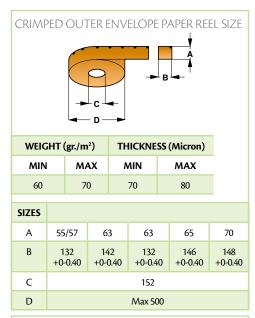


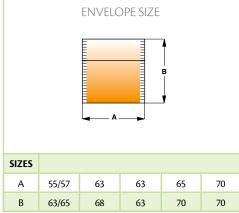


Α	В	С	D
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45	63	97	141
45	58	97	131
45	65	97	146
50	65	107	146

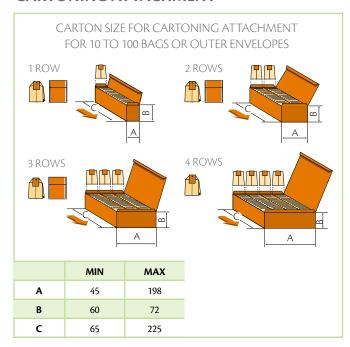


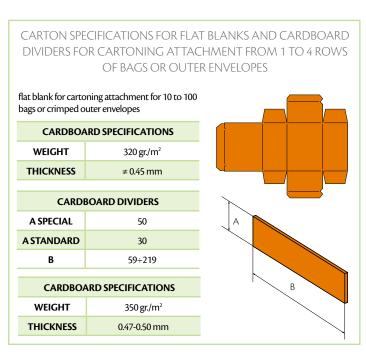






#### **CARTONING ATTACHMENT**





## C2000 GENERAL TECHNICAL DATA



## Machine speed:

- Up to 450 cycles/minute



#### Teabag capacity:

- Up to approximately 4.0 grams
- Filter bag maximum volume 14.3 cubic centimetres



#### Power required:

- Total installed power: 18 kW
- Average power consumption: 8,5 kW



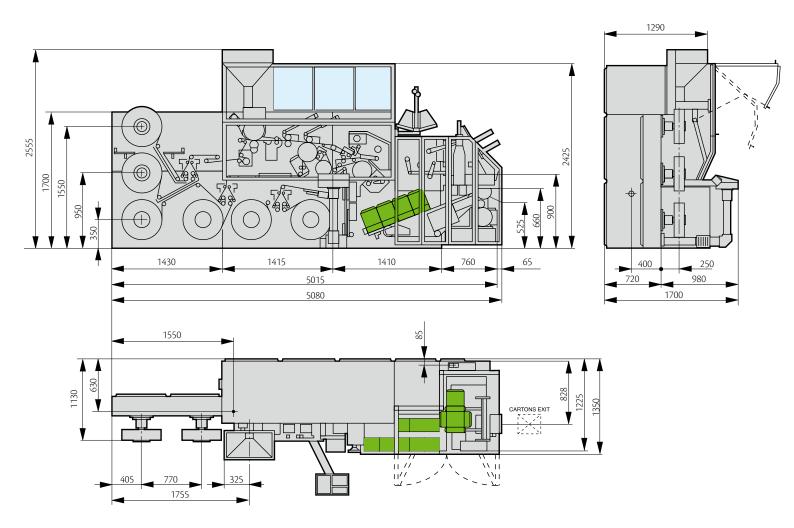
#### Compressed air (without/with outer envelope):

- Duty pressure : 6 bar
- Consumption: max. 500 NI/min
- Air supply connection: 1/2" b.s.p.
- Compressor: Tank capacity 250 liters



## Machine net weight:

- Max. 6300 kg.



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