PERFECTA





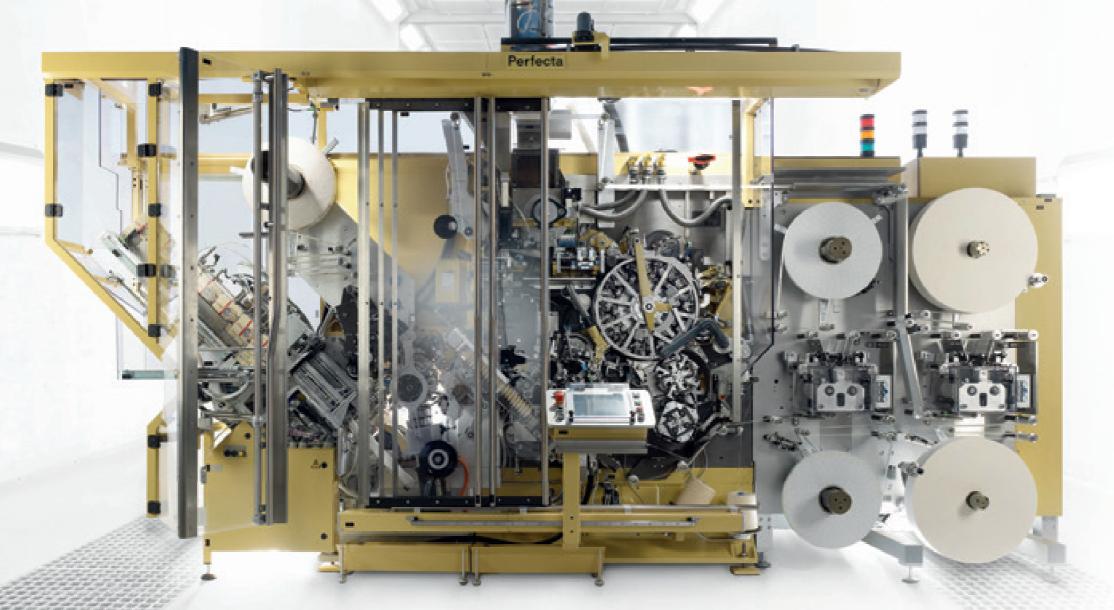
THE ADVANCED TEA BAG MACHINE SYSTEM

PERFECTA

HIGH PERFORMANCE MEETS FLEXIBILITY

bags with up to 22 cm³ filling volume. from the paper envelope. The PERFECTA UNIVERSAL allows for

PERFECTA TAG is the perfect system dual production of both paper or heat for making double-chamber tea bags sealing foil bags on a single machine. with natural non-heat seal filter paper, All PERFECTA models come with easily a thread and a cardboard tag. With exchangeable stapling or knotting the PERFECTA FAMILY SIZE machine stations. The economical PERFECTA you can pack double-chamber tea ENVELOPE even cuts the tag directly



Increase your efficiency while reducing costs

- Lower production costs
- German premium quality and perfection
- Reliability
- Flexibility
- Superior safety standards
- High production efficiency
- Time saving exchange of packaging materials

Rely on our innovative technology for premium quality products

- Shorter maintenance times
- Less staff required
- Quick format changes
- Low spare parts consumption
- Longer maintenance intervals
- Modular construction

PERFECTA TAG

ENHANCED EFFICIENCY AND PRODUCTIVITY

This machine produces doubleprotecting the natural tea aroma from harmful influences. The tag features a unique "thread safety"

design which fixes the thread into chamber tea bags with a thread and a slot at the lower edge of the tag, tag. Its natural filter paper is not This ensures that the threads and coated with chemical hot glue to tags do not get tangled inside the tea preserve the taste of your tea - bag box during transit. According to customer requirements, we can cut the cardboard tags with straight edges or cropped corners.





Dosing station with dust exhaust device and filter paper tube



"heart" of the PERFECTA machine. Continuous working transport wheel with the stations forming



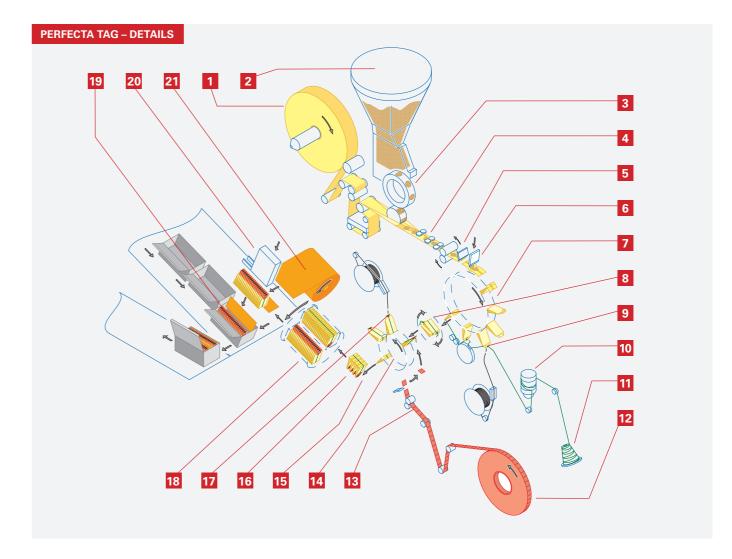


Final station of tea bag manufacture. Attachment of thread and card-

THE BENEFITS

- Capacity of up to 420 bags/min.
- Available as stapling or knotting machine
- Exchangeable knotting and stapling stations
- Faulty bag ejection

- Motor operated bag weight adjusting mechanism
- Computer controlled weight checker for full boxes (optional)
- Cardboard divider strip from reel (optional)
- Flavour dosing device (optional)
- Servo-controlled tag corner punching station (optional)
- Automatic splicer (optional)



- 1 Filter paper reel
- 2 Tea feeding
- 3 Dosing
- 4 Tube forming
- 5 Tube knife
- 6 Bottom folding
- 7 Head folding
- 8 Reversing wheel

- 9 Bag head stapling respectively head knotting station
- Thread regulating wheel (Fournisseur)
- Cotton thread cone
- 12 Cardboard tag reel

15 Faulty bag ejection

- 13 Tag unwinding and cutting
- Lower transport wheel (TagType)
- 20 Box filling
- 21 Cardboard divider strip reel

16 Bag stacking and counting

Turning magazine

strip into the box

Tag stapling or tag knotting station

Stacking and inserting of carboard divider

PERFECTA FAMILY SIZE

ADVANCED DESIGN FOR MAXIMUM QUALITY **FAMILY SIZE PACKAGING**

The PERFECTA FAMILY SIZE machine ing of bags with natural non-heat seal hot brew tea specialties.

filter paper using a variety of tag has been designed to deliver sizes. However, with the FAMILY SIZE maximum quality XL double-cham- model you can fill double-chamber ber tea bags with a thread and tea bags with up to seven grams of cardboard tag. It features all the black tea with a production speed advantages of the PERFECTA TAG of up to 250 bags per minute for the machine, allowing for the manufactur- latest trends in ice tea, and cold or















Dosing station with dust exhaust



"heart" of the PERFECTA machine. Continuous working transport wheel with the stations forming



Filter paper tea bag forming



Final station of tea bag manufacture. Attachment of thread and card-

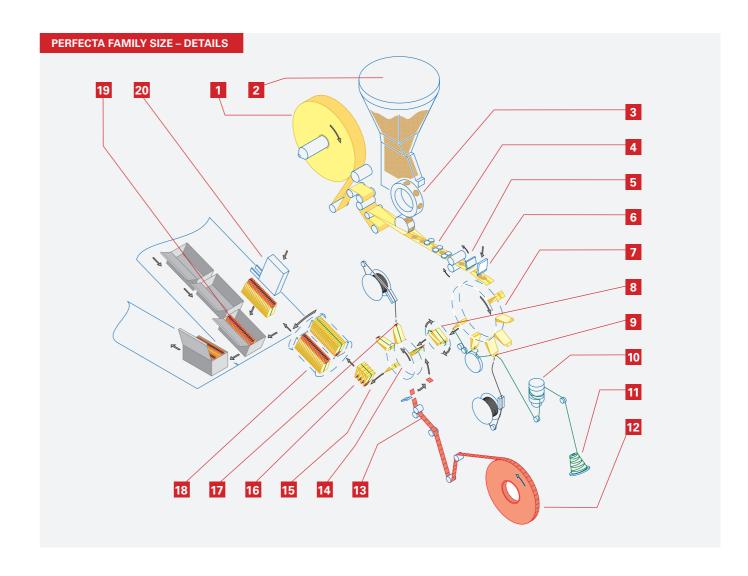


Drive, drive for filter paper and dosing. Motor operated bag weight adjusting mechanism

THE BENEFITS

- Filling volume of up to 22 cm³
- Capacity of up to 250 bags/min.
- Available as stapling or knotting machine
- Faulty bag ejection

- Low filter paper consumption
- Motor operated bag weight adjusting mechanism
- Quicker and easier exchanging of the dosing device
- Computer controlled weight checker for full boxes (optional)
- Servo-controlled tag corner punching station (optional)



- 2 Tea feeding
- 3 Dosing
- 4 Tube forming
- 5 Tube knife
- 6 Bottom folding

1 Filter paper reel

- 7 Head folding
- 8 Reversing wheel

- 9 Bag head stapling station
- 10 Thread regulating wheel (Fournisseur)
- Cotton thread cone
- 12 Cardboard tag reel
- 13 Tag unwinding and cutting
- 14 Lower transport wheel (TagType) 15 Faulty bag ejection
- 16 Bag stacking and counting

- 17 Tag stapling
- 18 Turning magazine
- Stacking and inserting into the box
- 20 Box filling

PERFECTA **ENVELOPE**

HIGHLY ECONOMICAL DUE TO A UNIQUE TAG CUTTING DESIGN

The PERFECTA ENVELOPE manu- as the tag is cut from the paper one which does not require the cost savings. production of an additional tag,

factures double-chamber tea bags envelope itself. With respect to the in a protective paper envelope. Its entire lifespan of the machine, this unique envelope bag is the only results in an enormous long-term

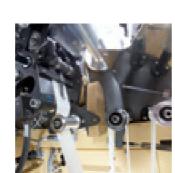














Lower transport wheel (envelope)



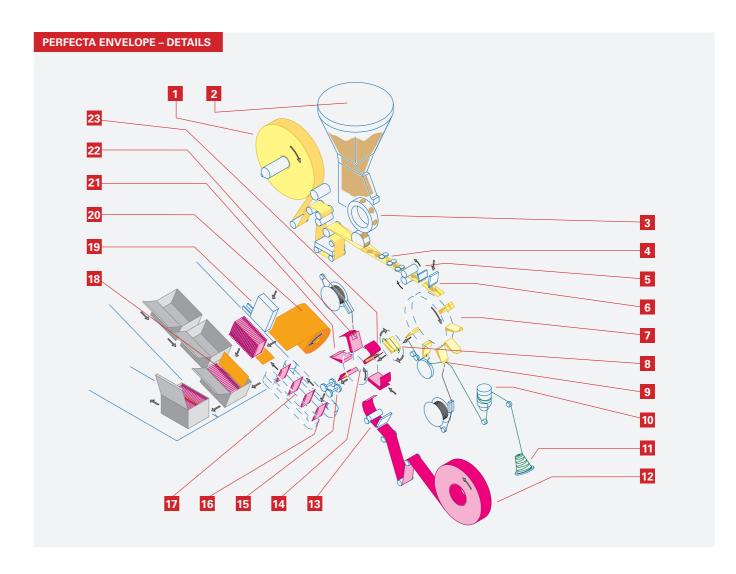
Bag stacking and box filling



Cardboard divider strip reel and cardboard divider inserter

THE BENEFITS

- Cost saving (paper tag cut from the paper envelope)
- Available as a stapling or knotting machine (tea bag head with knot, paper tag with staple)
- Faulty bag ejection
- Motor operated bag weight adjusting mechanism
- Motor operated bag weight adjusting mechanism
- Computer controlled weight checker for full boxes (optional)
- Cardboard divider strip from reel (optional)
- Flavour dosing device (optional)
- Automatic splicer (optional)



- 1 Filter paper reel
- 2 Tea feeding
- 3 Dosing
- 4 Tube forming
- 5 Tube knife
- 6 Bottom folding
- 7 Head folding
- 8 Reversing wheel

- 9 Bag head stapling respectively head knotting station
- Thread regulating wheel (Fournisseur)
- Cotton thread cone
- 12 Envelope paper reel
- 13 Envelope unwinding and cutting
- 14 Lower transport wheel (Envelope Type)
- 15 Bag take off and crimping station
- 16 Faulty bag ejection

- 17 Envelope bag stacking and counting
- 18 Stacking and inserting of card board divider
- strip into the box
- Box filling
- 20 Cardboard divider strip reel
- 21 Reversing of the closing flap
- 22 Tag stapling
- 23 Pushing of filter bag into the outer envelope

PERFECTA UNIVERSAL

MODULAR DESIGN FOR MAXIMUM FLEXIBILITY AND CAPACITY - UP TO 380 BAGS PER MINUTE

The PERFECTA UNIVERSAL produces Functions three types of double-chamber tea bags with a cardboard tag. The naked filter tea bag can be wrapped either with an outer paper envelope or an aroma protection envelope foil. Retrofitting to the two enveloping options is easy. Simply activate or deactivate the envelope feeder and exchange a few easy-to-handle formatting components in the cartoning device. The basic machine is a PERFECTA for tag type tea bags.

After finishing the tea bag with a cardboard tag, the bag is fed into a universal transport wheel where the tag type bag is wrapped into an outer paper envelope or aroma protected envelope foil. The finished tea bag is then transported to an automatic universal box filling station capable of handling all three types of bags. The envelope aggregate, as well as the box filling device are fitted at the left side of the PERFECTA basic machine.









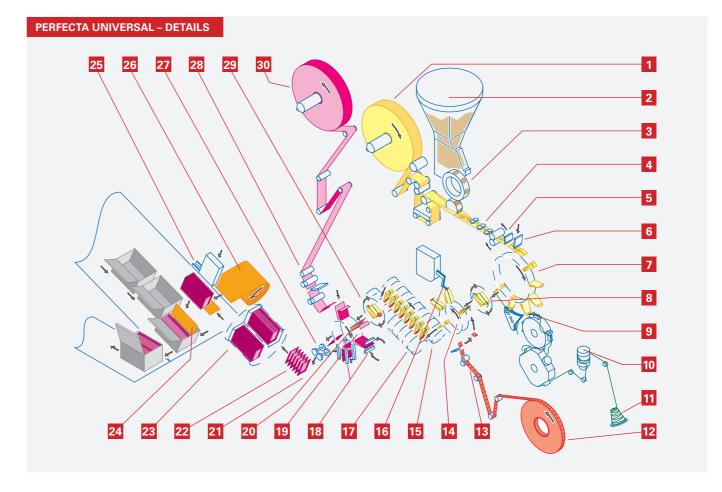




Bag stacking and cartoning

THE BENEFITS

- Production speed up to 380 bags and up to 350 bags per minute with HS foil
- Manufacturing options for 3 bag types (naked bag, paper envelope or heat seal envelope)
- Flexible production, can be guickly converted from naked bag to envelope production and vice versa
- Hard tag in the envelope (smallest tag size available: 20x24 mm)
- Knotting or stapling machine (reversible configuration)
- Flavour dosing device (optional)
- Automatic splicer (optional)
- Tea bag with cardboard tag and aluminium staple/knotted thread (with paper envelope or aroma protection foil)



- 1 Filter paper reel
- 2 Tea feeding
- 3 Dosing
- 4 Tube forming
- 5 Tube knife
- 6 Bottom folding
- 7 Head folding
- 8 Reversing wheel
- 9 Bag head stapling respectively head knotting station
- 10 Thread regulating wheel (Fournisseur)
- 11 Cotton thread cone

- 12 Cardboard tag reel
- 13 Cardboard tag unwinding and cutting
- 14 Lower transport wheel (TagType)
- 15 Faulty bag ejection
- 16 Tag stapling or tag knotting station
- 17 Bag feeding (spiral conveyor)
- 18 Sealing jaws with tear-off knife
- 19 Transport wheel (Universal)
- 20 Pushing of filter bag into outer envelope paper or aroma protected envelope foil
- 21 Faulty bag ejection
- 22 Bag stacking and counting

- 23 Turning magazine
- 24 Stacking and inserting of card board divider strip into the box
- Box filling
- Cardboard divider strip reel
- 27 Bag take off and crimping station
- 28 Feeding station and cutting of paper envelope or aroma protection envelope foil
- Reversing wheel
- 30 Paper envelope reel or aroma protection envelope foil reel

A PATENTED LINKAGE

KNOT ON THE BAG

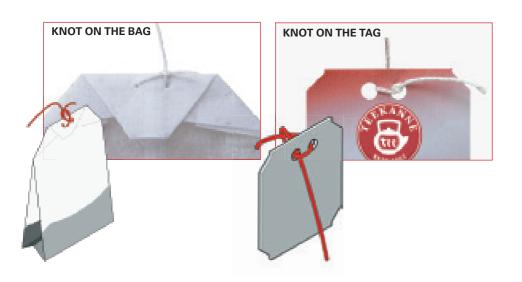
top of the bag by two needle stitches to the left and right of the longitudinal knot replaces the function of the staple by fixing the inner folds with two stitches and reliably closing the top of the tea bag.

fore cannot become loose. The station works in a continuous process. The movements run slowly and the needles are protected against wear. The knotted thread is tightened at the end stage. Faulty bags are ejected.

ced here as on any PERFECTA machine the two knotting stations simply replace the two stapling stations.

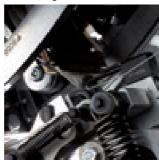
KNOT ON THE TAG

The thread is knotted securely to the The knot is formed between two holes punched before-hand in the cardboard tags in a patented proceseam in a patented procedure. The dure. The holes are cleanly punched out by an apparatus installed in the tag feed. As well as giving a neat optical impression, the holes serve to relieve wear on the needles which do not need to pierce the hard tag. The The knot is self-tightening and there- knot is formed between both holes which results in a perfect appearance. The knot is self-tightening. A sensor monitors the position of the bag and the tag before reaching the knotting station. If the positions are incorrect, of the process by a thread brake. A the knotting device swings out of its 100% knot check is performed at this operating position for one cycle and then back in again, allowing the faulty bag to pass through without knot-The same double chamber bag is produting, which protects the extremely precise components. A thread monitor checks whether the knots have been formed. A bag detected as being faulty is blown out by the faulty bag ejection station.





Sectional view of the knotting station(bag) BG-D60



Sectional view of the knotting station(bag) BG-D60



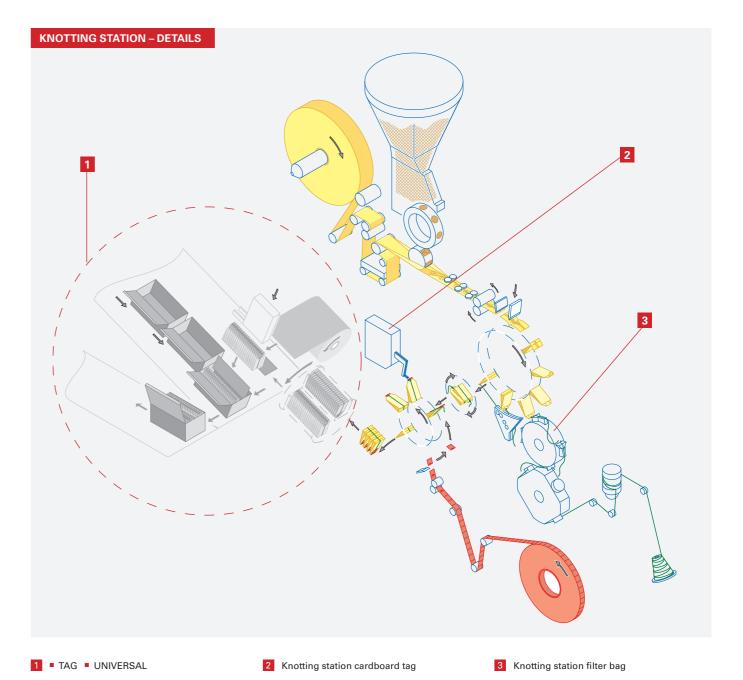
Sectional view of the knotting



Sectional view of the knotting station (tag) BG-D62

THE BENEFITS

- No aluminium staples
- The bag head is reliably secured with two needle stitches
- Complete and reliable knot control on the bag
- Optically attractive knot connection on the tag due to pre-punched knotting holes
- Self-tightening knots the thread cannot detach from the bag



OPTIONAL

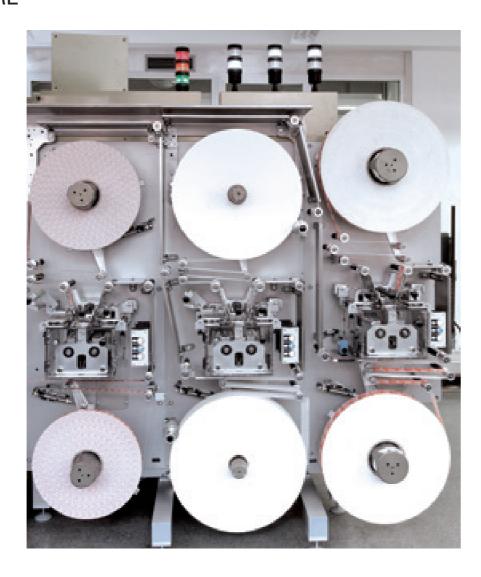
ADD-ON MODULES

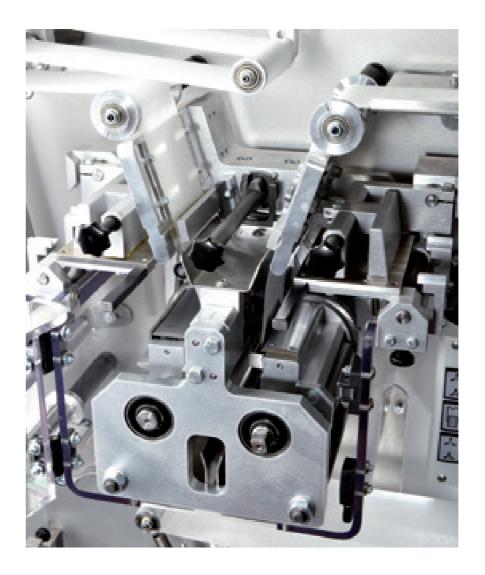
SIMPLY ACHIEVE MORE

Up to six reel pickup stations

Those who respond quickly to market changes will always be a step ahead of the competition. That is why the PERFECTA can be easily expanded to meet any requirement. It offers great flexibility in terms of tag design, allows flavour dosing with up to two flavours and is available with an optional weight check system.

The machine can also accommodate up to three optional splicer devices for filter paper, enveloping foil and tags, as well as up to six reel pickup stations.





Splicer

Once the end of a reel is reached, the PERFECTA Splicer automatically splices in the next roll of material while the machine remains operational. This useful option reduces machine downtime and allows for significantly more material feed flexibility. In the modular concept, in which two roller holders and one splicer unit form one module, splicers are available for one, two or even three material types. The machine can process roll diameters of up to Ø 600mm of filter paper and paper or foil envelope material.

The machine's universal structure allows quick and easy format changes without the need for additional parts. Parts can be exchanged by hand and the handling of all materials is the same. The result is an exact rapport when combining materials edges – the output of the bag with an adhesive point is similarly automated.

ADD-ON MODULES





Tag punch

A tag feed system enables greater flexibility and design options for the tags. The feed system is driven by a servo motor making it possible to process a tag reel without punchedout corners. The integrated punching unit can also punch out the corners or other geometric shapes from the tag material. The station can be set to any tag size quickly by exchanging a few format parts.

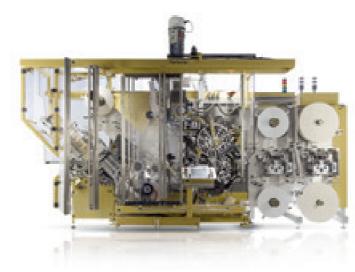
Flavour dosing device for one or two flavours

Flavour dosing allows the addition of flavours as powder or granulate. The aroma is added directly before the tea dosing, in which the appropriate dose for each bag is deposited on the filter paper. A sensor controls the process: the sampling device allows for quick weight checks during production. Any bags produced for sampling purposes are of course ejected. The flavour dosing device is available for single or double-dosing (two flavours), which can be configured separately.

Weight checking system

The weight checking system can be optionally integrated into the PERFECTA controls. It consists of a control scale, an interface for data exchange and a faulty box ejector. This system conducts an automatic weight check of every box and adjusts the motorised weight regulation system when necessary. The faulty box ejection device removes the boxes from production which do not conform to the exact weight specifications.

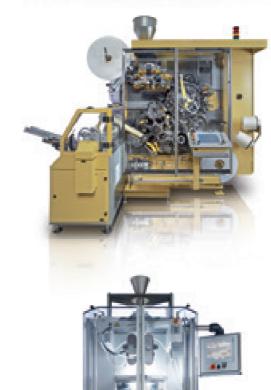
PRODUCT RANGE



PERFECTA



For high speed production and the filling of family size tea bags



COMPACTA



 The modular solution for high investment flexibility, which grows to meet your demands

ZENOBIA









 The all-rounder for premium tea bags and other applications (e.g., coffee, granola, sweets, etc.)











Fixing options

PERFECTA TAG

MATERIAL-DATA

PERFECTA FAMILY SIZE

MATERIAL-DATA

BAGS



Tea bag sizes

Size	VV	н	Max. bag volume
02	40	61	9.5 cm ^{3*}
03	44	61	12.5 cm ³

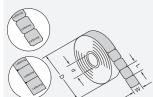
* Size 02 max. 7.0 cm³ by 420 bags/minute

CARDBOARDS



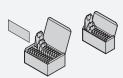
Cardboard dividers

Size	D	w	d+1	lope & tag Type	Paper thickness approx.
02	550	110-215	152	43	0.3
03	550	110-215	152	43	0.3



Cardboard tag

Standard size "Y" (other tag sizes availa						le)
	Size	W	L	d	D _{max}	
	Υ	20	24	120	500	
	Т	25,4	31,75	120	500	
	Z	28	32	120	500	



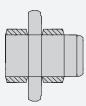
Cardboard material

1-row up to 160 mm length:

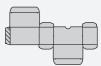
280-320 g/m²

More-row boxes:

360-400 g/m²



Flat blank for cartoning attachment for 15 to 160 bags per box

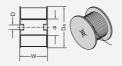


Folding box for cartoning attachment for max. two rows per box

SPOOLS



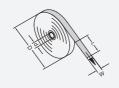




Aluminium wire spool

Da	D+/-0.3	di	W
min Ø138	18.3	min Ø56	min Ø 49
max Ø152	18.3	min Ø56	max Ø102

REELS

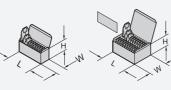


Filter	paper	reel			
Size	Dmax	d+2	L	W+0.5	g/m²
02	600	75	150	94	12
03	600	75	150	103	12

BOX

Box sizes for cartoning attachment for

15 to 160 paper tag type bags:







Format 02

	min	max
W	42	165
Н	60	60
L	115	220

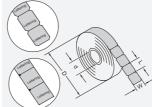
BAGS



Tea bag sizes

Size	W	Н	Max. bag volume
06	58	76	22.0 cm ³

CARDBOARDS



	Garubbaru tay							
	Stand	Standard size "Y" (other tag sizes available)						
	Size	W	L	d	Dmax			
	Υ	20	24	120	500			
,	Т	25,4	31,75	120	500			
	Z	28	32	120	500			

Cardboard material

1-row up to 160 mm length:

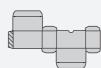
280-320 g/m²

More-row boxes:

360-400 g/m²



Flat blank for cartoning attachment for 10 to 75 bags per box



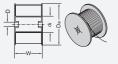
Folding box for cartoning attachment for max. per box

SPOOLS



Thread spool

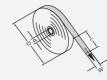
3126	Dillax	u	IIIIIax
06	180	47	180



Aluminium wire spool

Da	D+7-0.3	aı	VV
min Ø138	18.3	min Ø56	min Ø 49
max Ø152	18.3	min Ø56	max Ø102

REELS



Filter paper reel

	i iitei papei ieei						
	Size	Dmax	d+2	L	W+0.5	g/m²	
-	06	550	75	190	129	14	
W							

вох

Box sizes for cartoning attachment for

10 to 75 tag type bags:



Format 06

W	60	180	
Н	76	76	
L	110	240*	

* max. row length 220mm



SPOOLS







Cardboard



PERFECTA

MATERIAL-DATA

PERFECTA UNIVERSAL

BAGS

02 40

02 56

66

Tea bag sizes

Size W H

03 44 61

Universal Paper envelope

03 60 67 12.5 cm³

03 66 77 9.5 cm³

CARDBOARDS

Universal Heat Seal envelope

Size W H Max. bag volume

77 7.0 cm³

Max. bag volume

61 9.5 cm³

Size W H Max. bag volume

67 9.5 cm³

12.5 cm³

MATERIAL-DATA

ENVELOPE





CARDBOARDS

Cardboard dividers

Cardboard material

1-row up to 160 mm length:

02 550 110-215 152 33

03 550 110-215 152 33

0.3

Size D W

280-320 g/m²

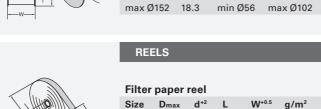
360-400 g/m²

Flat blank for

More-row boxes:

Thread spool						
Size	Dmax	d+/-0.3	Hmax			
02	180	47	180			
03	180	47	180			
Aluminium wire spool						
ο.	D+/-03	al:	14/			

min Ø56 min Ø 49



02

BOX

min Ø138 18.3



Box sizes for cartoning attachment for

15 to 160 paper envelope type bags:

03	600	/5	150	103	12	
Envelope paper reel sizes						
Size	Dmax	d+1	L1+/-0.5	W+/-0.2	g/m²	
02	650*	152	164	56	60-70	
03	650*	152	164	60	60-70	
* with splicing unit 500						

Format 02

min max

229

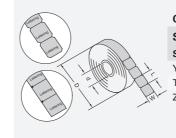
68

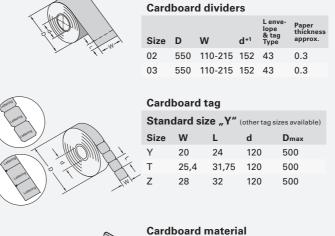
58

68

L 115 220

600 75 150 94





1-row up to 160 mm length:

280-320 g/m² More-row boxes: 360-400 g/m²

Flat blank for

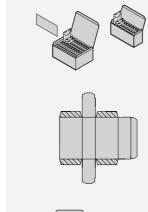
cartoning

attachment for 15 to 160 bags per box

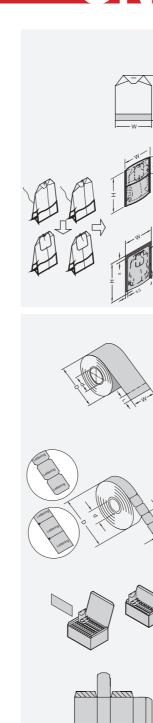
Folding box

for cartoning attachment for max.

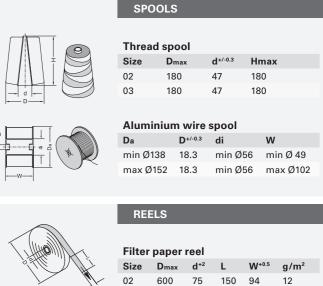
two rows









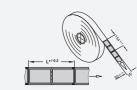




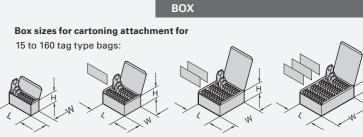
600

75

150

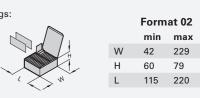


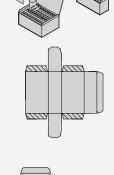
Envelope foil reel sizes					
Size	Dmax	d+1	L1+/-0.2	W+/-0.15	
02	600	152	154	66	
03	600	152	154	66	



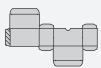








cartoning attachment for 15 to 160 bags per box



Folding box for cartoning attachment for max. two rows per box

TECHNICAL DATA

PERFECTA TAG

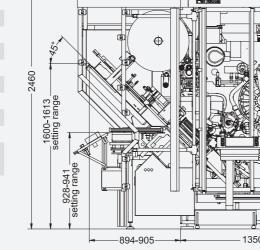
Technical data

Production speed: up to 420 bags/minute approx. 2780 x 1700 mm Length x Width: approx. 2460 mm Height with hopper: approx. 2270 mm Height without hopper: Net weight: approx. 2500 kg 4.0 kW / 6.0 kW* Electric power connection: up to 3.6 kWh Consumption:

Operating pressure:

Consumption: up to 200 NL/minute up to 600 NL/minute**

Compressed air connection: 1/2"





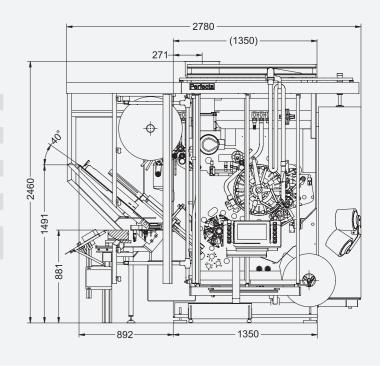
Production speed: up to 380 bags/minute approx. 2780 x 1700 mm Length x Width: approx. 2460 mm Height with hopper: Height without hopper: approx. 2270 mm Net weight: approx. 2500 kg Electric power connection: 4.0 kW / 4.0 kW* Consumption: 3.6 kWh

6 bar

Operating pressure:

Consumption: up to 700 NL/minute

Compressed air connection: 1/2"



PERFECTA FAMILY SIZE

Technical data

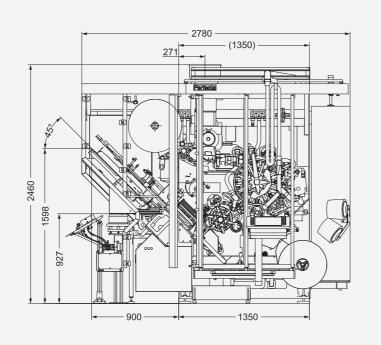
Production speed:	up to 250 bags/minute
Length x Width:	approx. 2780 x 1700 mm
Height with hopper:	approx. 2460 mm
Height without hopper:	approx. 2270 mm
Net weight:	approx. 2700 kg
Electric power connection:	6.0 kW
Consumption:	up to 2.4 kWh

Operating pressure: 6 bar up to 200 NL/minute Consumption:

up to 600 NL/minute**

Compressed air connection: 1/2"





PERFECTA UNIVERSAL

Technical data

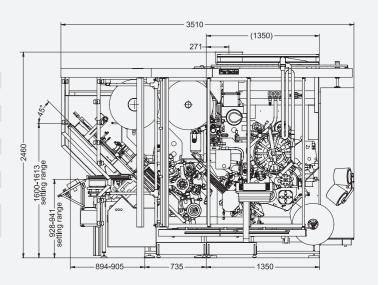
Operating pressure:

Consumption: 200 up to 800 NL/minute 600 up to 1200 NL/minute**

Compressed air connection: 1/2"



*electrical power connection for knotting machine.
**compressed air pressure consumption for knotting machine.



^{*}electrical power connection for knotting machine.

^{*}electrical power connection for knotting machine.

Production speed overview (bags per minute)

	PERFECTA TAG	PERFECTA FAMILY SIZE	PERFECTA ENVELOPE	PERFECTA UNIVERSAL
	naked bag	naked bag		naked bag
Stapling machine	up to 420*	up to 250**		up to 380
Knotting machine (two knots)	up to 400*	up to 250**		up to 380
Knotting machine (knot only on bag)	up to 400*	up to 250**		up to 380
* by up to 7.0 cm³ black tea				
** by up to 22 cm³ black tea				
			paper envelope	paper envelope
Stapling machine			up to 380	up to 380
Knotting machine (two knots)			not available	up to 380
Knotting machine (knot only on bag)			up to 380	up to 380
				cold seal envelope bag
Stapling machine				up to 380
Knotting machine (two knots)				up to 380
Knotting machine (knot only on bag)				up to 380
				heat seal envelope bag
Stapling machine				up to 350
Knotting machine (two knots)				up to 350
Knotting machine (knot only on bag)				up to 350

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