

BOSSAR®

HORIZONTAL FFS DOYPACK MACHINES



BOSSAR PACKAGING S.A. is dedicated to the design, development and manufacturing of :

HORIZONTAL Form, Fill and Seal Packaging Machines

CARTONING systems

DOSING systems



- More than **20 years** of packaging experience.
- Yearly production capacity:
70 – 90 Standard HFFS, or **60-80** Customized HFFS
- Human Capital of more than **100 valued professionals**
- Bossar was **established in 1992** offering to its worldwide customers the most innovative concept in horizontal Form, Fill and Seal machines.
- Since August 2009 Bossar Packaging is part of the **PKG HOLDING LLC** industrial group settled in Atlanta, USA



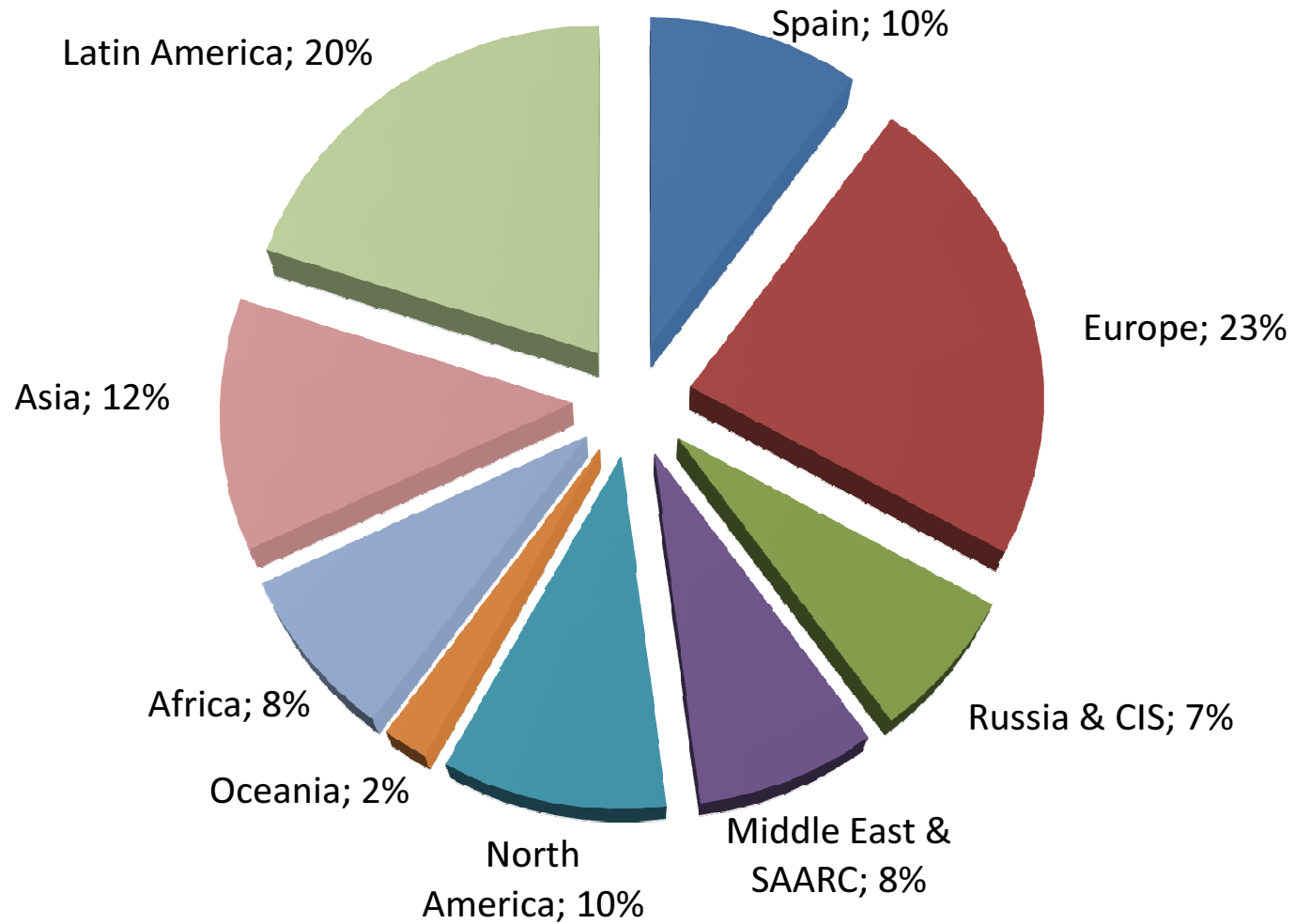
Company Overview

BOSSAR®

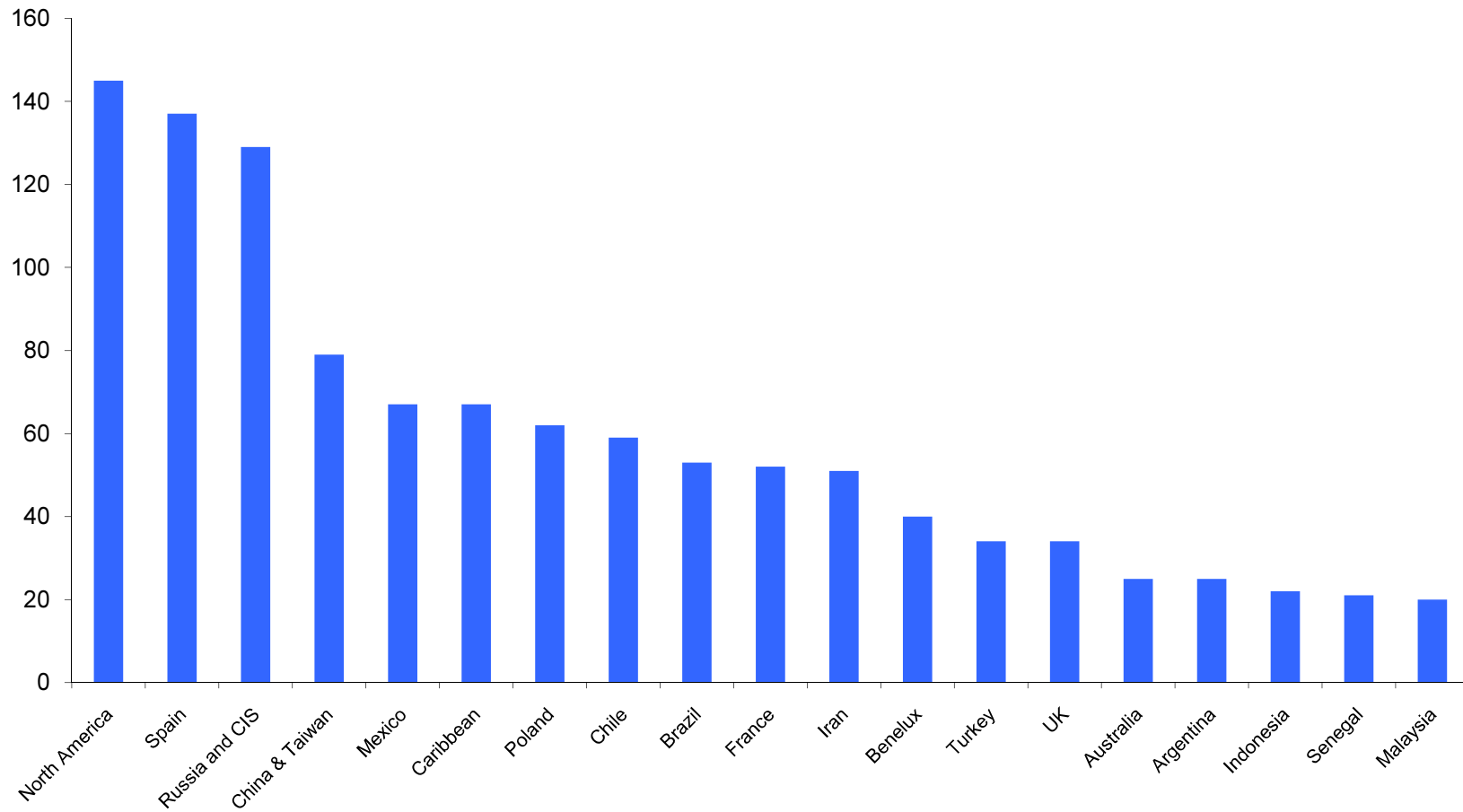
- HFFS machines capable of dosing liquids, powders, granulate and “pieces” up to **15 liters**.
- Market sector served:
 - **Food & Beverage Industry**
 - **Cosmetic**
 - **Pharmaceutical**
 - **Home & Personal care**
- Proprietary technology and dedicated **R&D Department**.
- **Global** coverage of **Sales & After Sales** service and wide sales network
- **Regular customers:** High percentage of repeated orders
- **International vocation:** **90 %** of our sales are export



MACHINE GEOGRAPHICAL DISTRIBUTION



Countries with over 20 machines





2.500 HFFS machines installed around the world

Contents

- **FLEXIBLE Vs RIGID**
- POUCH STYLES
- MARKETS
- TECHNOLOGY - MACHINES

Overview

- Packaging cost reduction
- Logistics
- Packing process
- Convenience / Functionality
- Environmental impact
- Shelf appearance



Packaging cost reduction

Cost comparison material for packaging 1000 cc of oil

Materials	Unit	Price unit	1 bottle PET 1000 ml	1 DoyPack 1000 ml
Preform 30 g for oil	pcs.	0,0487	0,0487	-
Glass bottle for oil	pcs.		-	-
Tap for bottle	pcs.	0,0099	0,0099	-
Label for bottle	pcs.	0,00572	0,00572	-
Ink for printer	l	68,64	0,00044	-
Vehicle for printer	l	21,142	0,00022	-
Film for oil	kg	5,72	-	0,03652
Cap (spout)	pcs.	0,0132	-	0,0132
Total			0,06498	0,04972
Cost packaging 1,0 l oil			0,06498 €	0,04972 €

**25 % cost reduction
per pouch !!!**

50 %
Cost reduction



	100gm Aluminium Tray	100gm Aluminium Barrier Pouch	100gm 2 Piece EO End Can
Retail Cost	€ 0.41	€ 0.30	€ 0.60
Packaging Cost	€ 0.07	€ 0.033	€ 0.065

Logistics

Trucks required to deliver packing material for 50.000 tons of product



x 110 with **Flexible** solutions



x 2500 with **Can** solutions



x 2630 with **Glass** Solutions

Source: Kraft Foods



- Multiple film laminations: improved product protection
- Improved freshness

Convenience / Functionality

- Easily transported in the shopping bag (softer and lighter weight)
- Can be squeezed into empty space in the cupboard
- Available in microwaveable version
- Offered with easy-open features
- No opener device required
- Low injury risk when opening



Environmental impact



- 75% less material compared with rigid containers of the same size
- Energy saving
- Low material waste



Shelf appearance

Improved shelf visual impact:

- Large printing surface
- Excellent printing quality = more visible
- Special shapes: flexibility in packing shape and measures
- Promotion can be printed on the bottom
- Your products look different from the competitors’.



Contents

- FLEXIBLE Vs RIGID
- **POUCH STYLES**
- FILM COMPOSITION
- MARKETS
- TECHNOLOGY - MACHINES

- DOYPACK (Stand Up)



Pouch styles

BOSSAR®

- DOYPACK + SPOUT (Top, Corner, Front)



■ DOYPACK + TOTAL OR PARTIAL SHAPES



04/10/2013

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Pouch styles

BOSSAR®

■ DOYPACK + ZIPPER



Pouch styles

■ DOYPACK + STRAW



- DOYPACK + HANDLE



Contents

- FLEXIBLE Vs RIGID
- POUCH STYLES
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RETORT



COSMETICS



PHARMA



CHEMICALS



SHREDDED CHEESE



SAUCES



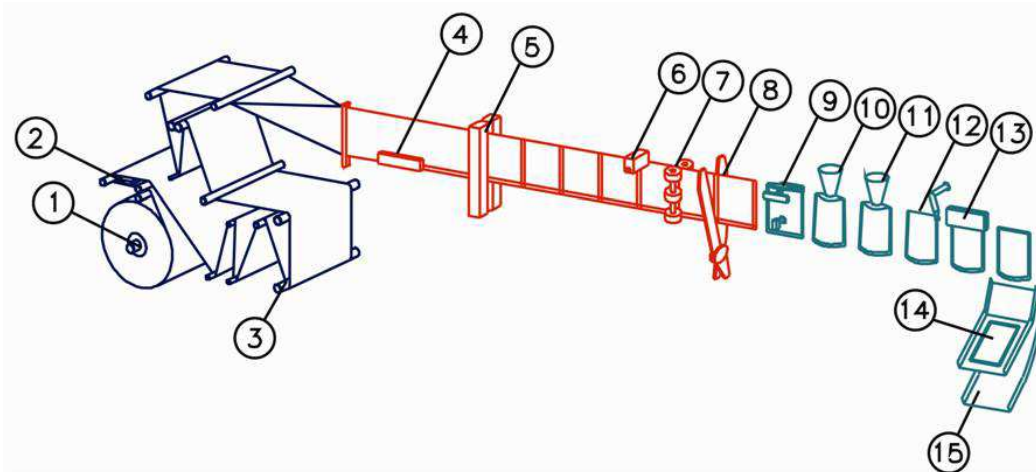
STAND-UP POUCHES WITH SPOUT

Contents

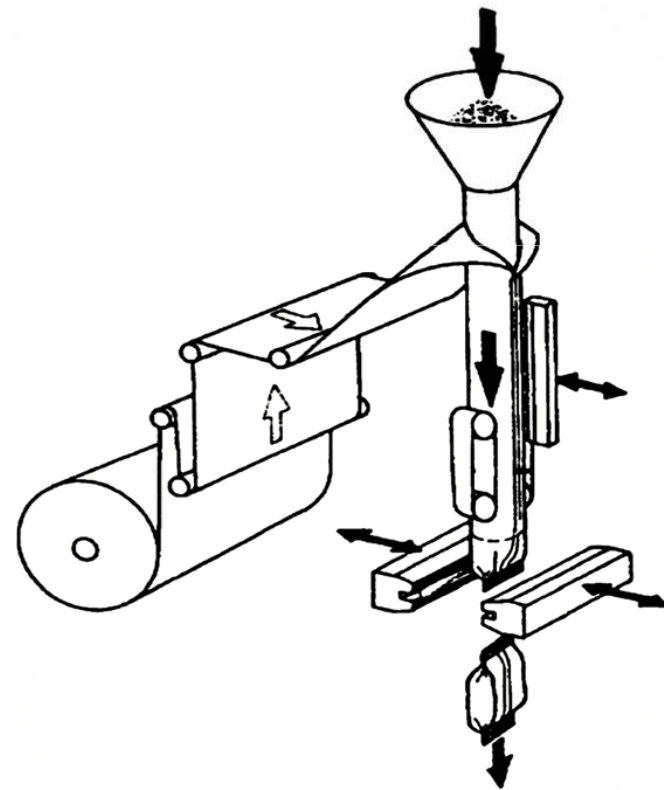
- FLEXIBLE Vs RIGID
- POUCH STYLES
- FILM COMPOSITION
- MARKETS

- **TECHNOLOGY - MACHINES**

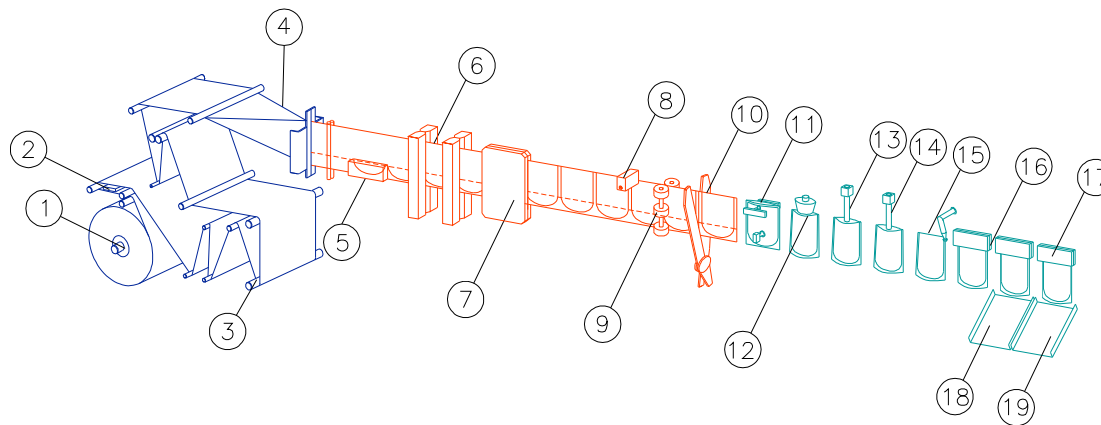
Horizontal FFS



Vertical FFS



Esquema operatiu d'una maquina envasadora Horizontal configurada per bossa Doypack



1. Eix de Bobina (Film)
2. Taula d'unió de bobines (canvi de bobines)
3. Basculant (Tensionador del Film)
4. Triangle Formador (Formació del Fons Estable)
5. Soldadura Inferior Doypack
6. Soldadures Verticals
7. Placa de Refredat de Soldadures
8. Fotocèl·lula (centratge de la impressió)
9. Grup Avanç del Film (Servomotor)
10. Tisores de Tall de les bosses
11. Estació d'obertura de les bosses
12. Estació de bufat (del Fons Doypack)
13. Estació de dosificat del Producte (1ª)
14. Estació de dosificat del Producte (2ª)
15. Estirat Lineal (Estirament de la part superior)
16. Soldadura Superior (1ª) i (2ª)
17. Refrigerador Superior
18. Sistema de Rebuig (de bosses buides en la 2ª Sold.)
19. Sortida de les bosses (Rampa, Cinta Transportadora)

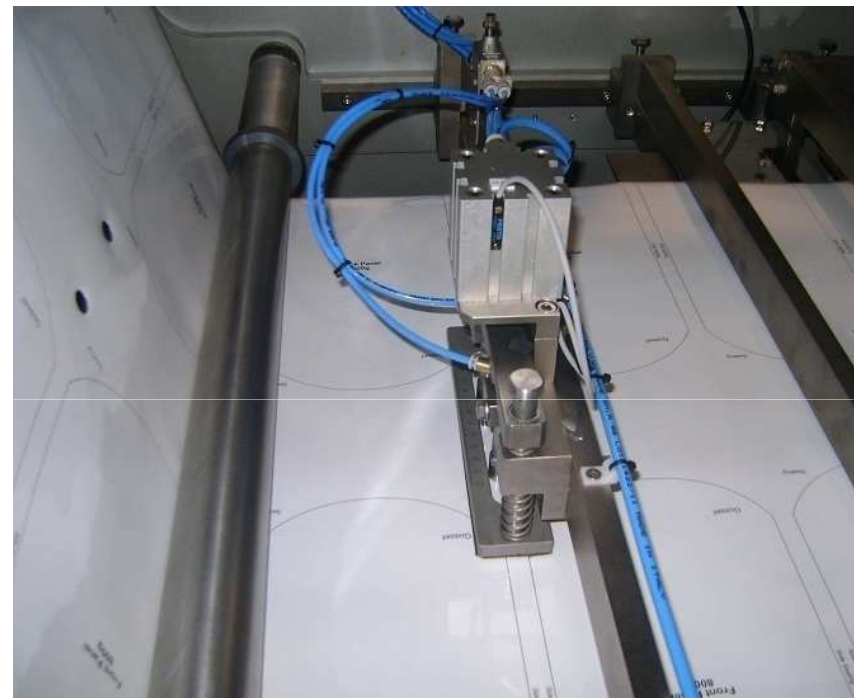
Desbobinador



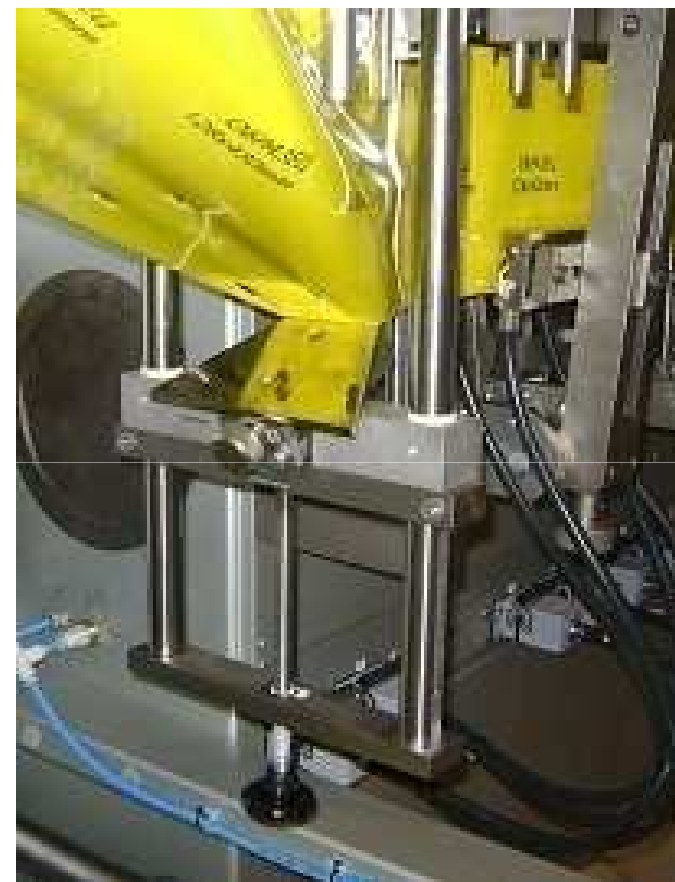
Desbobinador amb sistema automàtic continu



Detalls del Procés de bossa Doypack



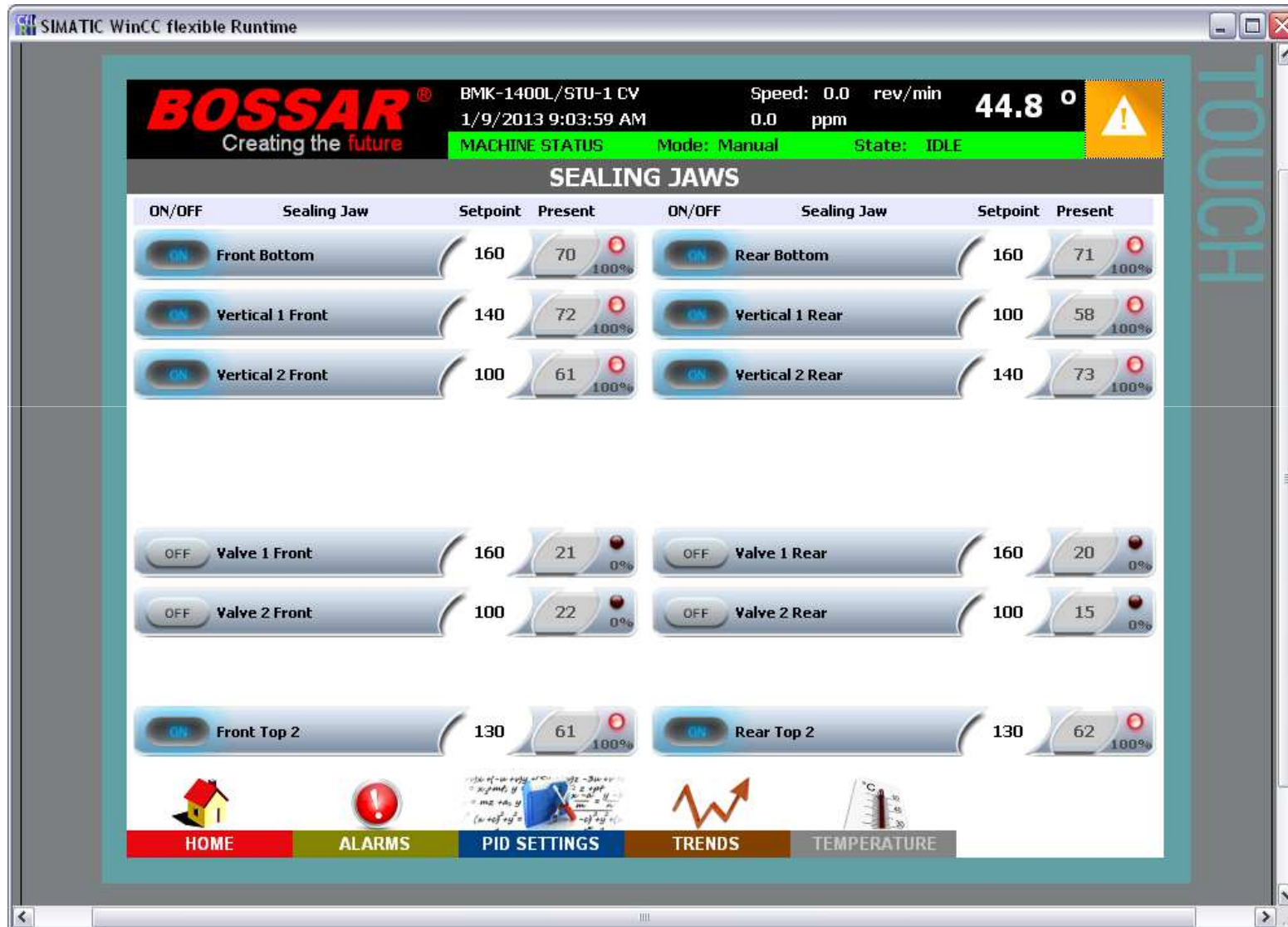
Triangle Formador



Zona de Soldadures i Refredador



Zona de Soldadures inferior i verticals (Pantalla)



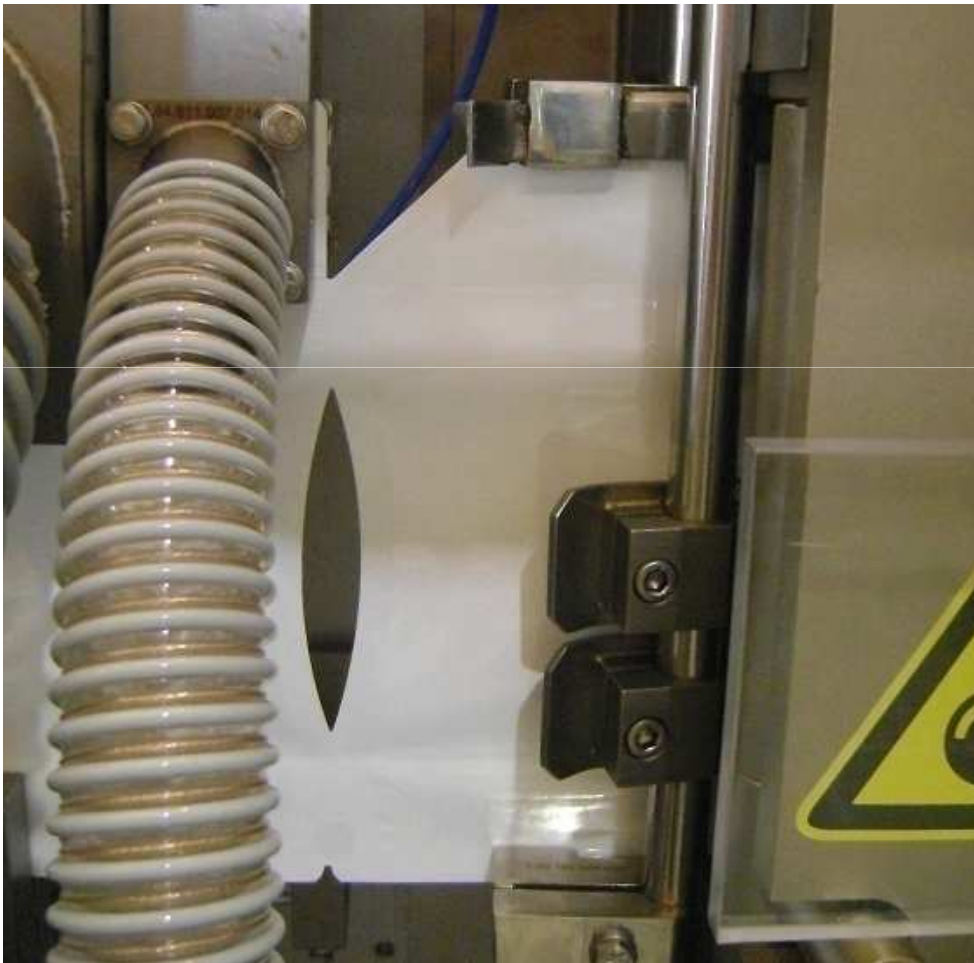
Accessoris , Avanç del Film i Tisores



Avanç del Film i Tall de la bossa amb Matriu (Parcial o Total)



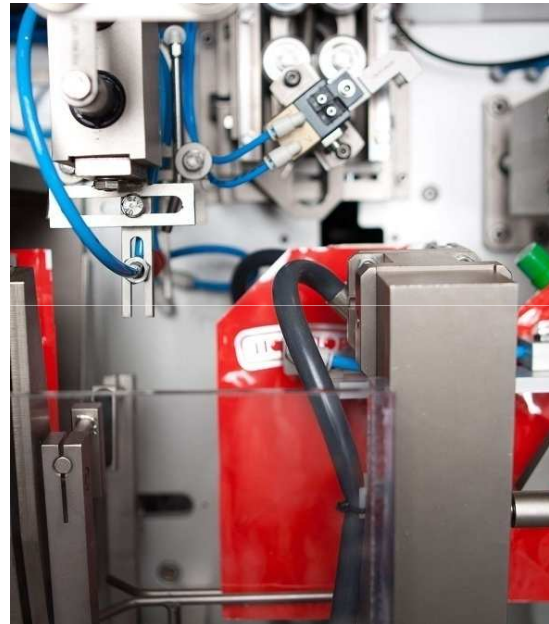
Avanç del Film i Tall de la bossa amb Matriu (Parcial Per Corner Valve i Forma Vertical)



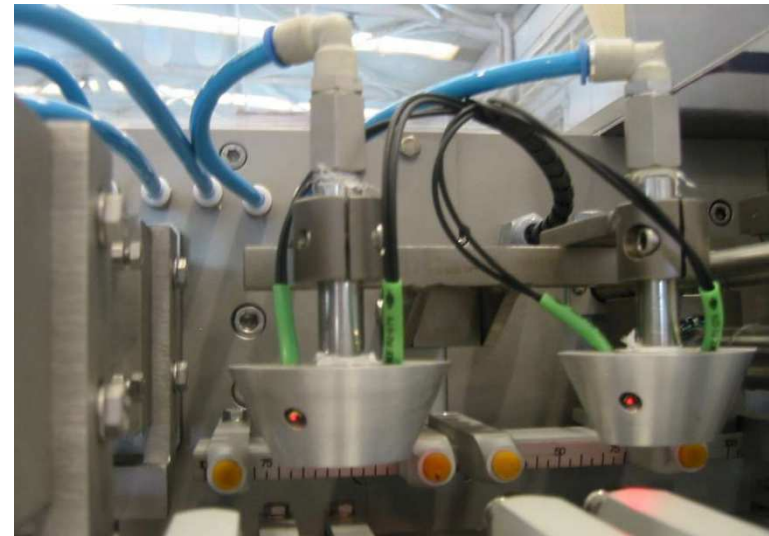
Matriu Parcial Superior



Matriu a 45°per CV/ Inserció Vàlvula / Detecció Vàlvula



Obertura de la Bossa / Bufat amb fibres òptiques



Zona dosificat (Estació 1ª i Estació 2ª) líquids/ pastosos



Dosificació de Productes Sòlids (Grans Volums)



Dosificació de Productes Sòlids Multi-ingredients (avantatges al tenir varies estacions de dosificat)



Dosificació del Producte Líquids (4 pistes) 240 b.p.m.



Inserció del Vàlvules (Taps) “Top Valve” Dúplex



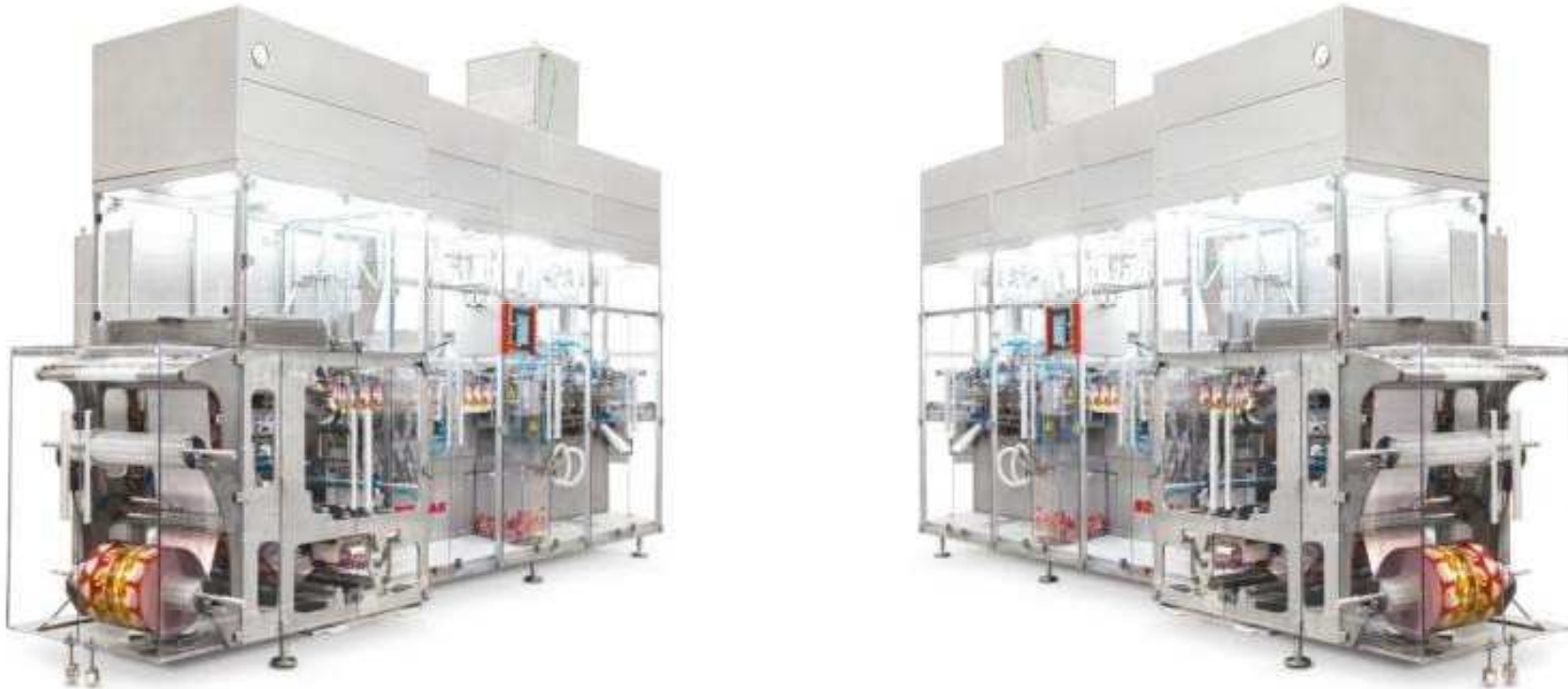
Estirat, Soldadura Superior 1ª, 2ª, Refredador i Sortida



Sortida de les bosses per Cinta Doypack



Línia de màquines “mirall” LF configurades per Doypack



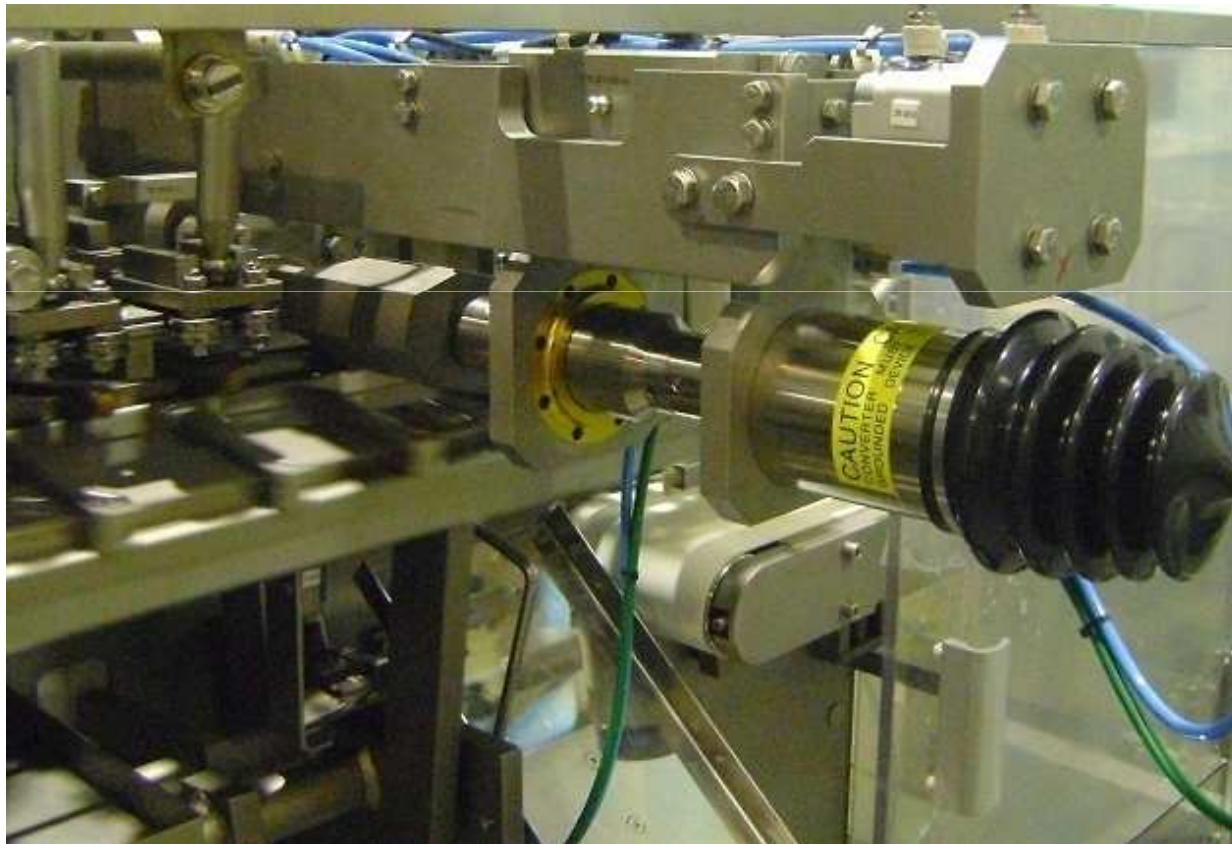
Aplicacions especials

Cambrà hermètica amb atmosfera modificada per injecció de Nitrogen per arribar a un màxim de 0.5% d'oxigen residual



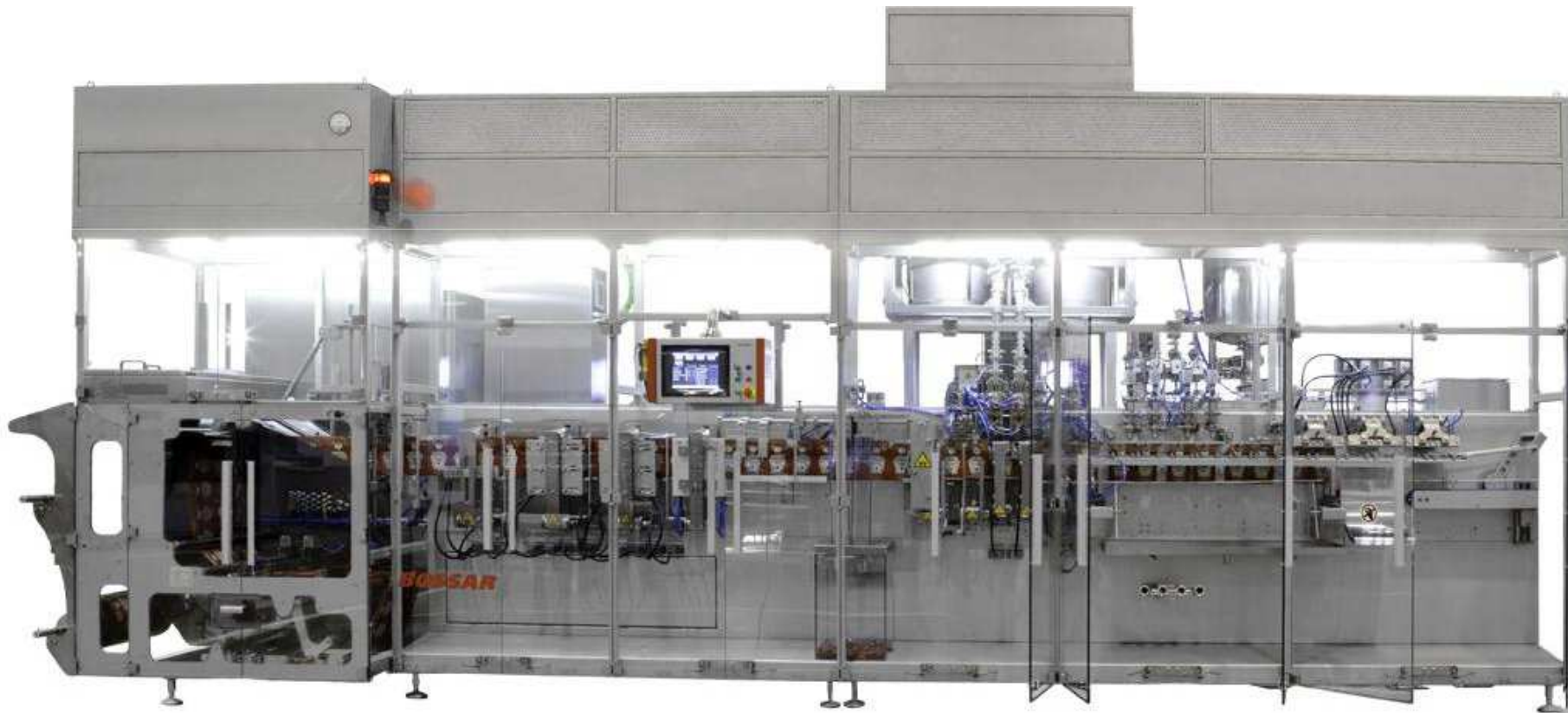
Aplicacions especials

Soldadures per Ultrasons



Aplicacions especials

Màquina "Clean" equipada amb LF per Salses o Baby Food (100 b.p.m.)



Aplicacions especials

Màquina Stand Up Triplex amb Zipper per la indústria Làctia (150 b.p.m.)



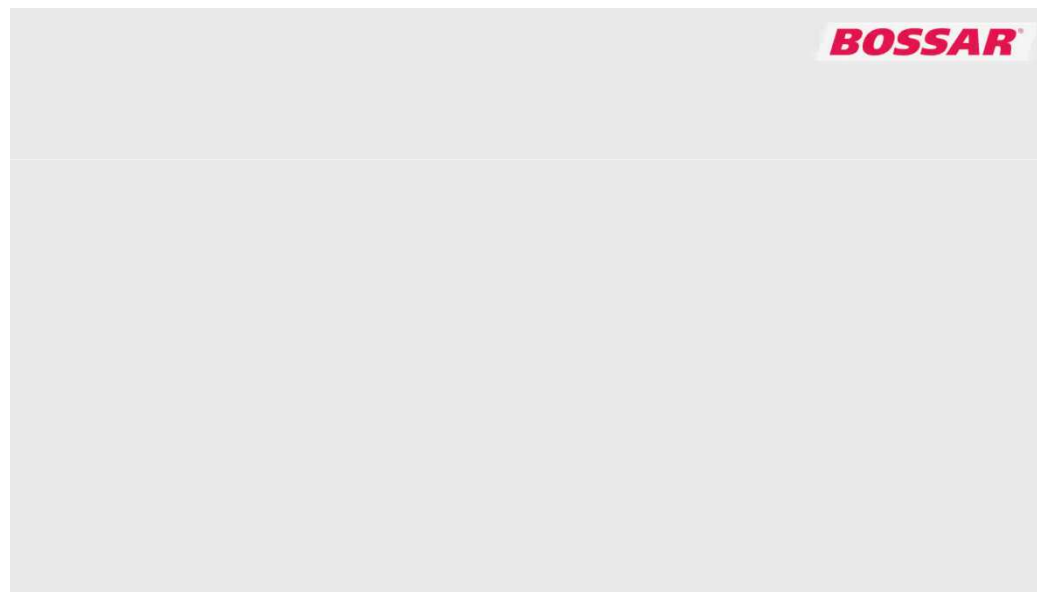
Aplicacions especials

Màquina Stand Up Triplex Aseptica per Baby Food (150 b.p.m.)



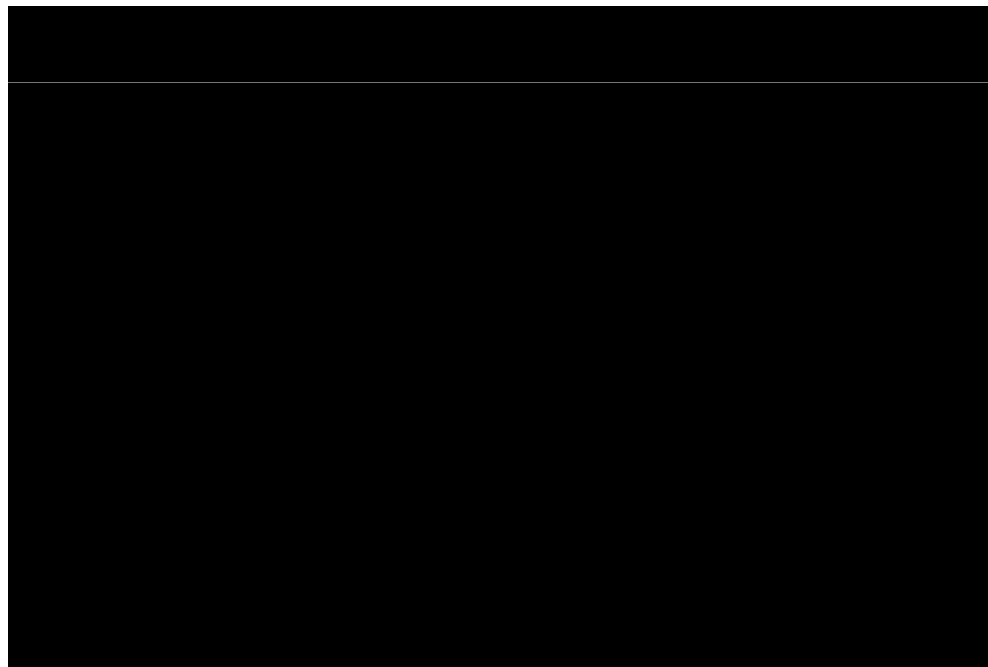
VIDEO

Màquina Stand Up Triplex amb Zipper per la indústria Làctia



VIDEO

Màquina Stand Up “Clean” Dúplex equipada amb Flux Laminar per Salses



VIDEO

Línia encaixat de Doypack Dúplex en posició vertical



VIDEO

Línia encaixat de Doypack Simplex en posició horitzontal



Innovació i futur



ESA astronaut Alexander Gerst posted this photo on Twitter (@astro_alex)- it shows yesterday's breakfast for the ProK nutrition experiment for which he is a subject during his ISS mission from May next year. (Article publicat al Juny de 2013)

**Gràcies per la vostra
atenció**

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