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Soluciones de envase para el mercado de alimentos, SIPA nuevo enfoque de una sola etapa

Packaging solutions for the food market, SIPA new single stage approach

Laurent Sigler (SIPA)

AIMPLAS - AINIA - MeetingPack2017

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MAY 31st, 2017

SESSION 4: Injection, ISBM, EBM

Packaging solutions for the food market, SIPA new single-stage approach

Mr. Laurent Sigler · SIPA

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SIPA in a nutshell

147
COUNTRIES COVERED

16
BRANCH OFFICES

> 7,100
SYSTEMS WORLDWIDE

HEAD QUARTER
IN ITALY

21
REGIONAL SERVICE CENTERS

2ND
LARGEST PET MOLD PRODUCER

> 2,600
CUSTOMERS WORLDWIDE

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SIPA: the PET Specialist

- All available technologies: wide competence on product and process.
- Support & consultancy in defining the most suitable industrial systems to specific packaging.

MOLDS

Injection Molds
& refurbishment
Blowing Molds

PREFORMS

XTREME
PREFORM systems

XFORM
PREFORM systems

BOTTLES

1-STEP systems
High speed

ROTARY
blowing systems

1-STEP systems
Low speed

LINEAR
blowing systems

360° PET competence

Packaging solutions

Preform manufacturing

Bottle manufacturing

Complete Lines

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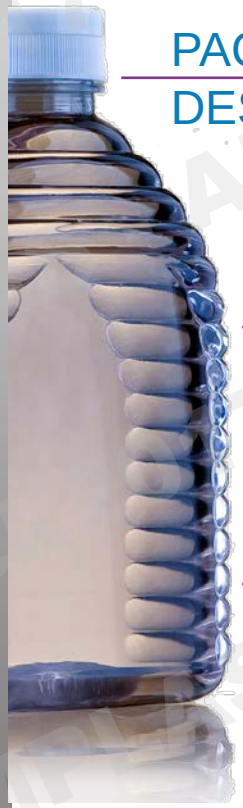
30 Years of Packaging Expertise



PACKAGING DESIGN

PACKAGING ENGINEERING

MOLD DESIGN & MANUFACTURING

30K
PREFORM DESIGN

25K
BOTTLE DESIGN

15K
PROTOTYPING PROJECTS

> 100
PATENTS

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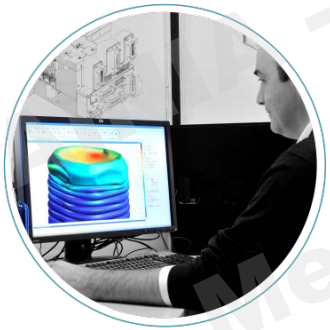
360° Packaging Expertise

Design

Bfief definition, Concept idea, New shapes to strengthen visibility and brand identity Premium design

Engineering

Preform & bottle optimization; weight analysis; performance enhancements



Prototyping

Quick container sampling to verify aesthetics and performance with lab machines

Validation

Bottle Quality certification in our Quality Laboratory

Approved Bottle

Bottle approved, certified performance, industrial platform

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Food packaging

Our latest packaging developments in the food industry.

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ThermaSet® by Graham

28th DuPont Awards for Packaging Innovation

DIAMOND AWARD WINNER

DuPont Awards for Packaging Innovation recognizes

SIPA

on this 16th day of May 2016 for

Technological Advancement, Enhanced User Experience, and Responsible Packaging

in the development of

ThermaSet® Blow Molded PET Container for Hot Fill, Pasteurized Food

DUPONT AWARDS FOR PACKAGING INNOVATION PROGRAM LEADER

REGIONAL BUSINESS MANAGER – PACKAGING
DUPONT PERFORMANCE MATERIALS

DUPONT

Joint development based on SIPA ECS one-step technology

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Conversion from glass to PET

LESS WEIGHT
ThermaSet reduces package weight:

24oz Jar in glass = **328g**

24oz Jar in PET= **37g** (**-89%**)

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ThermaSet® PET container

Dedicated blowing process to withstand hot filling (**92°C**) and pasteurization (**96°C** for 5-10minutes)

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ThermaSet® PET container

Graham is producing 16-ounce and 24-ounce "blow and trim" ThermaSet® containers on a SIPA ECS one step system, specially designed for the process.

Blow and trim is a process for making wide-mouth jars from standard neck preforms incorporating the thread into the blown part of the container.

The top is then trimmed and recycled.

Patented by Graham.

PATENTED

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ThermaSet® PET container data

Volume: **730ml**

Total Weight: **41.3g**

Final weight: **37-37.5g** (trimmed container)

Trimmed weight: **3.8g** (<9%)

Dimensions:

Height ≈ **195mm**

Diameter ≈ **82mm**

Neck Finish**:** blow&trim, metal lug

Platform: ECS FX 20/64, Prod 5284bh

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Ligher weight means less freight

+ 35% more product on truck vs. Glass for the same overall weight

28% less shipping

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ThermaSet in the filling line

ADVANTAGES :

- Drop-in solution on glass fill lines: uses metal lug closure & existing cappers
- Reduced downtime & cost with no breakage
- Less store/transport/consumer clean-up
- Improved working environment with reduced noise
- Faster production speed with no thermal shock

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SIPA one-step technology

ThermaSet containers are made on **SIPA ECS FX** high output one-step platform with special process (patented). This platform can produce up to 11,000 b/h of this type.

Medium/low output ECS SP one-step technology

ECS SP platform completes our offer of single stage and is a perfect fit for food type applications

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Squeezable oval hot fill bottle for ketchup

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Squeezable oval hot fill bottle for ketchup

BOTTLE FEATURES

Volume: 500g
Weight ≈ 28-30g
Dimensions:
Side max ≈ 80mm
Side min ≈ 55mm
Neck finish = 38mm Bericap

PET +color+scavenger

Filling Temperature = 85°C±2°C

Platform: **ECS SP80**, **1,400** bph on a **6** cavity mold

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Squeezable oval hot fill bottle for ketchup

ADVANTAGES

- Conversion from HDPE to PET;
- Hot fillable: Cost effective alternative to aseptic packaging;
- 12 months shelf-life with oxygen scavengers;
- Attractive design;
- Standard labelling;
- Squeezable bottle;
- 38mm neck finish, using closure for dispensing (Bericap);
- Flip top cap makes container stable on both vertical position;

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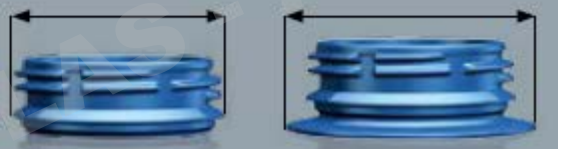
ECS SP production possibilities

ECS SP four-stations ISBM machine is designed for production of small lots of special containers enabling quick change-over, compact layout and high energy efficiency.

PRODUCTION POSSIBILITIES										
Cavity number		2	3	4	5	6	7	8	10	12
Volume	ml	3000	2000	1350	1000	700	450	250	100	80
Max NF	mm	80	65	60	50	40	34	30	20	16
Max bottle diameter	mm	165 (170)	122 (130)	92 (100)	72 (80)	60 (68)	51 (56)	37 (45)	29 (35)	24 (30)
Max height	mm	330								

max neck diameter



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thank you!

www.sipa.it

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