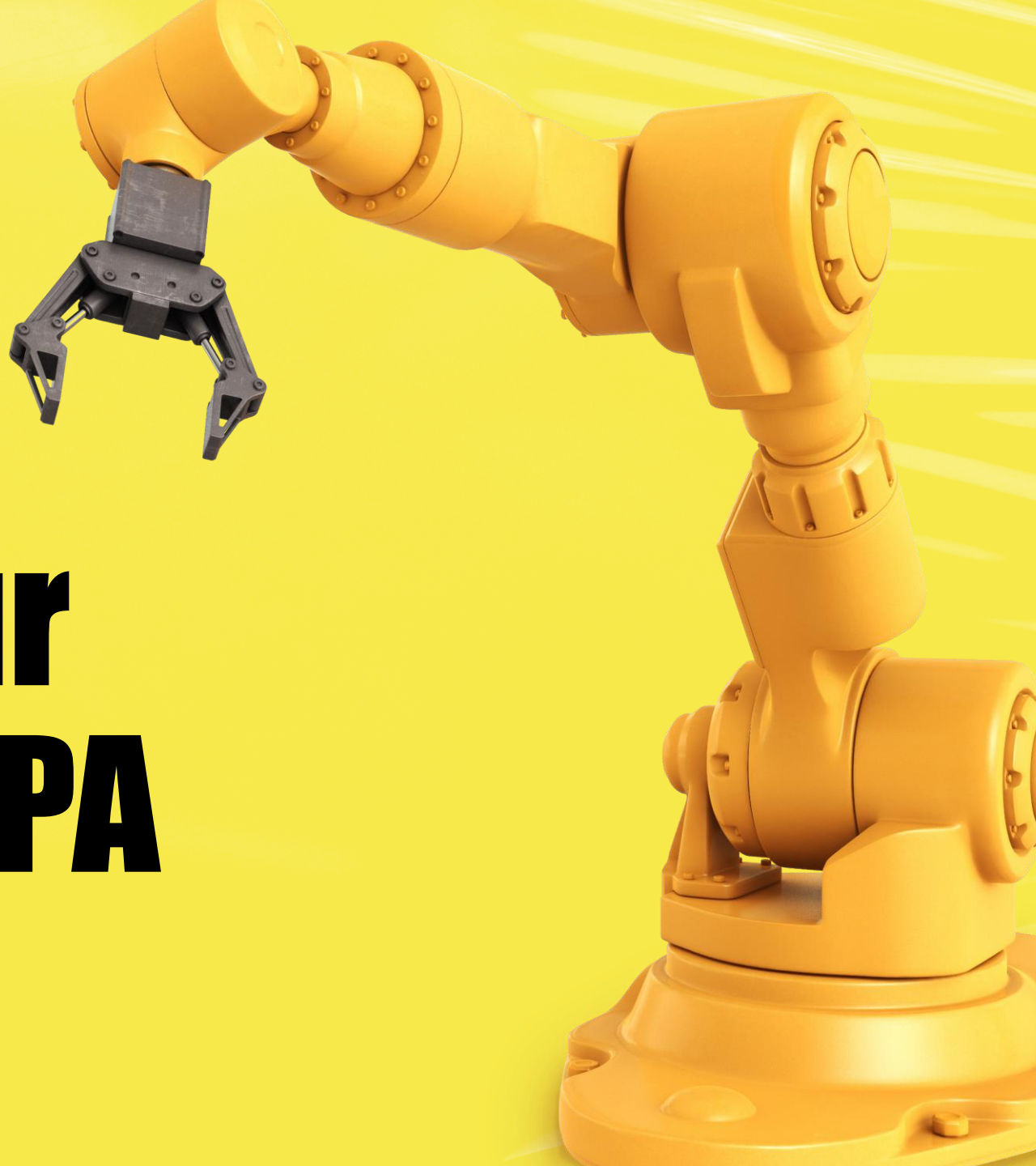


NPE 2024 | **MADE
FOR YOU**
The Plastics Show

Produced by  **PLASTICS**
INDUSTRY ASSOCIATION



Shaping Your Success | SIPA

May 7, 2023 • SIPA booth #S19096

NPE 2024 | **MADE
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INDUSTRY ASSOCIATION



Solutions to differentiate PET packaging XTRA PH | SFL FLEX

Paolo De Nardi

Product Manager Stretch Blow Molding • SIPA spa

01 A unique expertise: from PELLET to PALLET

The only company with full in-house competence



Solutions to differentiate PET packaging

- Since about 40 years, Sipa is leading the market of packaging production equipments as one-stop-shop solution player.
- Sipa's booth at the **NPE 2024** will showcase the **unique expertise in design and manufacturing**, emphasizing economic viability and sustainability.
- Highlighted solutions at NPE address **critical parameters** such as **weight reduction, container behavior, and cost-effectiveness while delivering attractive bottles and optimizing production costs.**



Complex packaging growth trends



Spirits:

2024 Total Packaging: **34.5** billion units
Rigid Plastics Packaging: **9%**
(PET= **99%** of rigid plastics)

CAGR 24-27:

Total Packaging **2%**
PET **2.3%**



Home Care:

2024 Total Packaging: **106** billion units
Rigid Plastics Packaging: **34%**
(PET= **29%** of rigid plastics)

CAGR 24-27:

Total Packaging **2.5%**
PET **2.7%**



Beauty & Personal Care Packaging:

2024 Total Packaging: **162** billion units
Rigid Plastics Packaging: **44%**
(PET= **14%** of rigid plastics)

CAGR 24-27:

Total Packaging **1.9%**
PET **2.4%**

Source: Euromonitor April'24

Complex packaging growth trends | Americas



Spirits: North America

2024 Total Packaging: **2.5** billion units
 PET Packaging: **43%** of total packaging
CAGR 24-27:
 Total Packaging **2.0%**
 PET **1.1%**

Latin America

2024 Total Packaging: **1.3** billion units
 PET Packaging: **4%** of total packaging
CAGR 24-27:
 Total Packaging **3.5%**
PET 3.8%



Home Care: North America

2024 Total Packaging: **8.5** billion units
 HDPE: **36%**
 PET= **19%**
CAGR 24-27:
 Total Packaging **0%**
PET 1%

Latin America

2024 Total Packaging: **14.7** billion units
 HDPE: **35%**
 PET= **20%**
CAGR 24-27:
 Total Packaging **2.1%**
PET 3.6%



Beauty & Personal Care Packaging: North America

2024 Total Packaging: **18.5** billion units
 HDPE: **14%**
 PET= **14%**
CAGR 24-27:
 Total Packaging **0.7%**
PET 1.2%

Latin America

2024 Total Packaging: **28.3** billion units
 HDPE: **14%**
 PET= **3%**
CAGR 24-27:
 Total Packaging **1.8%**
PET 1.4%

SIPA's systems for challenging packaging

XFORM
Preform Production
System



XTRA
Rotary blowing
system



SFL
Linear blowing
system



ECS SP
ISBM system



Machines on display at NPE 2024

XTRA 10 PH

Sipa's **Xtra rotary blowing system** offers industry-leading benefits, including the flexibility to produce a wide array of containers at high speed (**standard, complex, Hot Fill, large sizes, asymmetrical with preferential heating**), energy efficiency, and quality, leading to reduced total cost of ownership.

SFL FLEX

Additionally, explore the **SFL Flex linear blow molding system**, ideal for producing virtually all type of containers, **in a compact and flexible way**.

**JOIN US TO
EXPLORE THE
FUTURE OF
PACKAGING
INNOVATION AND
SUSTAINABILITY**

02 XTRA unique features

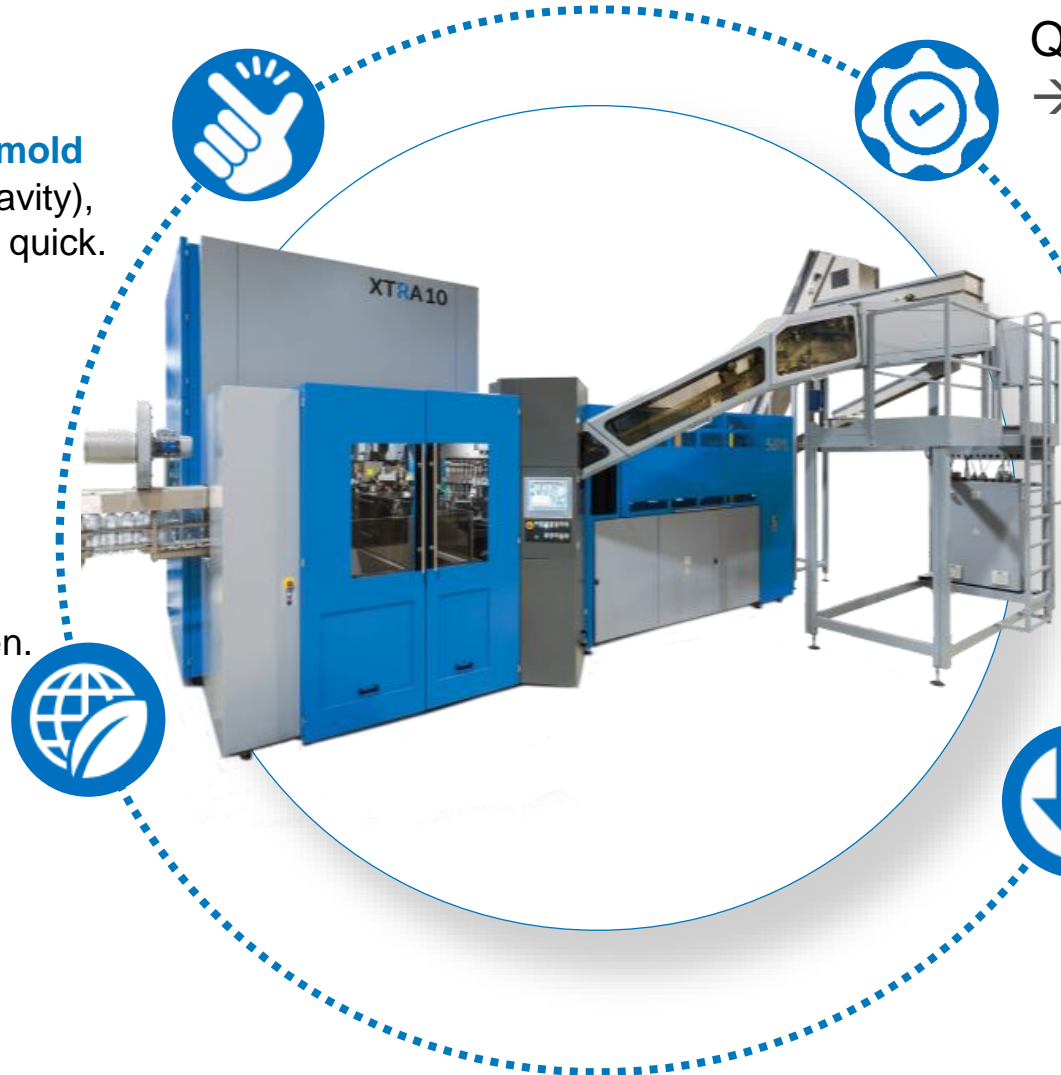
XTRA unique features

EASE OF USE

→ **Ultra Quick tool-less mold** change-over (**30"** per cavity), **new HMI**: simple, easy, quick. Process Wizard

SUSTAINABILITY

→ Big **energy saver** with green oven. **Lower blowing pressure**: air consumption **reduction**, **air recovery**



QUALITY

→ Best **process angle**; **precise & consistent**; solid kinematic, **simple** preform handling

FLEXIBILITY

→ **Hot fill & Cold Fill** on same machine, **Preferential heating** for oval containers, **BIG size** containers (up to 12 L) **rPET, TiO₂, PP, bio-based resin**)

TOTAL COST

→ **higher output/cavity** in the market (**2,800 b/h/c**); Simple **maintenance**; lower re-tooling cost; accept **legacy molds**

XTRA flexible

Hot fill version can handle Cold fill with no compromise:

- Hot Fill at 2200 bhc
- Cold Fill at 2800 bhc

Same machine with dual configuration, based on bottle diameter.

Use of **legacy shell** (150mm), with **simple adaptation kit** on mold base.

Hot Fill in aluminum mold with heating elements and individual thermo-control.



XTRA easy

ULTRA Quick mold change-over

Multiple access point
Effortless manual press opening
Mold changeover in **30"** **tool-less**

Easy & quick neck change-over, standard
Anti-nesting on preform chute
Mainly Tool-less or quick change parts

XTRA 12, bottle to bottle
same neck in **10min**
different neck in **2h**



XTRA PH | Preferential heating for ovals

Full Packaging capabilities →

- Thickness: 0.5 ↔ 9.9mm
- Neck weight: 0.5g ↔ 9.9g
- Neck diam: up to 38mm
- Ovality: even above 2x

Best process angle →
higher output/cavity in the market

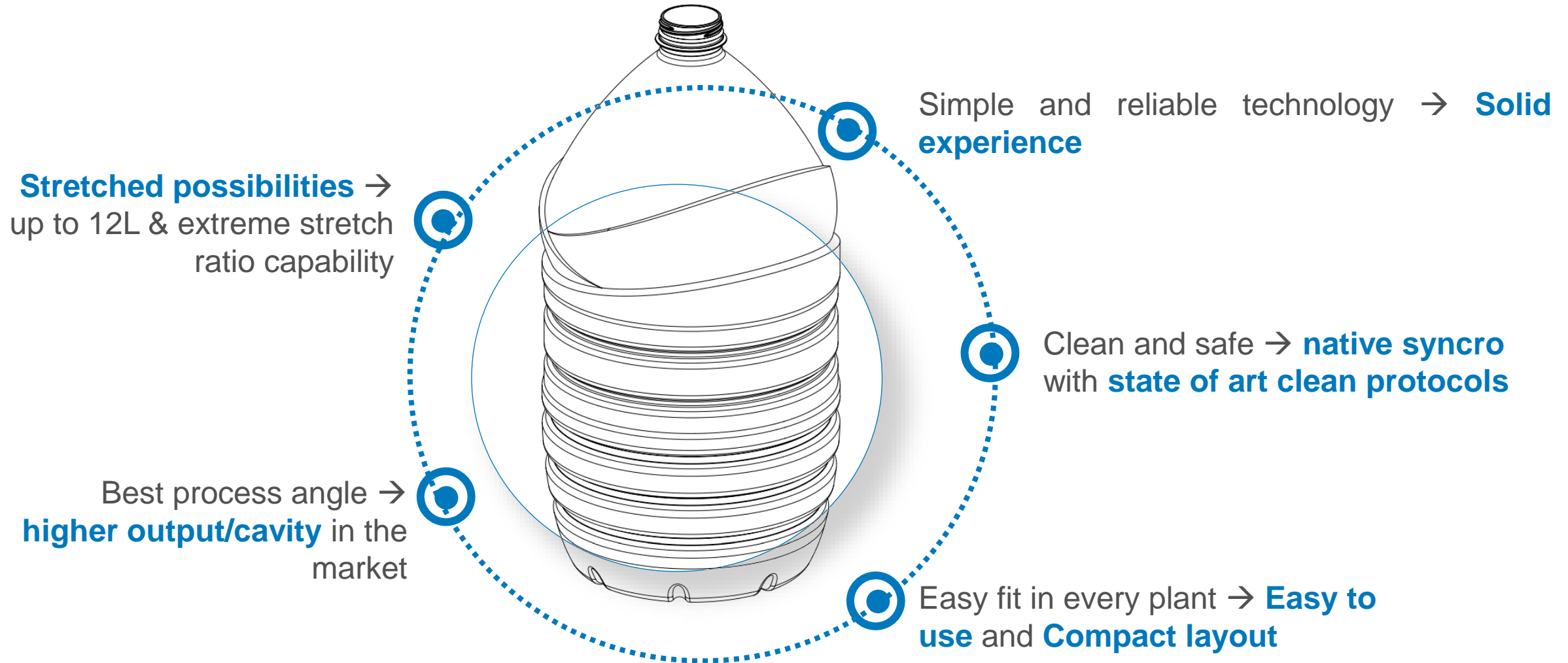


High speed → **high output production** even for **complex shapes**

High quality → **uneven heating** to get **oval container with uniform thickness** along the bottle profile

Flexible → **Ovals, squared, rectangular, round** shapes

XTRA BIG | A new solution for large sizes



03 SFL FLEX unique features

SFL FLEX | Packaging flexibility



Standard and Special Beverage (PET & rPET)



Personal Care - Cosmetic



Home Care



Refillable - Reusable



Milk, dairy & food



Hot fill & Nitro HF



Special liquids:
Preform in preform



Special resins:
Tritan, Biobased,
PE, PP, ...



Wine & Spirits

SFL FLEX | solution for crafting quality

1. Small and Flexible: compact, flexible, and easy to use
2. High-Quality Output: very high-quality PET bottles (like SFL family)
3. Versatile Applications: PET, rPET, other polymers
4. Size and Capacity Up to 3 liters/100oz (max to 4000 bph) or up to 5L/1,5 UsGal (single cavity), neck from 14 to 48mm
5. Optional Features: numerous options to expand its capabilities



SFL FLEX | space-saving efficiency

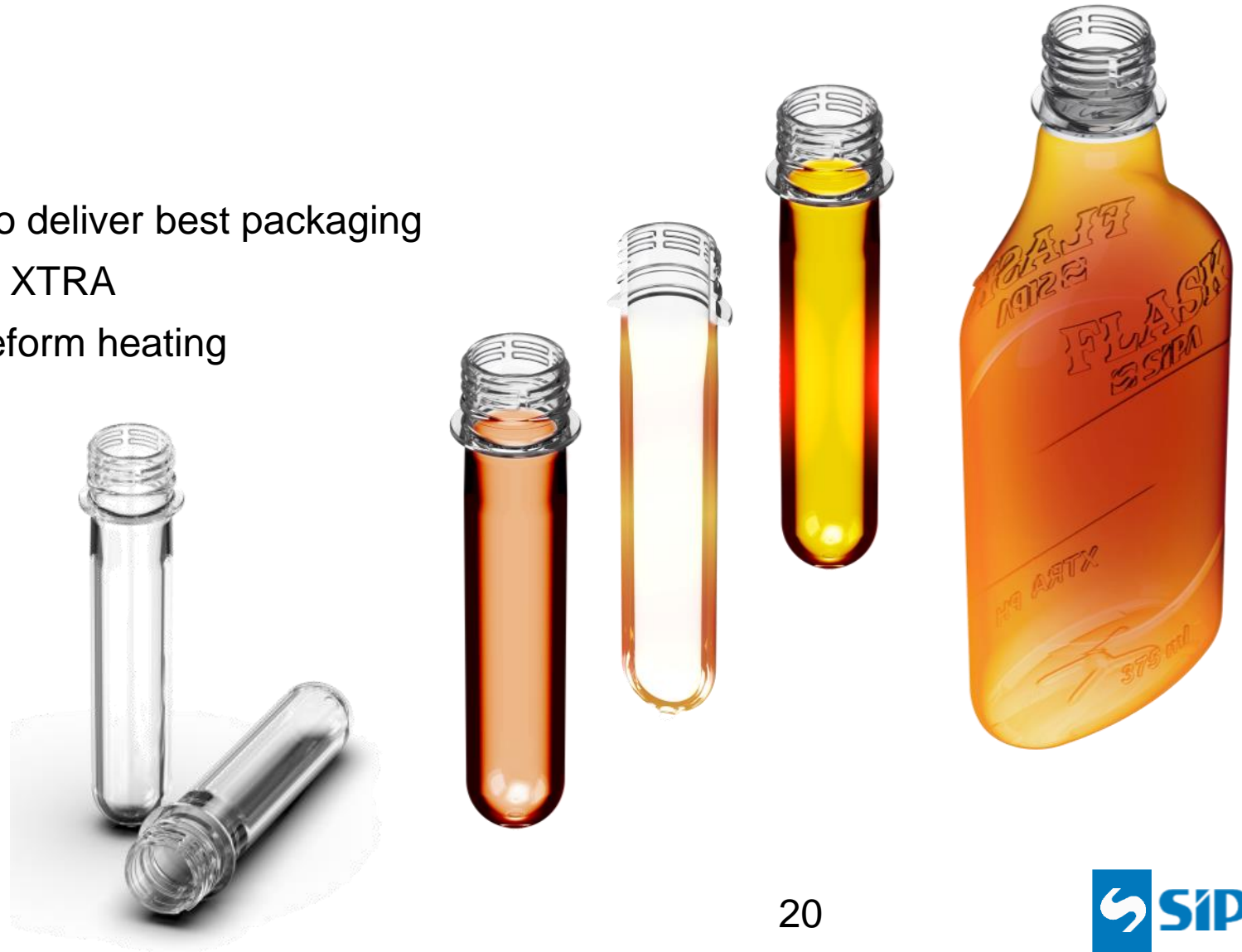
5. Quick Changeovers mold in 10 minutes, few parts for neck changes
6. Compact Footprint just 8 m²/86 ft², suitable for limited space installations
7. Flexibility can host any kind of existing mold (shell or block, from SFL, XTRA or other OEMs / mold producers). Majority of the perso-parts are interchangeable with SFL family
8. Mold opening adjusted from HMI
Digital Suite ECHO



Special features for complex packaging

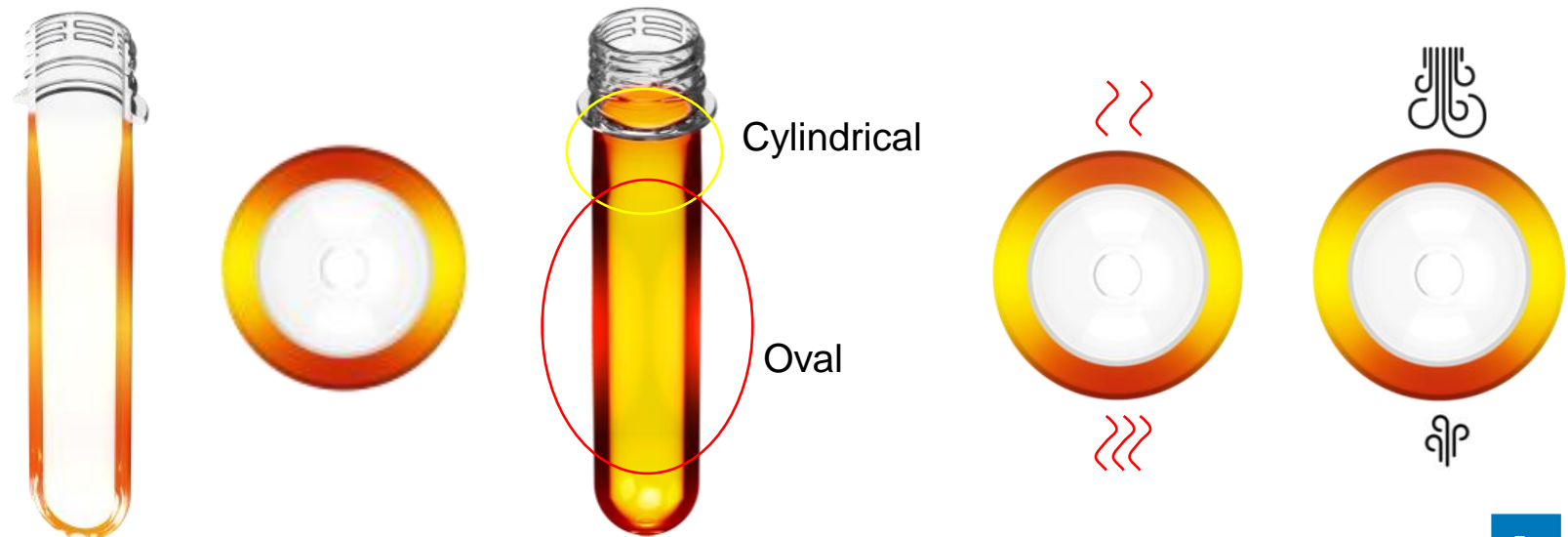
PREFERENTIAL HEATING:

- Special Focus on PH EVO feature to deliver best packaging
- The system is available on SFL and XTRA
- SIPA 5D PH – full HMI control of preform heating



Multiple conditioning – All combined

- **SIPA PH EVO** oven is a **combination** of preferential heating, at multiple levels
- Vertically, horizontally, independently controlled: a complete mix of cylindrical and oval heating
- **ALL the oven configurations** (every single lamp, and all ventilation power) are **set-up and stored** in HMI.
So it's **easy and repeatable** to restore multiple special conditioning



Running the machine smoothly

PROCESS WIZARD – MAIN BENEFITS

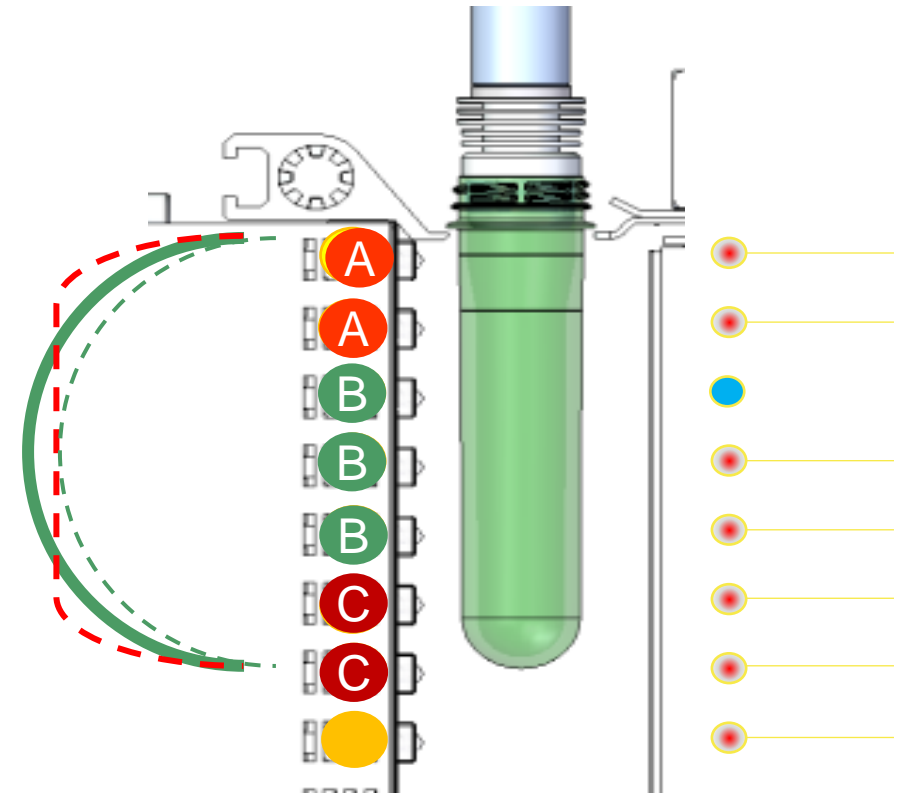
- **Automatic** process configuration
- Simple and **repeatable set-up**
- **Easy tool to support new test** (new preform, new mold)
- **Support training, operators' self-learning**



Running the machine smoothly

OVEN PLUS – MAIN BENEFITS

- Better **knowledge** of heating process
- **Detect** small/local **temperature variations**
- **Adapt thermal profile vs external variabilities**
- **Reduce scraps:** precise control of right preform temperature profile



Meet us live at our booth # S19096

There is a TREND for COMPLEX PACKAGING.

**SIPA HAS SOLUTIONS TO PRODUCE THEM IN A
SMOOTH & SUSTAINABLE WAY.**



“

1N73LL1G3NCE
15 7H3
4BILITY

70 4D4P7 70 CH4NG3

- S73PH3N H4WK1N6

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