

MEET US AT

**NPE2024** | **MADE  
FOR YOU**  
The Plastics Show

**South Hall Level 1**  
**Bottle Zone | Booth # S19096**

SOLUTIONS TO  
DIFFERENTIATE  
PACKAGING

**XTRA PH**  
**SFL FLEX**



**Shaping  
your success**

**EVERY SHAPE, EVERY TECHNOLOGY, EVERY NEED  
ABOUT PET PACKAGING**

**SIPA**

# A UNIQUE EXPERTISE: FROM PELLET TO PALLET

THE ONLY COMPANY WITH FULL IN-HOUSE COMPETENCE



# SOLUTIONS TO DIFFERENTIATE 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%**

# 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

## THE BENEFITS OF OUR 2 CUTTING-EDGE SYSTEMS

### 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**

# 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, TiO<sub>2</sub>, 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

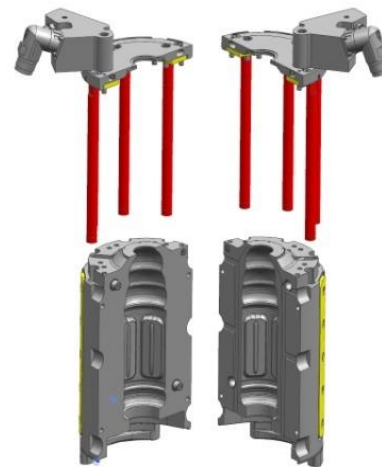
Hot fill version can handle Cold fill with no compromise:

- 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

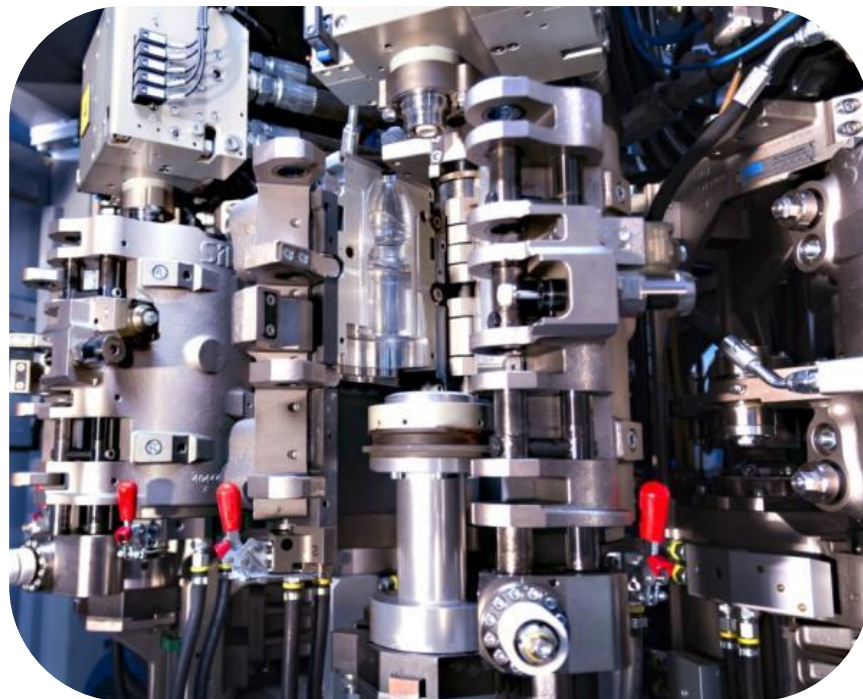
## ULTRA Quick mold change-over

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

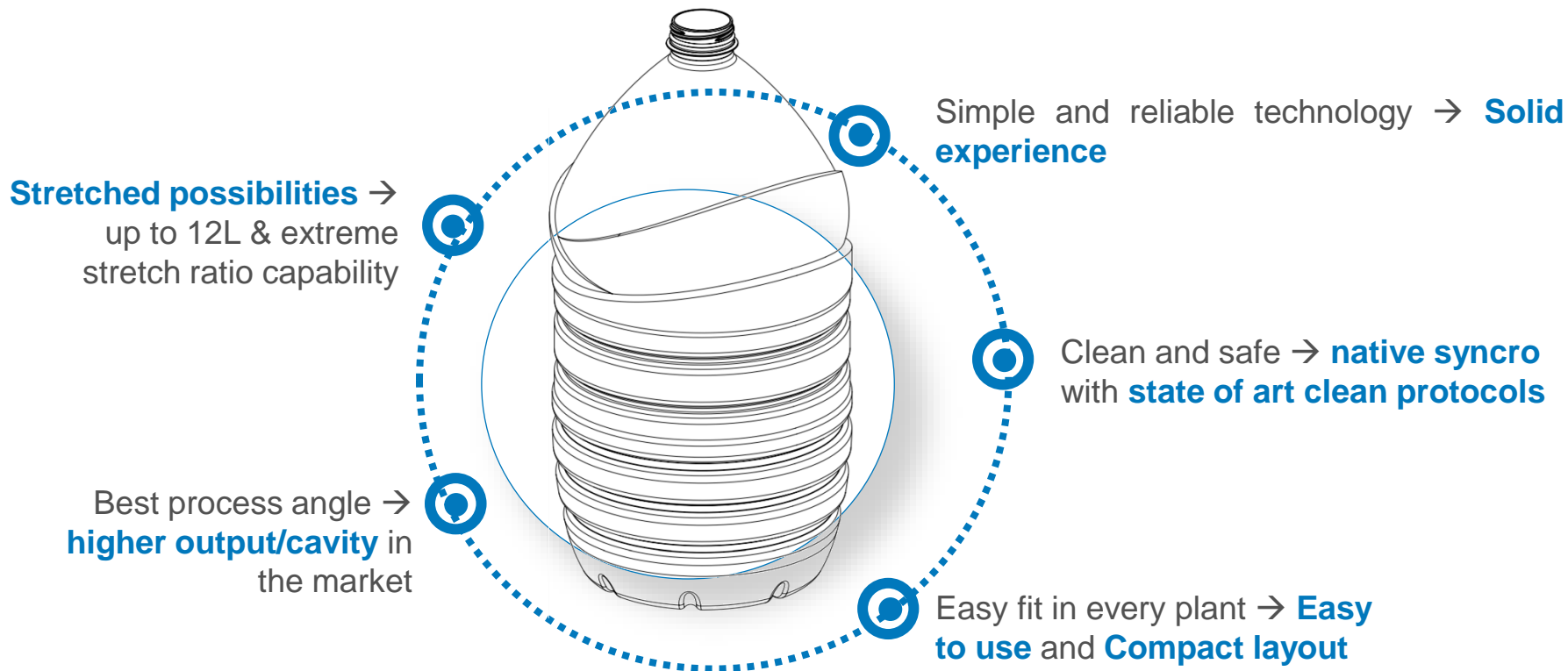


High speed → **high output production** even for **complex shapes**

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



# XTRA ADDED VALUES IN FEW NUMBERS

**LOWER  
TCO**

**-15%**

HIGHER OUTPUT,  
LIGHTWEIGHT CONTAINERS,  
LOWER MAINTENANCE AND  
CONSUMPTIONS

**ENERGY  
CONSUMPTION**

**-25%**

LESS ENERGY USED TO  
PRODUCE PET  
CONTAINERS  
VS PREVIOUS GENERATION

**HIGHER  
PERFORMANCE**

**+15%**

ADDITIONAL ACTIVE TIME  
AVAILABLE TO PRODUCE  
CONTAINERW  
WITH NO STRESS

**MOLD  
CHANGEOVER TIME**

**30''**

TOOL-LESS  
MOLD CHANGEOVER  
PER CAVITY

# 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



Wine & Spirits



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



# 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



## SFL FLEX – SPACE-SAVING EFFICIENCY

- 5. Optional Features:** numerous options to expand its capabilities
- 6. Quick Changeovers** mold in 10 minutes, few parts for neck changes
- 7. Compact Footprint** just 8 m<sup>2</sup>/86 ft<sup>2</sup>, suitable for limited space installations
- 8. 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  
Mold opening adjusted from HMI  
Digital Suite ECHO

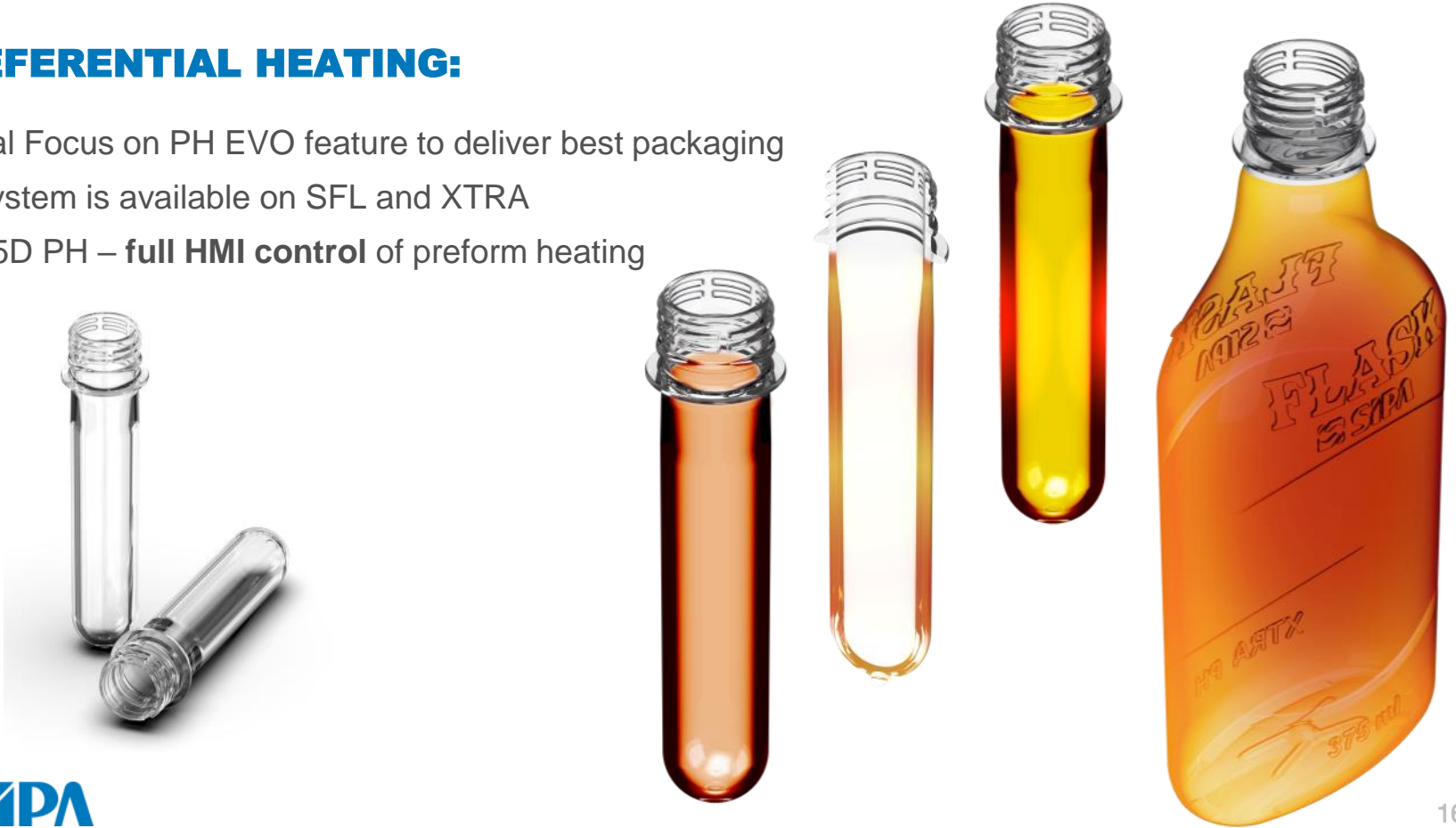
# SPECIAL FEATURES FOR COMPLEX PACKAGING

## PREFERENTIAL HEATING:

Special Focus on PH EVO feature to deliver best packaging

The system is available on SFL and XTRA

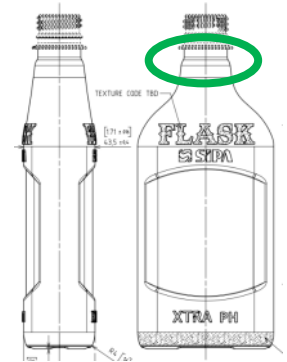
SIPA 5D PH – **full HMI control** of preform heating



# 1°/5D PH – CYLINDRICAL HEATING

As it normally happen on heating oven, preform can be heated 360° **homogeneously**, using the 8/9 lamps

On Oval container, this process is important to achieve the perfect thickness distribution on container's **portion** with axisymmetric shape (round or square)



## 2°/5D PH – OVAL HEATING

As it normally happen on Preferential Heating oven, preform is heated more, specifically on **opposite** (180°) portions

These lamps (8 on one side and 8 on the opposite side) heat up areas corresponding to narrow size of the container, for each oven module!

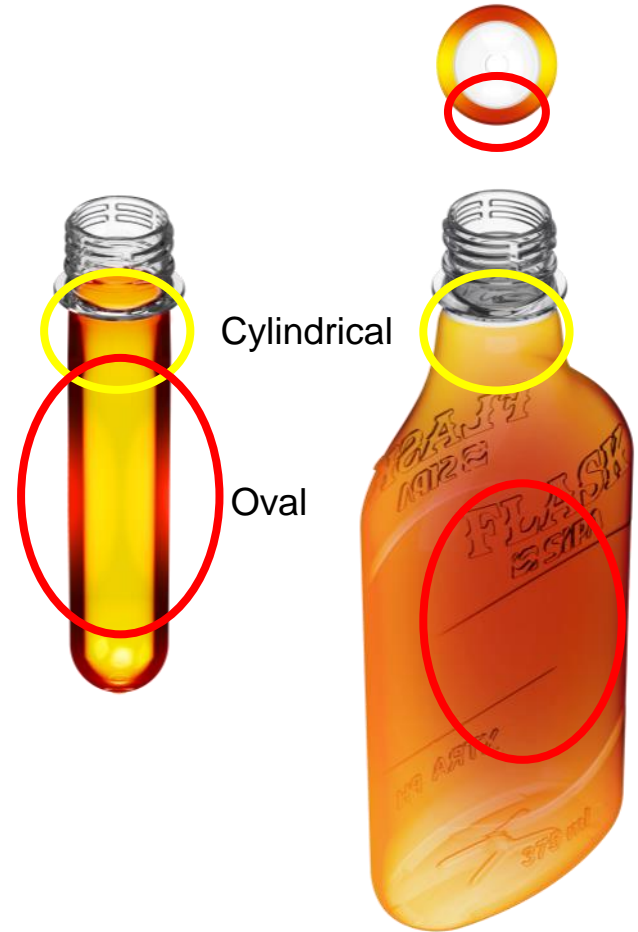
This provide the perfect thickness distribution on container's *portion* with **oval/rectangular shape**.



## 3°/5D PH – MIX HEATING

In SIPA PH oven, it's easy to control the **mix** of cylindrical and oval heating, **at any level**

This proper mix allows the perfect thickness distribution on complete container, reflecting **real bottle shape**, both in cylindrical and oval area.

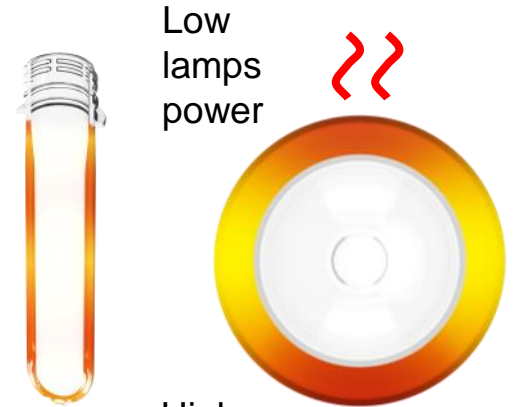


## 4°/5D PH – NOT AXIAL-SIM HEATING

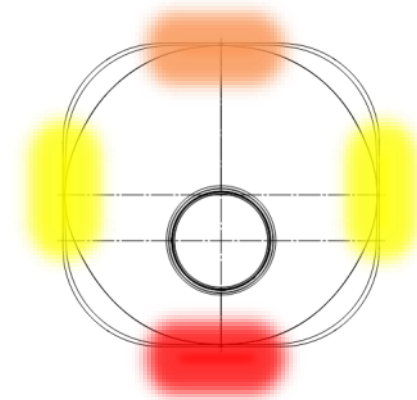
SIPA PH oven allow a further freedom

It's possible to use different lamps power in the PH side (**left different** than **right** module), producing a further customized heating.

This 3-way heating allows **special design features**:  
off-center neck, dedicated single-side higher thickness or innovative  
reinforcement



High lamps power



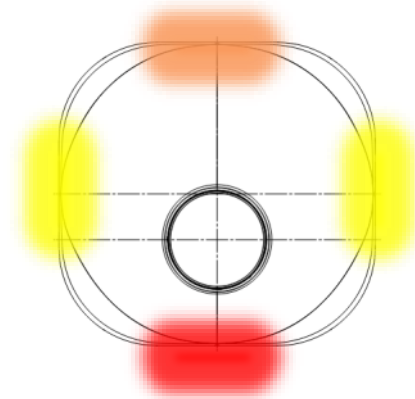
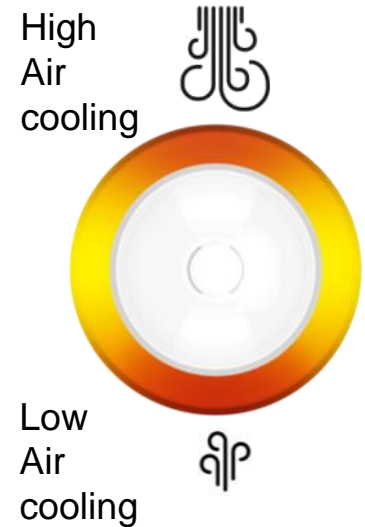


## 5°/5D PH – NOT AXIAL-SIM COOLING

SIPA PH oven allow an *even* further freedom !

It's possible to use different **ventilation** in the PH side (**left** module **different** than **right** module), producing a further customized conditioning.

This custom *cooling* allows **further special** design features, supporting 3-way heating, like off-center neck or special distribution

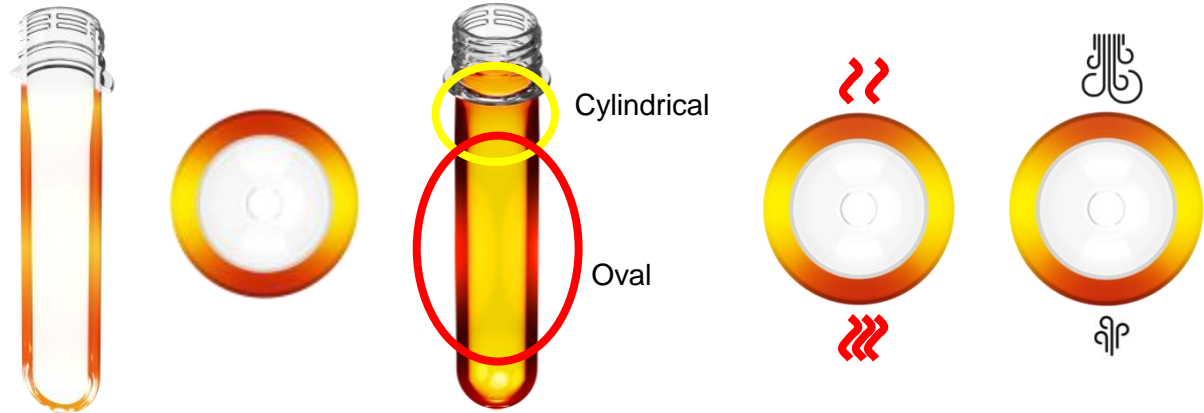


# 5D PH – ALL COMBINED

SIPA PH EVO oven is a **combination** of all these options

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

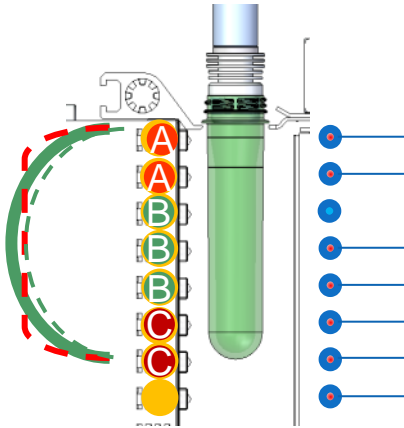
## OVEN PLUS – MAIN BENEFITS

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 IN ORLANDO!

There is a **COMPLEX PACKAGING** growth **TRENDS**



SIPA has **SOLUTIONS** to produce them in a **SMOOTH & SUSTAINABLE WAY**



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Thank you for your attention

Zoppas Industries



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