

## 1\_INNOPET FRESHSAFE BLOCK (WITH PLASMAX 20Q)

### STRETCH BLOW MOLDING COATING TECHNOLOGY FOR MAXIMUM PRODUCT PROTECTION

PET PACKAGING SYSTEMS



#### Requirements and solutions

As light and unbreakable as PET and as protective as glass: this is the ideal description of a bottle that meets all the requirements of the beverage and food industries. Compactness, economy and flexibility are the decisive factors taken into account by the industry today when investing in a production system.

The unique InnoPET FreshSafe block enables all of the above, namely the particularly efficient manufacture of the perfect bottle which:

- Provides the ingredients and flavor of the filled product with optimum protection and greatly increases the product shelf life
- Prevents CO<sub>2</sub> from escaping from and oxygen from penetrating the PET bottle
- Optimizes the cost balance of production.

The InnoPET FreshSafe block directly blocks the InnoPET Plasmax 20Q(S) coating system with the InnoPET Blomax Series IV stretch blow molder.

#### Key features

- Tried-and-tested stretch blow molding technology for the high-precision manufacture of PET bottles of various design
- Proven coating technology combines the benefits of PET and glass
- A patented coating system finishes PET bottle interiors with a fully transparent and highly flexible protective coating of chemically pure glass(SiO<sub>x</sub>)
- The ultra-thin interior coating protects the contents and extends the shelf life
- Low total operating costs thanks to high availability with low consumption of energy and materials
- Efficient, resource-saving, cost-effective bottle manufacture
- Gentle bottle handling
- 100% bottle-to-bottle recycling
- Maximum efficiency also when processing lightweight PET thanks to consistent neck handling.

#### Standard equipment

- Manufacture and coating of non-returnable PET containers holding between 0.1 and 1.5 liters
- Output of up to 46,000 bottles per hour (containing 0.25 liters maximum)
- Machine concept permits both lightweight bottles and other PET containers to be processed
- Bottles are directly conveyed to the coating system by a transfer wheel and transfer star
- The central control and servodrive concept permit individual machines to be decoupled in the event of stops
- Fully automatic machine monitoring and process control for simple operation by one operator.



## 2\_INNOPET FRESHSAFE BLOCK (WITH PLASMAX 20Q)

STRETCH BLOW MOLDING COATING TECHNOLOGY FOR  
MAXIMUM PRODUCT PROTECTION

PET PACKAGING SYSTEMS



### Benefits

- The elimination of conveying segments means:
  - Reduced investment
  - Less space required
  - High machine availability
  - High standard of hygiene.
- Gentle bottle handling by neck guides and low number of transfer stations
- Less operator involvement – can be operated by one person
- Premium product protection thanks to unique interior glass coating (SiOx):
  - Crystal clear and extremely flexible
  - Universal and high quality – protection for oxygen-sensitive and carbonated beverages and for liquid foods
- Sustainable – containers are 100% bottle-to-bottle recyclable
- Suitable for use with food products
- Longer shelf life.



### Service

- Worldwide service and application advice
- Fast supply of spare parts
- Customized design
- Complete line design
- Bottles & Shapes™ bottle design, development and tests
- Individual coating process optimization and laboratory testing

### Options

- Coding system for traceability of coated bottles
- Quality control with the Plasmax barrier quick tester
- Air conditioning for higher ambient temperatures
- Integrated quick-change system for various neck diameters
- Impact air cooling
- Airback Plus
- Preform inspection

### Technical data

#### Container capacity

0.1–1.5 l

#### Container height

80–320 mm

#### Container diameter

34–95 mm

#### Neck ring diameter

20–38 mm

#### Output (standard container: 0.25 l)\*

FreshSafe block with InnoPET Plasmax 20Q: up to 40,000 bph

FreshSafe block with InnoPET Plasmax 20QS: up to 46,000 bph

#### Stretch blow molder

InnoPET Blomax: 12–28 cavities

#### Coating machine

InnoPET Plasmax 20Q: 0.1–1.5 l

InnoPET Plasmax 20QS: 0.1–0.35 l

\*The output depends on the bottle, preform and product to be filled.

KHS Plasmax GmbH  
KHS Corpoplast GmbH & Co. KG  
Meiendorfer Straße 203  
D-22145 Hamburg  
Phone: +49 (0) 40 / 67907-435  
Fax: +49 (0) 40 / 67907-9435  
E-mail: philipp.langhammer@khs.com  
www.khs.com

