

THERMICjet® PA



GENTLE PASTEURIZATION USING COUNTER PRESSURE

Renowned companies like the wholesale bakery Mestemacher use counter pressure pasteurization systems from Schröter to preserve their products. Thanks to our pasteurization method which is gentle on both the products and their packaging, specialties like brown bread, salmon roe, or meat products remain fresh and aromatic for a long period of time.

The semi-preserved food products are loaded into the pasteurization systems in perforated, heat-proof EURO boxes on EURO pallets. As soon as the bread loaves, which are packaged in plastic wrap and placed inside EURO boxes, are inside the system, low-pressure steam from outside is fed into the system through a valve. As a result of the steam, the inside of the system is heated to a temperature of approximately 100° Celsius at a pressure of around 140 mbar. While the temperature is maintained, the pressure decreases through condensation. This results in a vacuum being created. This is counterbalanced using compressed air which is fed into the system through an additional valve.

A SAFE PROCESS

The air inside the bread loaves' packaging expands as a result of this increase in temperature. This causes pressure to build up inside the packaging. "This pressure needs to be counteracted to ensure that the packaging film doesn't burst," explains Max Schröter. This is carried out in two different ways: First, through the use of low-pressure steam, but only as long the temperature in the chamber has not yet reached 100° Celsius. Second, through the use of compressed air which is fed into the system through an additional valve (but only after the steam valve has closed). This method results in a significantly lower number of burst packages. Since the positive pressure gets up to between 1400 and 1600 kp/m², the systems are built heavy-duty and extremely robust. In addition, the systems include safety elements like pneumatically-locked lift gates to ensure that the process runs smoothly.



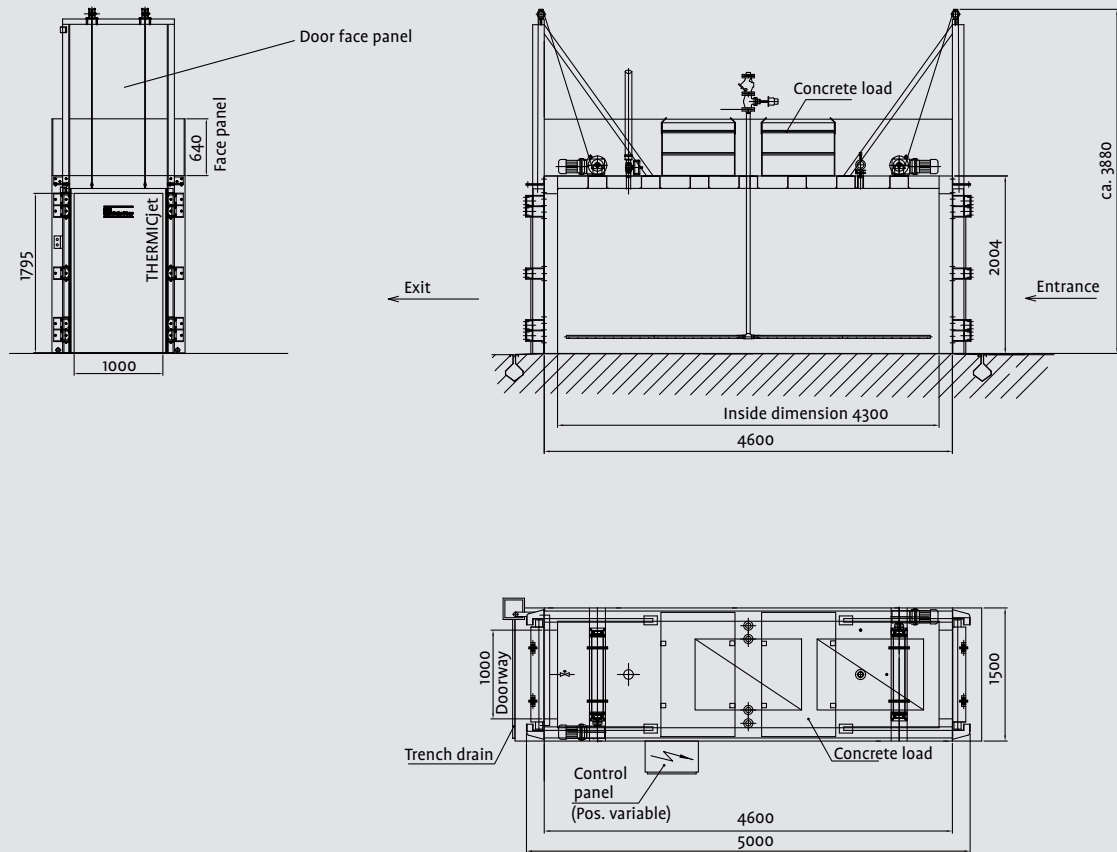
The packaged loaves of bread are loaded into the system in heat-proof EURO boxes.



Even sensitive products like salmon roe can be gently preserved in Schröter's pasteurization systems.

TECHNICAL DETAILS

EXAMPLE: THERMICjet PA TRANSIT



Special designs available upon request.



SCHRÖTER'S COMPACT CONCEPT: **THERMICjet[®] PA**

STRUCTURAL CHARACTERISTICS

- > Chassis and all relevant components are built to be structurally gas and steam tight
- > All components, such as insulation, motors, fans, and ducts, have the ideal dimensions

CUSTOMER BENEFITS

- > Speed
- > Homogeneity
- > Energy savings
- > Minimal weight loss
- > Quickly reach target value + accurately maintain target value
- > Consistent results
- > Accurately repeat a predefined result
- > Ideal temperature and humidity
- > Products are handled in an absolutely gentle and uniform manner



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