

## TKL Deep-Freeze Storage System

### TKLL Dough Deep-Freeze Storage System

**Temperature range** -18/-28 °C

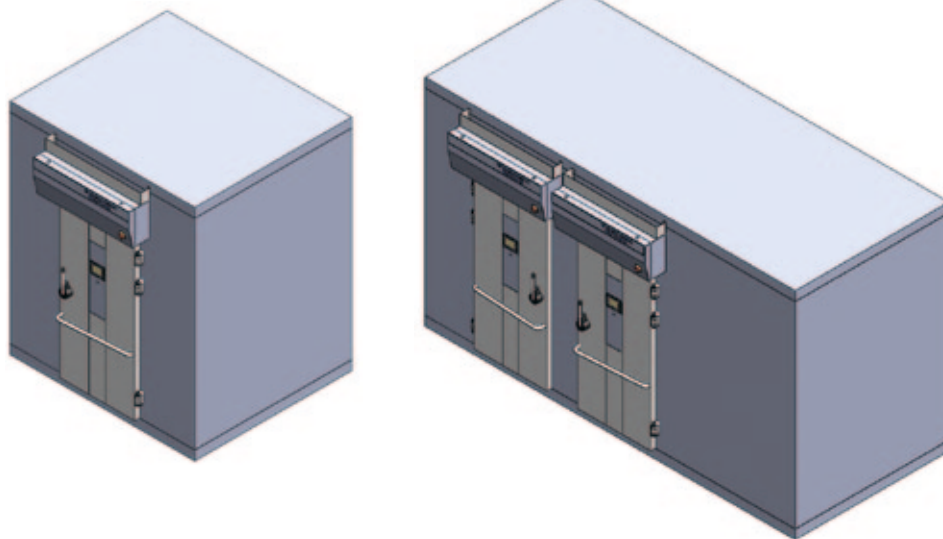
**Humidity range** TKL systems approx. 70-80% rel. hum.  
TKLL systems approx. 85-95% rel. hum.

#### TKL

Werner & Pfleiderer **Deep-Freeze Storage Systems TKL** are designed for deep-freeze storage of pre-frozen foodstuffs and raw materials. The systems are provided with a reserve freezing capacity for product after-cooling.

#### TKLL

Werner & Pfleiderer **Deep-Freeze Storage Systems TKLL** are designed for freezing and storing non-packed dough pieces and bakery products. Designed specifically for dough pieces and bakery products, the **Werner & Pfleiderer Air Guidance System**, together with the **high relative humidity** and the **adjustable air speed**, ensures optimum retention of quality of the stored products. The systems are equipped with appropriate freezer capacity for freezing products. The design of the systems guarantees maximum protection for the stored products.



#### Dimensions

We offer tailor-made deep-freeze systems or combinations for all bakery operations. The cells are constructed of standard panels and can be customized to suit individual customer requirements.

#### Cell housing

Panels in 120 mm PU insulation, foamed, free of CFCs, HCFCs and HHCs.

#### k value

0.16 W/m<sup>2</sup>

#### System

Tongue and groove system with foamed-in eccentric turnbuckle joints for easy, fast assembly on site.

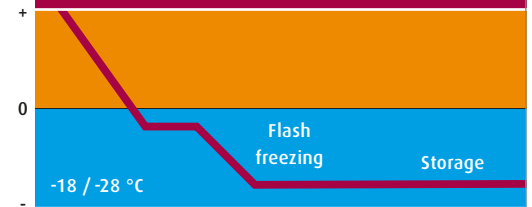
#### Surfaces *Standard Finish*

Inner walls, outer walls and cell front in sheet steel, galvanized, white, RAL 9002  
*Optional stainless steel panelling for all surfaces*

#### Floor

The floor of the TECFLOOR system is fitted with 120 mm thick PU insulation consisting of foamed-on 0.8 mm thick stainless steel panels. There is a 3 mm thick steel or stainless steel base plate mounted on this. This can be supplied either flat or as trough with raised sides. In the case of greater floor loads, we recommend a dual-layer floor insulation laid with tiled concrete floor (customer floor insulation).

TKL Deep-Freeze Storage System 1/2  
TKLL Dough Deep-Freeze Storage System 30.80.2012



## TKL, TKLL

TKL Deep-Freeze Storage System 2/2  
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### Floor heating

We offer two practice-related solutions as an alternative to underfloor ventilation.

- Electrical floor heating or
- heat recovery glycol floor heating stored by a heat exchange on the refrigerating unit.

### Ram protection

Inside allround stainless steel square profile 40×120 mm

### Doors

Optional as NC rotating door(s) or sliding door(s) with clear dimensions of 70/80/90/100 or 120×200 cm

#### Per rotating door

- 3 door hinges, rising
- Solid press lever fastener for commercial use
- Ram protection inside and out
- Door seal
- Door frame heating
- Multiple rubber abrasive for floor seal

*Optional electric operation of sliding doors*

### Technology

The performance of the cooling system is matched exactly to the feed volume taking into account loads per hour or per batch.

### Air Guidance

To achieve more gentle storage of the dough pieces in the deep-freeze storage system, cold air is fed into the room via a lowered ceiling and removable stainless steel air guidance system, i.e. it is not blown directly over the dough pieces. Stainless steel rails are mounted at a distance to the wall in the air intake and blow-out areas. The cold air is blown out on one side of the cell and fed back slowly over the cooling products to the vaporizer.

### Emergency Call System

Deep-freeze systems operating at less than -10°C and with more than 20m<sup>2</sup> ground area are fitted with an emergency call system which is separate from the general power supply network

### Control system

- By WP-MCS 5 E computer
- Complete with electrical switch cabinet, pre-wired to VDE regulations.
- Easy to operate

The computer control is installed either in the door in the correct ergonomic height or in a box at the wall of the cabinet. The control system is highly recommended by users because of its easy and clear operation and is considered to be exemplary for its kind.

*Each WP cooling machine is fitted with machine control switch, soft-start, oil sump heating, pressure/speed controlled liquefier fans for energy-saving operation and all necessary safety precautions. Separate liquefiers with < 56 db(A) or with < 38 db(A) as ultra-quiet unit can be used wherever low-noise installation is required.*

