

Technical description SBS cold storage and deep-freeze chambers

1. Insulation

Cold storage and deep-freeze chambers in element construction

- Insulation thicknesses: 80 mm, 100 mm, 120 mm, 150 mm, 200 mm
- Insulation made of rigid polyurethane foam, water-powered, absolutely free of CFC, HCFC and HFC
- Volume weight 40–45 kg/m³
- Thermal conductivity group 025 according to DIN 4108
- U-values:

Wall thickness	80 mm	100 mm	120 mm	150 mm	200 mm
U-value	0.27 W/km ²	0.22 W/km ²	0.18 W/km ²	0.14 W/km ²	0.11 W/Km ²
Rec. temp. difference	36K	45K	55K	70K	88K

- Building material class B3 according to DIN 4102

2. Hygienic design

- SBS Hygiene Plus
- Floor and ceiling elements on the inside. No visible cross joints in the outer walls
- Joint-free smooth surfaces
- Easy to clean hygienically
- Sheets with a food-safe coating

3. Design / connection of the chamber elements

- Floor and ceiling elements on the inside. No visible cross joints in the outer walls
- Self-supporting element construction with tongue and groove connection and foamed-in, corrosion-protected, eccentrically operating clamp fasteners
- Wood-free wall and ceiling elements
- Elements are provided with a protective foil for transport and assembly

3.1 Partition walls

- In the same design as the chamber elements, the partition wall is integrated into the wall, ceiling and floor elements recessed in a groove. The connection to the chamber walls is made with foamed-in, corrosion-protected, eccentrically operating clamp fasteners.
- No subsequent creation of cold separation cuts or fastening by means of brackets required.
- Positioning of the partition wall freely selectable. No grid dimensions required.

4. Surfaces (apart from interior floor surface)

- Galvanised thin sheet 0.63 mm with a white plastic coating similar to RAL 9010
- Galvanised thin sheet 0.63 mm with an antibacterial coating similar to RAL 9010
- Aluminium sheet 0.7 mm with a white plastic coating similar to RAL 9010
- Stainless steel sheet 0.8 mm (material 1.4301) type 2B, mill finish
- Stainless steel sheet 0.8 mm (material 1.4301) grain 240, polished
- Stainless steel sheet 0.8 mm (material 1.4301) circle matted
- Stainless steel sheet 0.8 mm (material 1.4301) linen texture
- Other surfaces and colours available on request

All surfaces are provided with a protective foil for transport and assembly.

5. Floor elements / interior floor surfaces

- Stainless steel chequer plate type TB1, anti-slip class R11
Material thickness: 0.7 mm and 1.5 mm bonded to a 15 mm pressure distribution plate
2.0 mm and 3.0 mm glued and screwed to a
21 mm pressure distribution plate with staggered joints
- Polyurethane coating 2.0 mm to 3.0 mm thick, absolutely joint-free and particularly hygienic with a plastic chip bedding to increase the slip resistance. The coating is applied to a 21 mm pressure distribution plate after chamber assembly. Suitable temperature range from -30 °C to +40 °C (-22 °F to 104 °F).
- Plastic-coated composite panel, non-slip. Material thickness 15 mm and 21 mm
- Permitted loads:

	Stainless steel floor TB1 – 0.7 mm	Stainless steel floor TB1 – 1.5 mm	Stainless steel floor TB1 – 2.0 mm	Stainless steel floor TB1 – 3.0 mm	PU floor coating 2.0 mm – 3.0 mm
Rubber wheel load	1000 N/4cm ²	2500 N/4cm ²	3500 N/4cm ²	4000 N/4cm ²	3000 N/4cm ²
Surface load	30 KN/m ²	40 KN/m ²	50 KN/m ²	50 KN/m ²	50 KN/m ²

	Composite panel 15 mm	Composite panel 21 mm
Rubber wheel load	3000 N/4cm ²	3500 N/4cm ²
Surface load	40 KN/m ²	50 KN/m ²

- Stainless steel floor design optionally with radius (hygienic groove)
- Other floor designs such as welded floor trays etc. on request
- Chambers without floor are delivered and mounted with a stainless steel U-profile

6. Cold storage and deep-freeze chamber hinged doors

6.1 Cold chamber hinged doors type KT80

- For a chamber insulation of 80 mm and 100 mm
- Outward opening hinged door
- Insulation thickness 80 mm
- Door element in chamber surface with a plastic cold interruption profile
- Compression lever with profile cylinder, inner lever with integrated emergency unlocking device
- Rising door hinges made of stainless steel/plastic, height adjustable
- Acid and grease resistant seal
- Reinforced threshold made of 1.5 mm stainless steel
- The hinge and position of the door is freely selectable
- Door surfaces as described in section 3

6.2 Deep-freeze chamber hinged doors type GT80 / GT120 / GT160

- GT80 for chamber insulation of 80 mm and 100 mm
GT120 for chamber insulation of 120 mm
GT160 or chamber insulation of 150 mm
- Outward opening hinged door
- Insulation thickness 80 mm / 120 mm / 160 mm
- Door element in chamber surface with a cold interruption profile made of plastic with a frame heater (230V/50Hz)
- Compression lever with profile cylinder, inner lever with integrated emergency unlocking device
- Rising door hinges made of stainless steel/plastic, height adjustable
- Acid and grease resistant seal
- Reinforced threshold made of 1.5 mm stainless steel
- The hinge and position of the door is freely selectable
- Door surfaces as described in section 3

7. Panelling

7.1 SBS Hygiene Plus panelling / ceiling connection

- Front / wall elements as a continuous element without cross joints foamed in one piece up to the ceiling of the building. Smooth surfaces for best possible cleaning and design

7.2 SBS Standard panelling ceiling / wall connection

- Panelling made of galvanised thin sheet, optionally with reinforcement