Cold Line

SITEP
Italian Bakery & Cooling Solutions

Product Catalogue

SITEP

Italian Bakery & Cooling Solutions

Since 1982, Sitep has continued to develop new technologies designed to rapidly blast chill products and preserve them flawlessly over time, while minimizing energy consumption and increasing production capacity.

Our equipment is engineered to shift production to more convenient time slots and to extend the shelf life of products.

We are proud to set ourselves apart thanks to the DLS (Dynamic Lamination System): an electronic control of the refrigeration circuit that reduces refrigerant gas consumption and halves the system's pull-down time.

Our modular units allow bakery production facilities to blast chill and store trays and racks, saving 1 hour of work per day.

Our "**SEMPREFRESCO**" units are considered unrivaled when it comes to preserving pastry products.

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Our Cold Line comprises a wide range of cold rooms available in various formats, from tray models to trolley (roll-in) models, with numerous configurable options, including stainless steel interior walls.

Our products stand out for their versatility and modularity, offering solutions that range from compact models to systems designed for large-scale production facilities and the industrial bakery and pastry sectors.

Main Products

Our Cold Line represents the core of Sitep S.r.l.'s reliability in refrigeration systems for bakery and pastry production processes.
A complete range of solutions engineered to ensure precise temperature control, energy efficiency and maximum operational reliability, meeting the needs of professionals who place the highest value on quality and continuity of work.

BLAST CHILLERS / HOLDING CABINETS

mod. IND40T

Our Blast Chillers and Holding Cabinets are engineered to ensure maximum efficiency in temperature management, preserving the quality, freshness and safety of food products. Reliable, technologically advanced solutions designed to support bakery and pastry professionals at every stage of the production process.

MODULAR HOLDING CABINETS

mod. 4CP

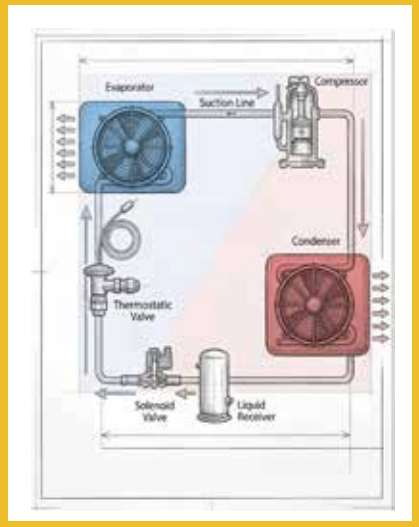
Modular Holding Cabinets offer flexibility and reliability in space management and temperature-controlled storage. Thanks to their modular structure and high refrigeration performance, they are the ideal solution for creating customized environments, meeting the operational needs of professional production facilities.

DLS Refrigeration Technology
(Dynamic Lamination System)

A Revolutionary Electronic Control System

It increases the equipment's efficiency, making a real difference especially during peak operation (for example at start-up). For many customers, it has halved the blast chilling times of their previous unit!

Standard vs. DLS Comparison



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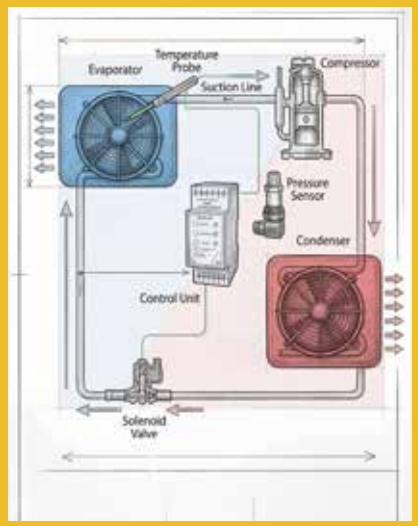


Conventional **New DLS**

Sustainability and reduced costs
1/5 of the refrigerant gas in the new DLS circuit, with the same performance!

Reduced maintenance
Fewer components in the circuit.

Performance
Faster evaporator flooding = shorter pull-down time.

What sets Sitep apart: the DLS System

1. **Increases the intrinsic safety of the refrigeration system**
2. **Allows the construction of low-environmental-impact systems**
3. **Enables a reduction in conventional energy consumption, with an installation cost inversely proportional to the system's capacity**
4. **Represents a sound investment with regard to future refrigerant recharges, given the continuous rise in its price, thanks to its specific feature of reducing the amount of refrigerant gas required**
5. **The absence of thermostatic expansion valves increases system reliability and reduces operating costs in terms of energy**
6. **No risk of system blockage in the event of moisture**

UP TO 80% LESS REFRIGERANT

The main advantage of DLS technology is the absence of the thermostatic expansion valve and the removal of the corresponding liquid receiver, which is no longer required.

Thanks to DLS technology, the system can operate at maximum output with 80% less refrigerant gas, requiring—in the event of a leak—the recharge of a significantly smaller quantity. Furthermore, eliminating the liquid receiver increases the subcooling at the end of condensation, but without any pressure drop, thereby improving energy efficiency.

Every DLS system is equipped with a low-pressure transducer (Pressure Control) and a coil temperature probe (Temperature Probe).

A further feature is the DLS algorithm in the controller, which allows the liquid receiver of a pre-existing conventional system to be reused as an automatic refrigerant recharge.

The Benefits of the DLS System

ADVANTAGES OF THE ALGORITHM

The operating principle of this new technology is not based on superheat, as is the case with mechanical and electronic thermostatic valves, nor does it emulate the superheat principle.

This characteristic makes it possible to apply the control to systems using any refrigerant and to eliminate the effects of poor flooding in the evaporators.

1. The amount of refrigerant injected by the solenoid valve is calculated by the DLS algorithm based on the actual temperature of the coil under thermal load;

2. Full utilization of the heat exchange coil, which is always fed at maximum;

3. No instances of liquid return to the compressor, with an evaporator outlet temperature lower than that of a thermostatic valve.

Therefore, **DLS technology makes it possible to fully exploit the heat exchange coils, always ensuring that the fluid returning to the compressor is in a gaseous state.**

OPERATIONAL ADVANTAGES

The DLS System meets the high standards of industrial refrigeration in terms of temperature and relative humidity control, offering the ability to regulate temperatures from -80°C to +180°C and relative humidity from 10% to 95% (at temperatures of +10°C/+90°C).

1. Reduces energy consumption, thanks to the speed at which the coil temperature is reached at start-up

2. Exploits the entire heat exchange surface, as it is not based on the superheat principle

3. Completely eliminates any faults affecting the valve

DLS in Sitep’s Custom-Built Equipment

CUSTOM APPLICATION

DLS technology can be applied from modest capacities, starting at 500 W, with no upper limit.

The larger the system, the more efficient it becomes.

It can be implemented in single-compressor systems or on refrigeration racks, with no technical differences or differences in dynamic response.
Many companies are already using this system on both small- and large-capacity installations, in low-temperature as well as high-temperature applications, achieving greater operating efficiency, less time spent on checks, and reduced running costs.

VALUE PROPOSITION

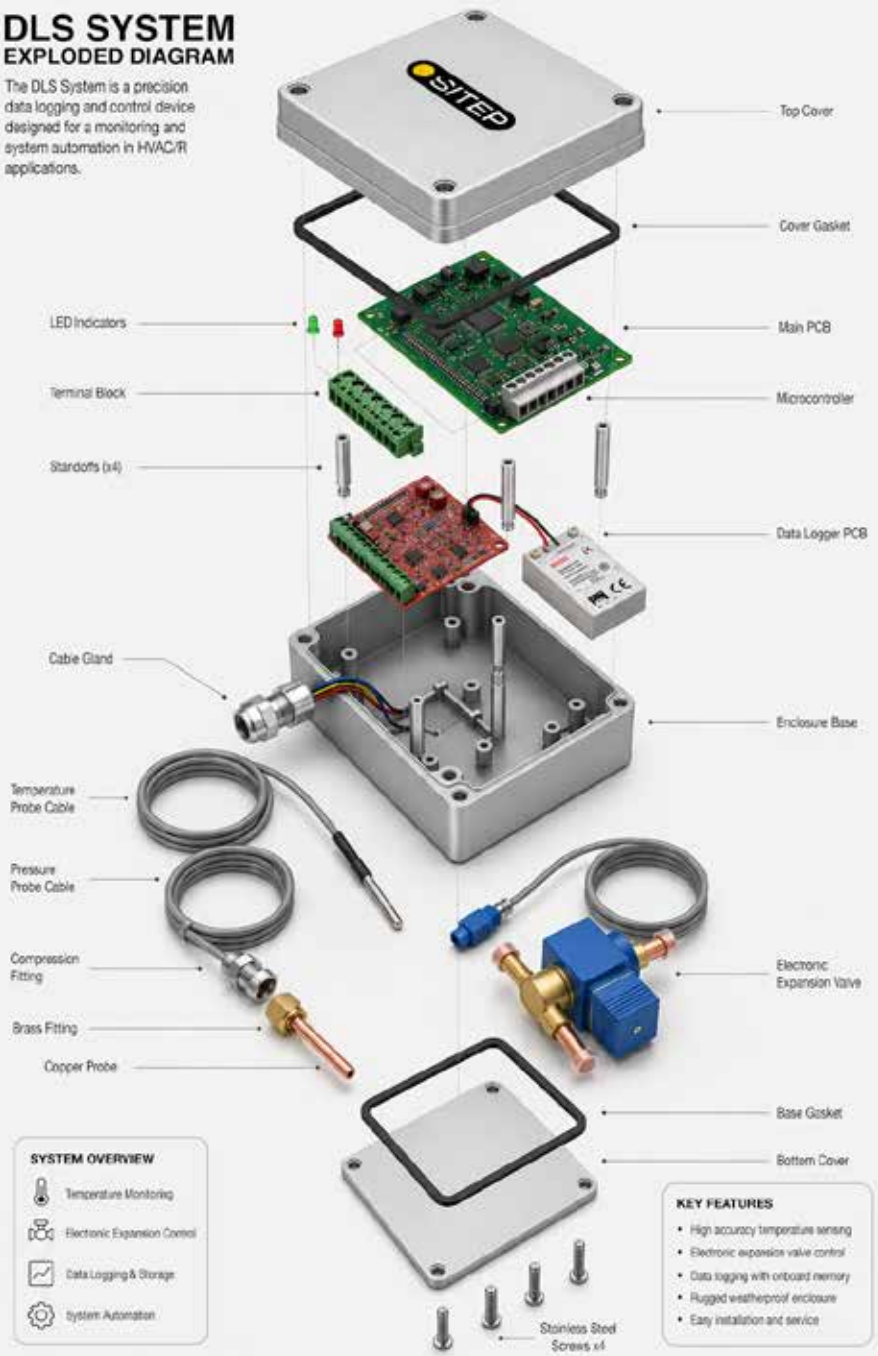
We design and manufacture technological systems for refrigeration and controlled proofing, primarily for the bakery and pastry sectors.

“One client, one project” is what embodies the originality of our offering: **we are the bespoke tailors of refrigeration. And we are proud of it.**

We assist the client in defining their needs, build tailor-made systems, and support them throughout the entire product experience, providing technical assistance and application consultancy aimed at maximizing the system’s performance.

DLS SYSTEM
EXPLODED DIAGRAM

The DLS System is a precision data logging and control device designed for a monitoring and system automation in HVAC/R applications.



SYSTEM OVERVIEW

- Temperature Monitoring
- Electronic Expansion Control
- Data Logging & Storage
- System Automation

KEY FEATURES

- High accuracy temperature sensing
- Electronic expansion valve control
- Data logging with onboard memory
- Rugged weatherproof enclosure
- Easy installation and service

Modular Blast Chillers-Holding Cabinets
for trays

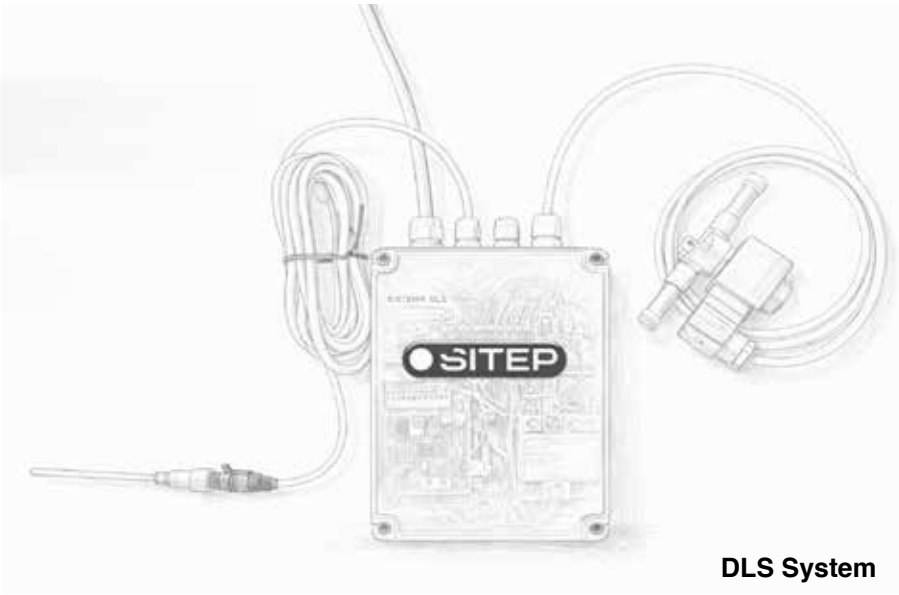
SITEP
Italian Bakery & Cooling Solutions

Our range of blast chillers-holding cabinets for trays is designed to ensure rapid cooling, precise temperature control and maximum reliability in everyday operations. Solutions conceived for bakery and pastry production facilities, capable of preserving the quality, freshness and organization of production, from the small workshop to the most structured production operations.

mod. IND40T

DLS Refrigeration Technology (Dynamic Lamination System)

In our blast chillers-holding cabinets, the DLS system dynamically manages the refrigeration circuit to ensure faster, more efficient performance, particularly during start-up phases and peak workloads. Thanks to advanced electronic control and an optimized circuit, the equipment reaches its operating regime more quickly, reducing blast chilling times, energy consumption and the amount of refrigerant gas required.



DLS System

Modular Blast Chillers-Holding Cabinets for Trays

Mod. IND20T, IND40T, IND60T

Perfect for blast chilling and storage in a single unit, with maximum flexibility and no need to move the trays

Technical Specifications

- Modular, sectional structure in corrosion-resistant plastic-coated aluminium (optional: stainless steel)
- Insulation with high-density expanded polyurethane
- Tropicalized refrigeration unit
- Automatic defrost device
- Single-door clear opening 61x80 cm
- Single-compartment capacity: 20 trays 60x80 cm or 80 trays 60x40 cm

Alternative voltage available on request

Surgela e conserva impasti da forno e prodotti di pasticceria
La cella di abbattimento permette di surgelare immediatamente (fino a -35°C) prodotti di pasticceria e impasti da forno, conservandoli anche per tempi medio-lunghi. Il particolare clima freddo-umido mantiene il prodotto anche senza confezionamento, migliorando tempi e costi di processo.

Riduce la carica batterica
I prodotti possono essere surgelati per shock termico (-40°C) o per induzione (-25°C), riducendo drasticamente la carica batterica. Il secondo programma consente una maggiore conservazione delle particelle di lievito, grazie alla velocità di raffreddamento del sistema di abbattimento a induzione che convoglia in modo circolare il flusso di aria fredda, con l'ausilio della ventilazione a impulsi.

Conserva i valori nutritivi e le proprietà organolettiche
La superficie maggiorata dell'evaporatore ad alette distanziate di 8mm riduce notevolmente la disidratazione del prodotto, lavorando sino a otto ore no-stop senza sbrinamento. Grazie a questi accorgimenti, la cella di abbattimento conserva al meglio i valori nutritivi e le caratteristiche organolettiche, data la minore perdita di liquidi durante la conservazione.

Easy to use

The blast chilling unit is equipped with a stainless steel core probe for precise monitoring of the temperature at the product's core. From the integrated LCD display, all blast chilling and storage parameters can be viewed and set; time-based blast chilling cycles or cycles controlled by the active product probe can be started; and storage can be programmed at the end of the cycle.

Modular Holding Cabinets for Trays

Mod. 2CP, 2CN, 4CP, 4CN, 6CP, 6CN

Ideal for those who only need a frozen (sub-zero) or chilled (above-zero) holding cabinet (managing the blast chilling separately)

Positive-temperature (chilled) storage for fresh bakery doughs and pastry products
The positive-temperature cold room, with an operating temperature of +1°C/+10°C, is essential for pastry products and “fresh” bakery doughs that need to be stored on trays for medium-to-long periods.

Negative-temperature (frozen) storage for frozen and deep-frozen bakery doughs and pastry products
The negative-temperature cold room, with an operating temperature of -10°C/-25°C, is essential for pastry products and “frozen” and “deep-frozen” bakery doughs that need to be stored on trays for medium-to-long periods.

Preservation of nutritional values and organoleptic properties
The cold room features uniform air distribution at every point, keeping nutritional values and organoleptic characteristics intact. To this end, the temperature is constantly controlled through airflow regulation.

Technical Specifications

- Modular, sectional structure in corrosion-resistant plastic-coated aluminium (optional: stainless steel)
- Insulation with high-density expanded polyurethane
- Tropicalized refrigeration unit
- Automatic defrost device
- Single-door clear opening 61x80 cm
- Single-compartment capacity: 20 trays 60x80 cm or 80 trays 60x40 cm

Alternative voltage available on request

Easy to use

The cold room is equipped with an integrated LCD display: all product storage parameters can be viewed and set.

Mini Blast Chillers
for Trays

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mod. P8ABT8K

Our mini blast chillers for trays are the compact, efficient answer for those who need to rapidly blast chill small batches without sacrificing precise temperature control. Designed for bakery and pastry production facilities working with up to 16 trays of 60x40, they deliver immediate thermal shock and reliable storage—all in a compact footprint, ready for everyday use.

Integrated LCD Display

Easy to use

he mini blast chiller is equipped with an integrated LCD display, where the machine's settings can be viewed and adjusted intuitively.

Mini Blast Chillers for Trays

Mod. P5ABT5K, P8ABT8K, P12ABT-12KP16ABT16K

Ideal for those who want to blast chill up to a maximum of 16 trays of 60x40

Eliminates bacterial load

The mini blast chiller is ideal for pastry products and bakery doughs that require immediate deep-freezing and medium-to-long-term storage. The thermal shock makes it possible to drastically reduce the bacterial load, lowering the product temperature from +70°C to -18°C in just 60 minutes/kg.

Preserves nutritional values and organoleptic properties

The freezing speed induced by the blast chilling phase is the key to preserving the products' nutritional values and organoleptic characteristics, thanks to the reduced liquid loss during thawing.

Technical Specifications

- Structure entirely in stainless steel
- Reversible self-closing doors
- Stand with adjustable feet (optional: steel castor kit)
- Stainless steel product probe
- Insulation with high-density expanded polyurethane
- Tropicalized refrigeration unit
- Automatic defrost device
- Tray pitch 6.5 cm

Easy to use

The mini blast chiller is equipped with a stainless steel core probe for precise monitoring of the temperature at the product's core, while the integrated LCD display allows all the machine's settings to be viewed and adjusted intuitively.

Roll-in Blast Chillers

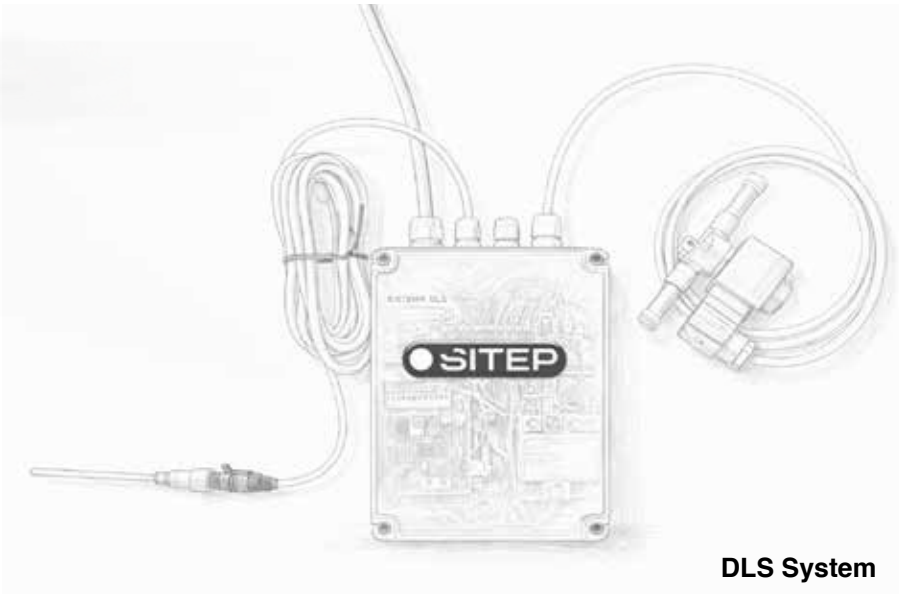
Italian Bakery & Cooling Solutions

mod. C3ABT100K

Our roll-in blast chillers are designed for those who work with large volumes and cannot afford to compromise on blast chilling speed. High-performance modular solutions, capable of deep-freezing entire trolleys of product down to -40°C, conceived for bakeries and pastry production facilities aiming to maximize production capacity while keeping quality intact.

DLS Refrigeration Technology (Dynamic Lamination System)

In our blast chillers-holding cabinets, the DLS system dynamically manages the refrigeration circuit to ensure faster, more efficient performance, particularly during start-up phases and peak workloads. Thanks to advanced electronic control and an optimized circuit, the equipment reaches its operating regime more quickly, reducing blast chilling times, energy consumption and the amount of refrigerant gas required.



DLS System

Roll-in Blast Chillers

Ideal for those who need to blast chill quality products arranged on trolleys

Mod. C1ABT25K, C1ABT50K, C2ABT50, C2ABT100K, C3ABT100K, C3ABT150K, C4ABT100K, C4ABT200K

Technical Specifications

- Modular, sectional structure in corrosion-resistant plastic-coated aluminium (optional: stainless steel)
- Insulation with high-density expanded polyurethane
- Tropicalized refrigeration unit
- Automatic defrost device
- Door clear opening 100x200 cm

Alternative voltage available on request

Deep-freezes and stores bakery doughs and pastry products

The blast chilling unit makes it possible to immediately deep-freeze (down to -40°C) pastry products and bakery doughs, storing them even for medium-to-long periods. The special cold, humid climate preserves the product even when it is unpackaged, improving process times and costs.

Reduces bacterial load

Products can be deep-frozen by thermal shock (-40°C) or by induction (-25°C), drastically reducing the bacterial load. The second program allows for better preservation of the yeast particles, thanks to the cooling speed of the induction blast chilling system, which circulates the cold airflow in a circular pattern with the aid of pulsed ventilation.

Preserves nutritional values and organoleptic properties

The enlarged evaporator surface, with fins spaced 8 mm apart, significantly reduces product dehydration, allowing operation for up to eight hours non-stop without defrosting. Thanks to these features, the blast chilling unit preserves nutritional values and organoleptic characteristics, given the reduced liquid loss during thawing.

Easy to use

The blast chilling unit is fitted with a stainless steel core probe that precisely monitors the temperature at the product's core. Thanks to the integrated LCD display, all blast chilling and storage parameters can be set and monitored; time-based cycles or cycles controlled by the active product probe can be started; and storage can be programmed at the end of the cycle.

Cold Storage Rooms

mod. 215x215CP

Our cold storage rooms are the ideal solution for those who need dedicated spaces for the positive- or negative-temperature storage of semi-finished or finished products, with or without internal shelving, to hold bakery and pastry products, as well as fish, meat and vegetables. Custom-built, they ensure uniform air distribution and constant temperature control—from +1°C for fresh products down to -20°C for frozen and deep-frozen items—reducing waste and optimizing production flows.

Cold Storage Rooms

**Mod. da 135x135C a 295x255CP,
da 143x143CN a 303x263CN**

Ideal for those who need general-purpose storage spaces, negative (-20°C) or positive (+1°C), optionally with internal shelving

Stores fresh bakery doughs and pastry products (Positive-Temperature Room)
The cold room has a minimum operating temperature of +1°C, suitable for the medium-to-long-term storage of pastry products and fresh bakery doughs.

Stores frozen and deep-frozen bakery doughs and pastry products (Negative-Temperature Room)
The cold room has a minimum operating temperature of -20°C, suitable for the medium-to-long-term storage of frozen and deep-frozen pastry products and bakery doughs.

Preserves nutritional values and organoleptic properties
The cold room features uniform air distribution at every point, ensuring product preservation while keeping nutritional values and organoleptic characteristics intact. Thanks to airflow regulation, the temperature is constantly controlled. Particular attention is also paid to energy saving through floor insulation.

Technical Specifications

- Structure entirely in pre-painted galvanized sheet steel
- Self-supporting shelving
- Door with clear opening 70x190 cm (on request: installation of additional doors)
- Floor in plastic-coated sheet steel
- Tropicalized refrigeration unit
- Automatic defrost device
- Straddle-mounted monobloc unit

Custom dimensions and alternative voltage also available

Ideal for bakeries, pastry shops and professional production facilities, our holding cabinets ensure the optimal preservation of fresh or frozen products, safeguarding their quality, aroma and food safety. Thanks to precise temperature control and uniform air distribution, they help reduce waste and better organize daily production flows.

Refrigerated Cabinets and Counters

for Trays or Grids

SITEP
Italian Bakery & Cooling Solutions

Our refrigerated cabinets and counters for trays or grids combine compactness and performance, offering positive- or negative-temperature storage in a stainless steel solution. Suitable for any production environment—even in the hottest climates, thanks to the tropicalized refrigeration unit—they are the ideal choice for bakeries and pastry shops seeking everyday reliability and flexibility in managing their products.

mod. ACP1P GLASS

Automatic Defrost

Extremely easy maintenance

It defrosts automatically, evaporating the condensate water by means of a dedicated heating element, thus avoiding the inconvenient tray that has to be emptied by hand or the installation of a dedicated water drain.

Refrigerated Cabinets for Trays or Grids

Ideal for those who need a positive- and negative-temperature holding cabinet with a capacity of up to 40 trays of 60x40

Mod. ACP1P, ACN1P, ACP2P, ACN2P, ACP1P MAXI, ACN1P MAXI, ACP1P/E, ACN1P/E, ACP2P/E, ACN2P/E

Technical Specifications

- Internal supports
- Reversible self-closing doors (optional: glass doors)
- Stand with adjustable feet
- Remote refrigeration unit and alternative voltage available on request

Positive-temperature (chilled) storage for fresh bakery doughs and pastry products
The positive-temperature refrigerated cabinet, with an operating temperature of +1°C/+10°C, is suitable for pastry products and “fresh” bakery doughs that need to be stored on trays for medium-to-long periods.

Negative-temperature (frozen) storage for frozen and deep-frozen bakery doughs and pastry products
The negative-temperature refrigerated cabinet, with an operating temperature of -10°C/-20°C, is suitable for pastry products and “frozen” and “deep-frozen” bakery doughs that need to be stored on trays for medium-to-long periods.

Preserves nutritional values and organoleptic properties
The refrigerated unit boasts uniform air distribution at every point, ensuring product preservation while keeping nutritional values and organoleptic characteristics intact. Thanks to airflow regulation, the temperature is constantly controlled.

High performance even in the hottest countries
The tropicalized refrigeration unit allows the cabinet to operate at full capacity in extreme thermal conditions, where the ambient temperature reaches +40°C.

Easy to maintain

It defrosts automatically, evaporating the condensate water by means of a dedicated heating element, thus avoiding the inconvenient tray that has to be emptied by hand or the installation of a dedicated water drain. Particular attention is also paid to energy saving through insulation with high-density expanded polyurethane.

Refrigerated Counters for Trays or Grids

Mod. da BCP2P a BCP4P, da BCN2P a BCN4P, da BCP2P/E a BCN4P/E

Ideal for those who need a positive- and negative-temperature holding cabinet with a capacity of up to 24 trays of 60x40

Technical Specifications

- Internal supports
- Reversible self-closing doors

Remote refrigeration unit and alternative voltage available on request

Fresh pastry products
The positive-temperature refrigerated counter, with an operating temperature of +1°C/+10°C, is suitable for pastry products and “fresh” bakery doughs that need to be stored on trays for medium-to-long periods.

Negative-temperature storage for frozen and deep-frozen bakery doughs and pastry products
The negative-temperature refrigerated counter, with an operating temperature of -10°C/-20°C, is suitable for pastry products and “frozen” and “deep-frozen” bakery doughs that need to be stored on trays for medium-to-long periods.

Preserves nutritional values and organoleptic properties
The uniform air distribution at every point of the counter ensures product preservation while keeping nutritional values and organoleptic characteristics intact. Thanks to airflow regulation, the temperature is constantly controlled.

Easy to use and install
For optimal space management, the counter features a self-supporting stainless steel structure with no fixings, a remote refrigeration unit (optional, to further reduce the floor footprint) and steel castors (optional, to move it as required). The reinforced worktop can support heavy loads.

Easy to maintain

It defrosts automatically, evaporating the condensate water by means of a dedicated heating element, thus avoiding the inconvenient tray that has to be emptied by hand or the installation of a dedicated water drain. Particular attention is also paid to energy saving through insulation with high-density expanded polyurethane.

SEMPREFRESCO Cabinets and Counters

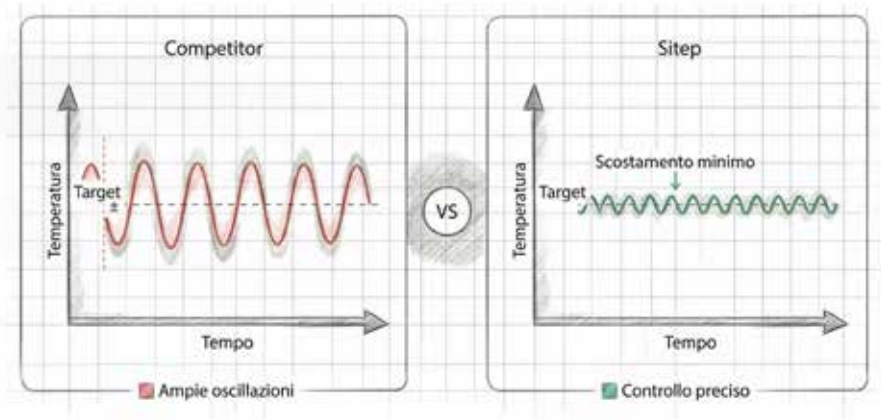
Professional, for Pastry

mod. SEMPREFRESCO

SEMPREFRESCO cabinets and counters are Sitep's exclusive solution for pastry shops that refuse to compromise on the freshness of their products. Thanks to the pulsed forced-air refrigeration system and precise humidity and temperature control, they keep baked products fresh for more than three days—without dulling chocolate, glaze and fruit—with the option to manage everything remotely via app.

Precision for Shelf Life

Thanks to exceptional temperature and humidity control, our customers confirm that the shelf life of stored products is significantly extended in Sitep's SEMPREFRESCO units.



Temperature Control Test

Professional SEMPREFRESCO Cabinets for Pastry

Mod. Semprefresco1P, 2P, MAXI

Ideal for pastry shops that want to extend the optimal storage of their products

Technical Specifications

- Reversible self-closing doors (optional: glass doors)

Internal supports for trays

SEMPREFRESCO keeps your products fresh for up to 3 days
The SEMPREFRESCO cabinet is ideal for storing already-baked pastry products, keeping them fresh for up to three days. It offers production flexibility and ensures immediate availability for sale.

Uniform and constant storage
Thanks to the electrically pulsed forced-air refrigeration system and the stainless steel ducting, the air is distributed uniformly and humidity and temperature values are constantly controlled.

No more dulling effect
When the door is opened, the pulsed system eliminates condensation on the product, preventing the dulling effect on chocolate, glaze and fruit.

SMART Remote Control (optional)
SEMPREFRESCO can also operate in “retarding” or “proofing” mode and be managed remotely via app and internet connection (optional). From the integrated touch screen or via app, you can set humidity, monitor cycles and save custom programs.

Easy maintenance and energy efficiency

The 110°C steam generator reduces internal condensation. Intelligent water control limits limescale formation. High-density expanded polyurethane insulation reduces consumption. Automatic defrosting with water evaporation avoids filters or external drains.

Professional SEMPREFRESCO Counters for Pastry

Ideal for pastry shops that want to extend the optimal storage of their products

Technical Specifications

- Internal supports for trays
- Reversible self-closing doors

SEMPREFRESCO keeps products fresh for up to 3 days
Ideal for pastry making, it keeps already-baked products fresh for up to three days. Perfect for flexible production and a ready stock for unexpected sales.

Uniform freshness
Thanks to the electrically pulsed forced air flow and the stainless steel ducts, humidity and temperature are always under control for optimal storage at every point.

No more dulling effect
When the door is opened, the pulsed ventilation dries the condensation, preventing the dulling effect on chocolate, glaze or fruit.

Reduced maintenance and energy efficiency
The 110°C steam generator limits internal condensation, while the water control system reduces limescale-related maintenance. The expanded polyurethane insulation and the automatic defrosting with evaporation avoid drains and filters that need emptying.

Remote control (optional)
It can also operate in retarding or proofing mode, with remote control via app and internet connection (optional).

Easy to use and install

The counter has a self-supporting stainless steel structure with no fixings, with a remote refrigeration unit (optional) to reduce the floor footprint and steel castors (optional) to make it easier to move. The reinforced worktop can support heavy loads.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