



-10°C | +40°C

QUARTZ

PROFESSIONAL PROGRAMMED
RETARDER PROOFING ROOMS



THERMOGEL

TECHNOLOGY PIONEER

Cold technology since 1963

Thermogel

Baking is one of the oldest professions in the world. Thermogel was established alongside modern bakeries to provide support in everyday work.



1970

In 1970, following careful research into bakers' work, a machine was designed to simplify the work and give bakers more flexibility.

This is how retarder proofing came about.



QUARTZ, CONSTANTLY EVOLVING

A project successful, always in step with the times.

QUARTZ retarder prover are a decades project, born from the need to offer the baker a machine that combines minimum overall dimensions and large capacity. Over the years the project has always evolved to always offer a machine of the latest generation.

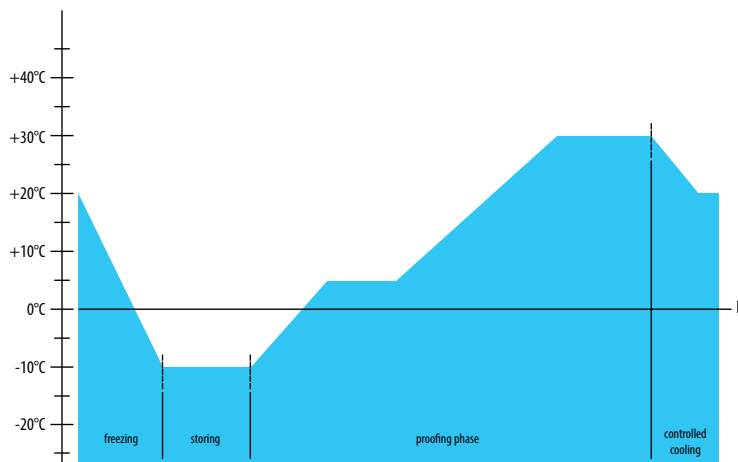


CELLS WITH A MINIMUM SIZE, BUT WITH
LARGE CAPACITIES

MAXIMUM FLEXIBILITY

There isn't just one way to use Quartz.

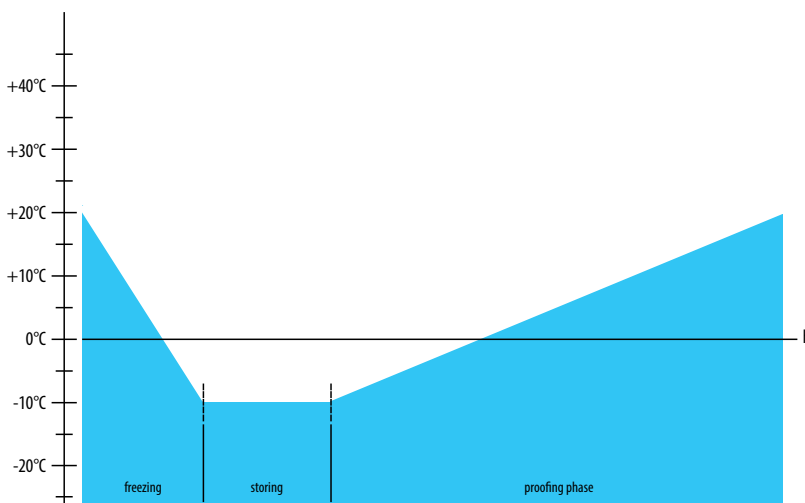
Our QUARTZ retarder proofer adapts to any type of work allowing the user to use it according to production needs.



“CLASSIC” RETARDER PROOFER

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Automatic and programmable cycle program, every day different program cycles can be included, with start and end times with subsequent maintenance before baking the product.



NATURAL LEAVENING - SLOW LEAVENING

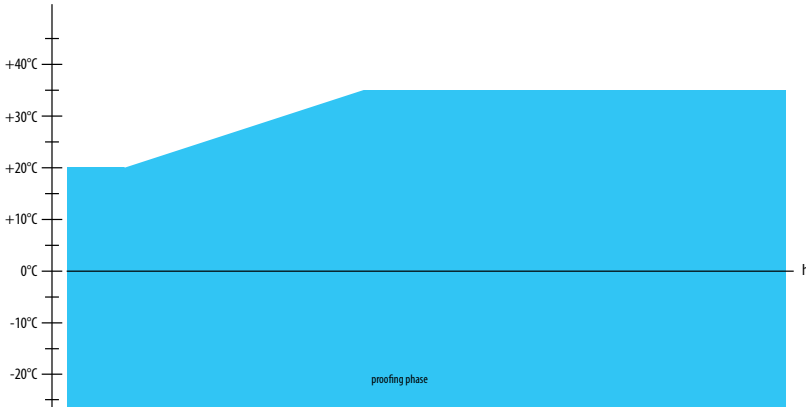
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Thank a perfect control of temperature and humidity, the dough is progressively leavened at natural temperatures and maintained for a long time.

FINAL PROOFING - FAST LEAVENING

▲ +30°C | +40°C

Thanks to the presence of the heating element and the humidity producer, it is possible to make a professional leavening according to the needs.



RELATIVE HUMIDITY 60-95%

In the retarder proofing process, other than temperature, humidity plays a fundamental role for a correct leavening process, avoiding skin forming on the surface of the product.

The relative humidity of the environment must always be under control with values between 60 and 95% according to the type of leavening and the product you want to achieve.



A close-up photograph of a loaf of bread, showing a very porous and airy crumb structure with many small holes. The bread is covered with a white cloth.

TOTAL PHASE CONTROL TO ACHIEVE
PERFECT LEAVENING.



IMPROVING YOUR WORK...

Improve your work optimizing production processes

Many still wonder why it is necessary to have a retarder prover. In a modern bakery that wants to grow and improve in quality, it is essential to control individual processes and minimize variability.



1. IMPROVE PRECISION

The baker gains the benefit of this technology by obtaining a constant quality product and a timing precision over the entire process.

2. SAVE TIME

Professional retarder proofing saves time thanks to better organisation.

3. PLAN YOUR WORK

Perfect retarder proofing enables your precise organisation to plan production for the full week.

4. INCREASED PRODUCTIVITY

Retarder proofing also allows greater product rotation to allow the baker to best manage baking phases, optimising production organisation in the laboratory.

5. LESS WORK

Retarder proofing allows bakers to work less, avoiding night shifts and strenuous waking up in the middle of the night.

6. LESS INGREDIENTS

Perfect leavening allows guaranteed calibration of the quantity of ingredients, yeast in particular, lowering product costs.

7. HIGHER QUALITY

The balance between the ingredients, the correct temperature and humidity during leavening allow the best end product to be obtained.



YOUR PRODUCT

Our objective is not just to “automate” the work, but help bakers optimise the production process and best enhance the properties of the product.



...PRESERVING THE WORKMANSHIP OF
THE PRODUCT

QUALITY FIRST

Built to work, all the time.

Our rooms are built according to strict quality criteria. Through an in-depth selection of materials and components, they guarantee a long life even in hard working conditions.

STRUCTURAL DETAILS



- Modular structure with 60mm thick hook panel
- Internal structure in aisi 304 stainless steel
- 80mm thick door with airtight seal.
- Sanitary profiles in aisi 304 stainless steel
- Mechanical components resistant to heavy stress.
- 20mm thick phenolic resin plywood floor.



SYSTEM DETAILS



- Large surface evaporator.
- Ultra-tropicalised condenser unit to also work in ambient temperatures up to +45°C
- Electrical defrosting.
- Heating resistors in stainless steel.
- Electric resistance instantaneous humidifier.



Maximum performance for 24h, non-stop working day.



- Electric box easily accessible and equipped with every safety device according to standards.
- 7" mod. touchscreen control card DIGITH LED
- Humidity and temperature probe.
- Internal led light.

UNIFORM AND BALANCED

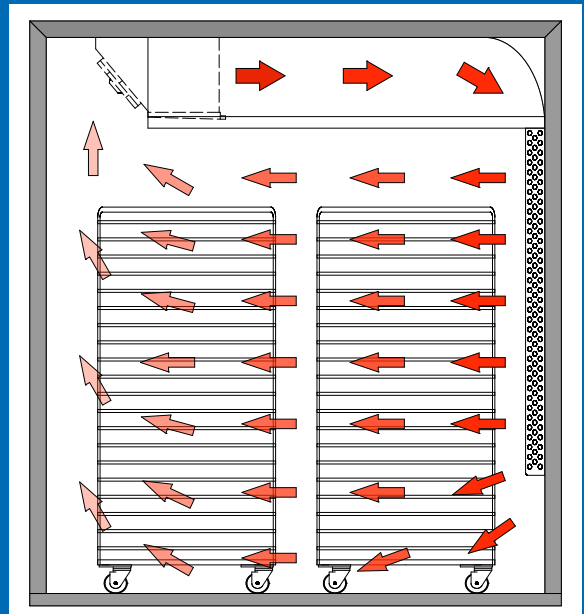
Perfect balance to guarantee no skin formation.

Each room is created using a principle of balance among the various elements composing it: evaporator, condenser and motor. This correct balance allows all “skin” issues to be avoided, as well as dehydration on the surface of the product, respecting the natural relative humidity.

VENTILATION SYSTEM

Air volume and ventilation are always designed to obtain perfect distribution and uniformity of the temperatures without ever being aggressive on the product, but always constant and delicate.

- $\pm 1^{\circ}\text{C}$ temperature and $\pm 1.5\%$ humidity precision
- Uniform temperature and humidity in every room
- Perfect balance of mildness and volume of the air
- No skin and dehydration on the surface of the product

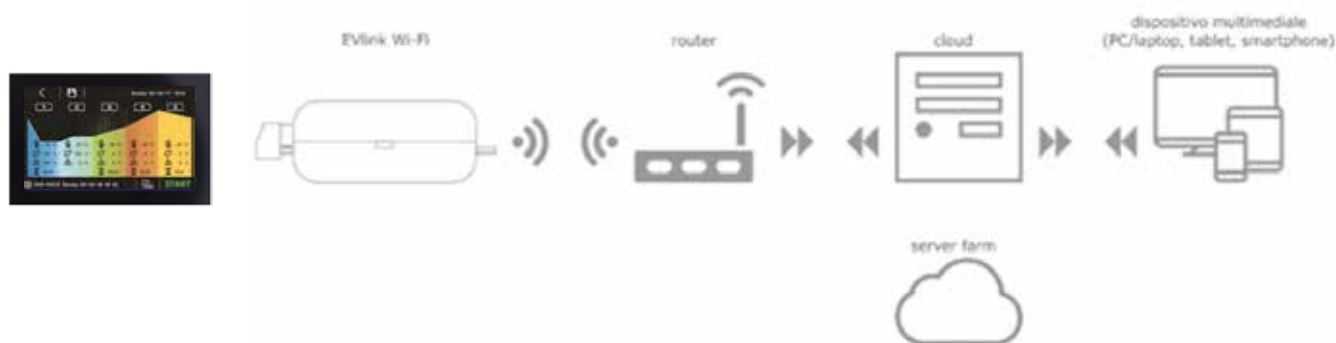




TECHNOLOGICALLY ADVANCED

TRC, an entirely new technology.
Also monitors the work from remote.

TRC - Thermogel Remote Control is a remote management and monitoring system based on the Cloud platform. A wireless Internet connection system suffices on site so that the controller can connect to the cloud system, allowing remote management of the machines via PC, tablet or smartphone.



TRC provides the possibility of one or more users enabled to operate the unit to configure the parameters, display HACCP data (also in graphic format) and download records.

Functionalities include alarm notifications, which the system automatically sends to the selected e-mail addresses.



ALWAYS ONE STEP AHEAD

DIGITH LED - intuitive interface, simple, clear and accessible to all.

Our DIGITH LED electronic control with 7" touch screen interface has been designed to give maximum autonomy and functionality to the customer, and at the same time to make work easier.

DIGITH LED allows complete management of the 5 retarder-proving phases, with different temperatures and relative humidity.

1. Blocking Phase
2. Conservation Phase
3. Pre-fermentation phase
4. Leavening phase
5. Delayed baking phase

During the working cycle it is possible to see a diagram graph with temperature display.

Manual work cycles

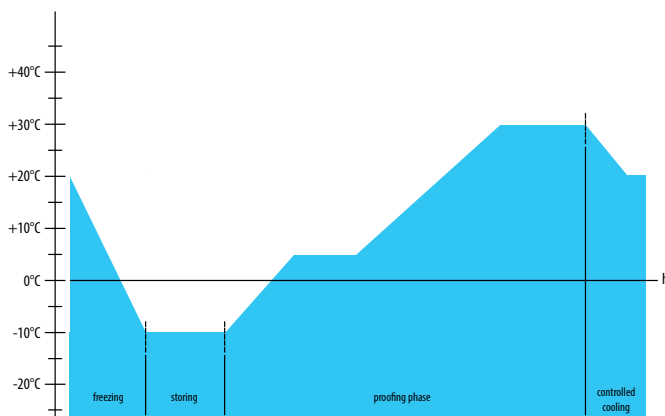
- Hot manual
- Cold manual

The card also allows you to download work data in two ways: either via remote access via web (TRC), or via USB port.

CHOOSE HOW TO WORK

Choose the model that best fits your work

Not all works are the same. There are those who have different production needs and different types of products. For this reason we have studied two different lines to offer a greater choice and better adapt to customer needs.

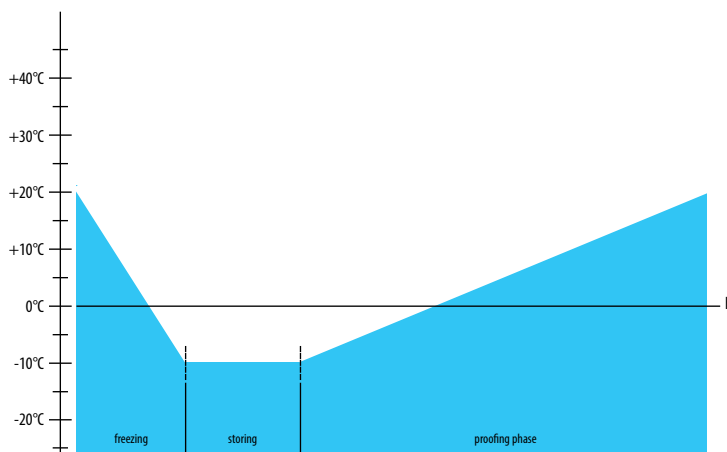


QUARTZ - TCA

RETARDER PROOFING + FINAL PROOFING

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Quartz designed for automatic retarder-proving cycles. The presence of electric resistances and professional humidifier allow a final leavening phase.



QUARTZ - TTN

RETARDER PROOFING + NATURAL LEAVENING

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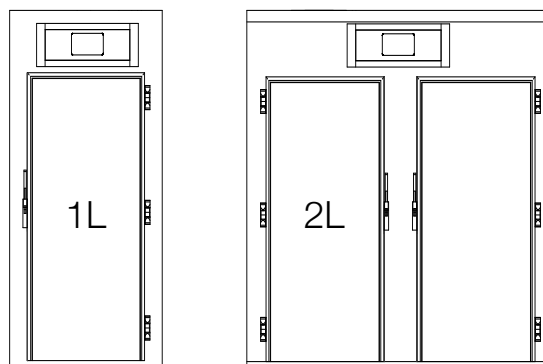
Quartz designed to make cooling and natural leavening cycles by using the relative humidity of the product.

TECHNICAL TABLE

QUARTZ - TCA

RETARDER PROOFING +
FINAL PROOFING

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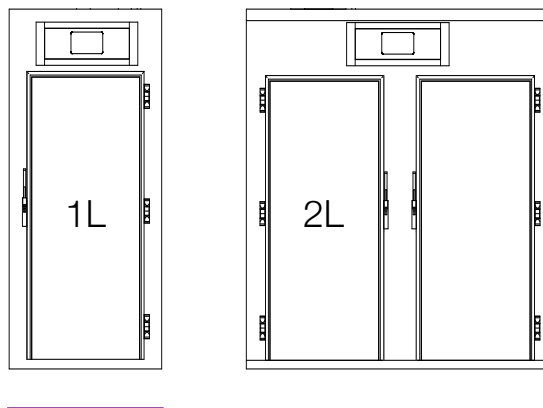


Code	Trolleys 670x800	Trolleys 600x450	(WxDxH) External	(WxDxH) Internal	Door 750x1950	Volts/Kw
QRZ9511/1L	1	2	950x1100x2400	750x940x1950	1	230/1,83
QRZ9520/1L	2	4	950x2000x2400	750x1840x1950		230/2,56
QRZ9529/1L	3	6	950x2900x2400	750x2740x1950		230/3,90
QRZ9535/1L	4	8	950x3500x2400	750x3340x1950		230/4,50
QRZ9552/1L	6	12	950x5200x2400	750x5040x1950		380/6
QRZ2011/2L	2	4	2000x1100x2400	1800x910x1950	2	230/2,56
QRZ2311/3L	3	6	2300x1100x2400	2100x910x1950		230/4,20
QRZ2020/2L	4	8	2000x2000x2400	1800x1810x1950		230/4,50
QRZ2028/2L	6	12	2000x2800x2400	1800x2610x1950		380/6

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RETARDER PROOFING +
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Code	Trolleys 670x800	Trolleys 600x450	(WxDxH) External	(WxDxH) Internal	Door 750x1950	Volts/Kw
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QRC9520/1L	2	4	950x2000x2400	750x1840x1950		230/1,76
QRC9529/1L	3	6	950x2900x2400	750x2740x1950		230/3,10
QRC9535/1L	4	8	950x3500x2400	750x3340x1950		230/3,70
QRC2011/2L	2	4	2000x1100x2400	1800x910x1950	2	230/1,76
QRC2311/3L	3	6	2300x1100x2400	2100x910x1950		230/3,40
QRC2020/2L	4	8	2000x2000x2400	1800x1810x1950		230/3,70

50 YEARS
OF EXPERIENCE
 *made in Italy*



THERMOGEL
COOLING TECHNOLOGY FOR BAKERY

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