

retarder provers

# *TSE* and *TSL* series



## Multi-functional and reliable

Modern bread-making requires different programming of the production cycle.

This can be done by regulating the various proving phases using a refrigeration process.

The advantages which this method offers are:

- better organization (reduction of waste, reduction of costs, better management of production peaks related to seasonal demand or to occasions etc.);
- improved programming of baking times depending on demand and on the time of day;
- reduction of night shifts and a less stressful working pace;
- constant product quality

**TSE** series prover



The **TS** series retarder provers have been designed to automatically manage the proving phases of bread and pastry dough.

Two different versions are available: **TSE** and **TSL** in a wide range of models with different features satisfying all possible requirements.



**TSL** series prover

# Innovation and convenience at your side



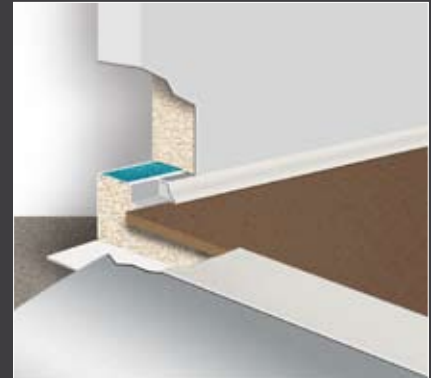
## Built-in angles

All the internal angles are rounded and are built-in to the structure increasing its solidity, improving the thermal seal and facilitating cleaning operations.



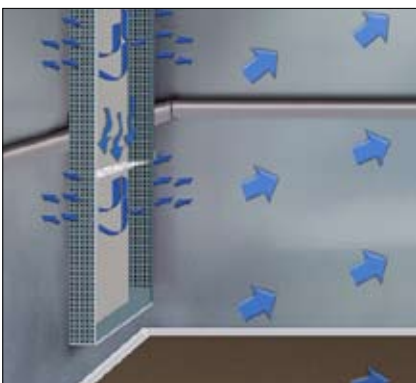
## Perfect coupling

The panels are joined to each other by eccentric mechanical hooks making installation times faster and ensuring, thanks to a layer of foam applied around the perimeter, precision coupling and exceptional thermal insulation.



## Single block floor

Made from high-density insulation material with upper reinforcement in antiskid, phenolic resin and outer perimeter rim in stainless steel. Makes for perfect thermal insulation preventing the formation of condensation, water build-up and mould.



## Equalised air ducts

This system resolves all the problems related to stratification of the temperature and humidity inside the cell, even in the most difficult conditions and longest cycles (48-72 hours) thanks to the reduced air speed.



## Smaller access ramp

The access ramp is just 15 cm and its inclination of 8 degrees facilitates movement of the racks, limiting the space occupied inside the bakery.



## Perfect climate

Humidification is produced by an immersed electrode steam generator offering:

- reduced electricity consumption
- easy everyday maintenance
- extremely precise quantities of steam produced.

# Everything under control

Three functioning logics cater to all types of production needs

- 1 - 4 phase cycle
- 2 - 6 + 1 (baking delay) phase cycle
- 3 - pre-proving of the frozen, unbaked dough

## TSE series

The **TSE** series retarder prover cells have a black and white LCD graphic interface with automated management of the "6 +1 phase" and manual cycles of holding, proving and delayed baking. A black and white touch screen interface is also available as an optional.

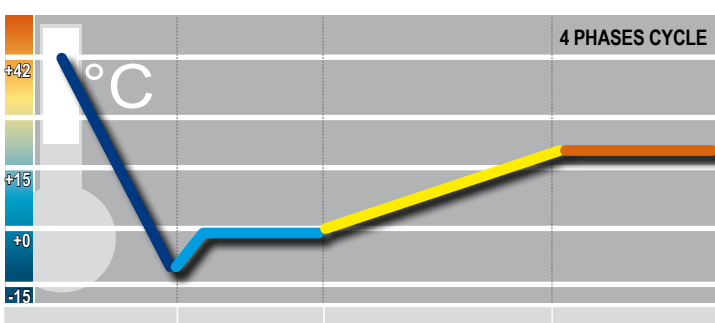


## TSL series

Mondial Forni has developed a graphic interface with a colour touch screen function making management of the retarder prover easy and intuitive. In this case the electronics enable management of the "4-phase" and "6 +1 phase" automatic cycles as well as the manual cycles of holding, proving, retarded proving and delayed baking.



The functioning logic of the 6 + 1 phase cycle works on "achievement of the set temperature": the required temperature is achieved as rapidly as possible and maintained throughout the phase.



The functioning logic of the 4-phase cycle works on "building up to the set temperature": the required temperature is achieved progressively (for example depending on the duration of the phase, starting from a temperature of +2°C, to achieve the desired temperature of +18°C the programme raises the temperature by 1°C every 15 minutes). This way products of different types and sizes are standardized during the proving process.

# Features

DESCRIPTION	TSE	TSL
Insulated panel structure – 60mm thick	✓	✓
Angular panels, eccentric hooks and gaskets	✓	✓
Outer front surface	pre-painted galvanized white sheet	AISI 304 stainless steel
Outer lateral surface	pre-painted galvanized white sheet	pre-painted galvanized white sheet
Inner surface	pre-painted galvanized white sheet	AISI 304 stainless steel
Electronic steam unit	✓	✓
Self-raising hinges	painted with plasticised coating	chromium plated
Internal rack protection board	aluminium	AISI 304 stainless steel
Safety opening	inside handle	self-closing with gas piston
Graphic interface	LCD (black and white)	colour TOUCH SCREEN

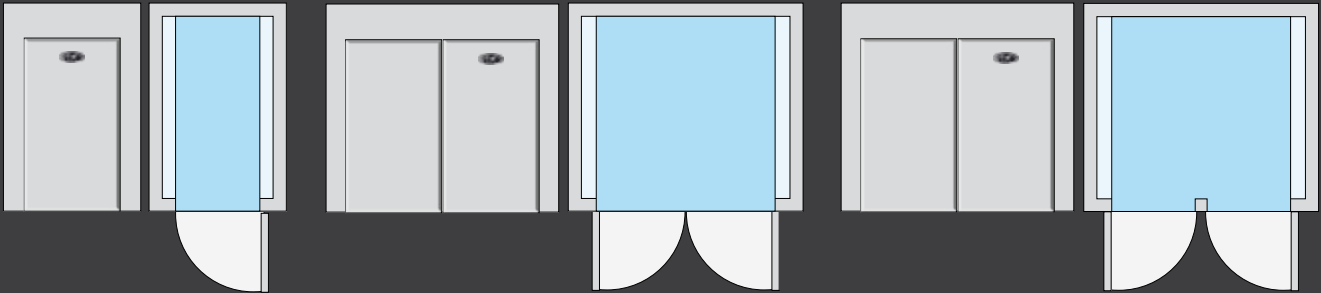
OPTIONALS	TSE	TSL
Water cooled compressor	✓	✓
Touch Screen b/w control panel	✓	✗
Double door without central column	✓	✓
Remote condensing unit kit	✓	✓
Sound proofed condensing unit	✓	✓
Additional TUNNEL TYPE door	✓	✓
Additional SIDE door	✓	✓
External finish in stainless steel AISI 304	✗	✓
Remote control via cable	✗	✓
Remote control via modem	✗	✓

✗ not available

✓ available

# Models

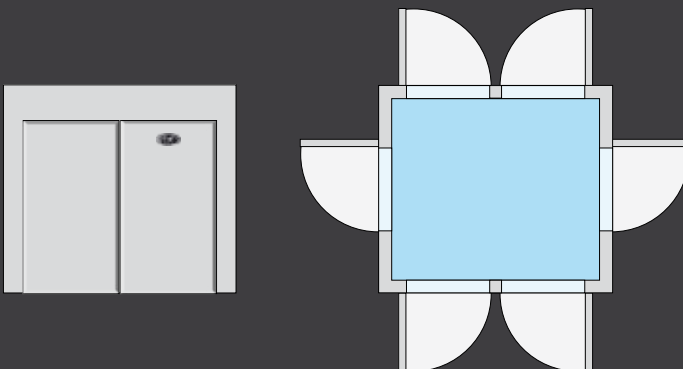
Mondial Forni retarder provers are available with one or two doors, with or without the central column, in various sizes.



single door model

two door model without central column

two door model with central column



examples of additional doors

## External dimensions *TSE - TSL* series

	Depth (cm)																								
	137	157	177	197	217	237	257	277	297	317	337	357	377	397	417	437	457	477	497	517	537	557	577	597	617
99	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
117	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
137	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
157	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
177(*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
217(*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	
257(*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	
297(*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	

(\*) two doors models

 Available dimensions

 Not available

 The condensing unit must be installed in remote position



[www.mondialforni.it](http://www.mondialforni.it)



**mondial forni**  
bakery projects

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