



CYCLOTHERMIC INDIRECT FIRED STONE/STEEL BELT TUNNEL OVEN

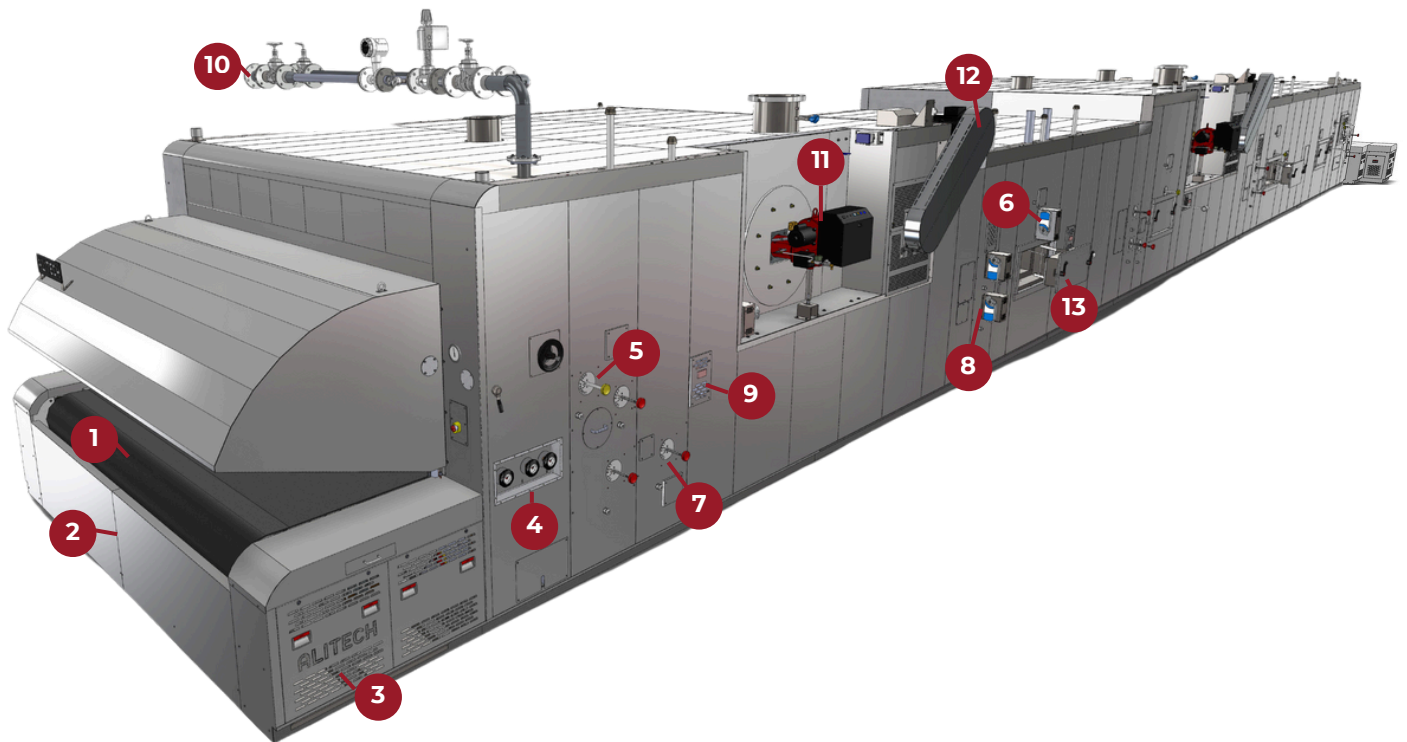
Premium End Product

Industrial Volume + Product Consistency

Mechanical Reliability

Enhance your baking performance

The cyclothermic indirect fired stone/steel belt tunnel oven is typical for the baking of free-standing bread with consistent crust formation and crump development, with clear “artisan” character.



1 STONE BELT BAKING SURFACE

2 STONE TEMPERATUR SENSOR

3 MOTORIZED ROTATING STEEL BRUSH

4 STEAM CONTROL VALVES

5 STEAM EXTRACTION MANUAL DAMPER

6 STEAM EXTRACTION AUTOMATIC DAMPER (OPTIONAL)

7 HEATING MANUAL DAMPER

8 HEATING AUTOMATIC DAMPER (OPTIONAL)

9 TEMPERATURE SENSOR IN BAKING CHAMBER

10 STEAM INFEEED

11 BURNER

12 AIR BLOWER

13 INSPECTION DOOR

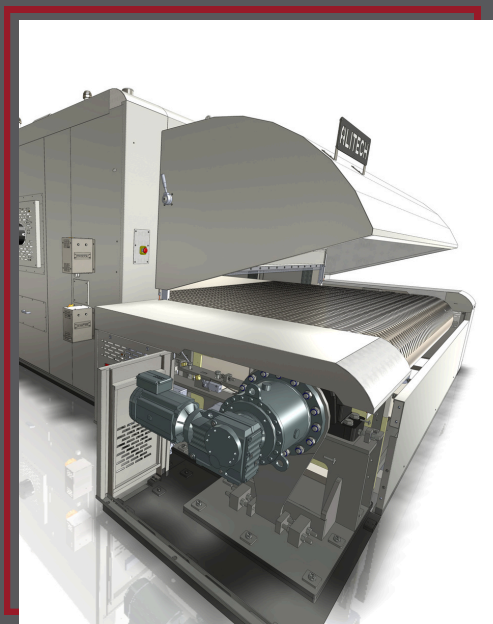


BUILT ON DEMAND

Size on demand based on the customer needs. Modular structure with variable length baking zones with independent heat and humidity regulation.

One Burner heating circuit every 15-20 meters, this minimizes maintenance.

The complete stone belt tunnel oven is lined with stainless steel panels. Steaming section and steam extraction are in stainless steel.



STURDY AND RELIABLE CONSTRUCTION

The tunnel oven stone conveyor is driven by a planetary gear motor coupled directly to the driving wheels shafts. This system has an excellent reliability and no maintenance. The baking time is continuously adjusted through variable frequency drive.

The stone belt tensioning system is hydraulically activated by means of a hydraulic pump and hydraulic pistons adequately sized to avoid slipping during operation of the oven. The tensioning and releasing procedure (heat up/cool down) is programmable.

Roller chain with interchangeable graphite bushings and safety side rollers moves on side guides installed in the baking chambers.

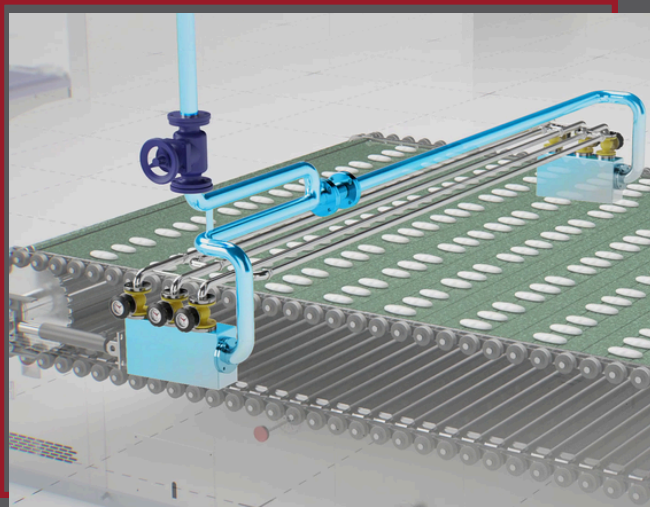
An automatic lubrication system oils the chain according to a preset program, granting an excellent reliability and durability of the system.



PRODUCTION FLEXIBILITY, INDUSTRIAL SCALE

The baking belt, made of granite stone, allows smooth and consistent heat transfer, improving product quality and crust development, resulting in a moister core. Stone belt preheating to regulate the required temperature at infeed. Baking process by means of heat radiation and heat conduction. Based on the product requirement it's also possible to provide the oven with air turbulence.

Radiators have sliding dampers for heat setting, as an option the dampers can be motorized. Side flaps allow side heat adjustment for even baking across the width.

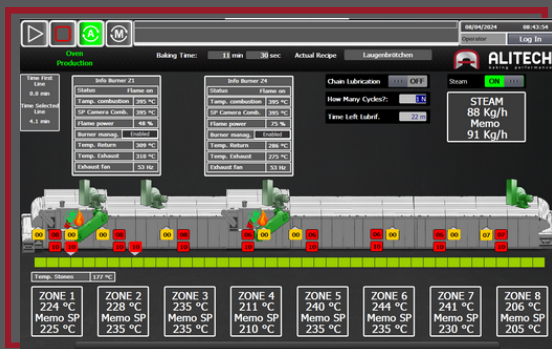


Steam is distributed at the oven entrance by a 5-pipe system fed from both sides for uniform distribution. Steam infeed control/modulation can be automated.

EASY TO CLEAN AND MAINTAIN

A motorized rotating steel brush at the oven infeed cleans the baking surface. Extractable drawers below collect the dirt. Inspection doors improve access for cleaning and maintenance, and additional extractable drawers on the oven's sides collect dirt from the bottom of the baking chambers.





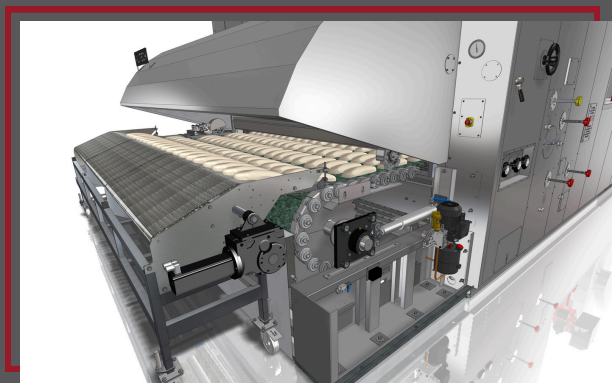
HIGH DEGREE OF AUTOMATION

In-house operating software. High degree of automation, scalable in order to optimize process, the energy consumption and the safety. From the operator panel the supervisor can manage the whole baking process.

It is possible to supervise the power efficiency of the system together with other productivity data.

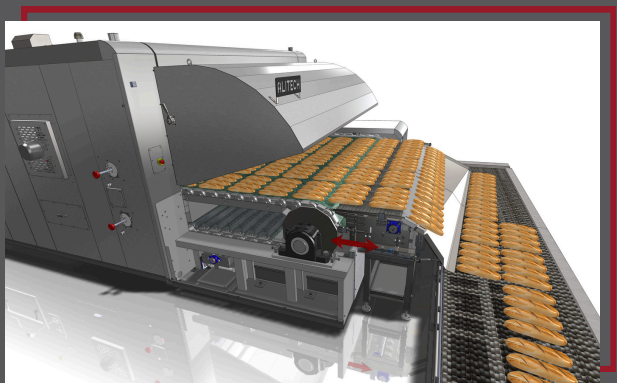
OVEN LOADER

The loading device conveyor belt places the product directly onto the stone plates, a small size nose avoids deformations of the dough.



OVEN UNLOADER

At the exit of the oven in order to compensate for the polygonal profile of the stone plates, the outfeed belt moves horizontally thus allowing a constant distance between the belt nose and the stone surface. A rotating mesh on top of the nose helps the transfer. Conveyor is on wheels.



ENERGY OPTIMIZATION

Our tunnel ovens are being consistently improved in order to reach the maximum efficiency in fuel and energy consumption.

- Product gap management thru software and automation
- High modulation burners
- Wasted heat recycling to improve the burner performance
- Complete and careful insulation to minimize heat dispersion.



DYNAMIC HEAT RECOVERY CIRCUIT

With this application the air used for the combustion which is normally heated by the burner (using energy), is heated in a serpentine using the hot air coming out of the chimney. This increases significantly the oven energy efficiency. Another feature in the circuit is a sensor that continuously monitors the "quality" of the combusted hot gasses with an automatic feed-back in case of anomalies.

REDUCED HEAT WASTE/HIGHER ENERGY EFFICIENCY
HIGHER SAFETY WITH CONSTANT MONITORING OF COMBUSTION



BUILT
ON DEMAND

3-level radiating heaters
Turbulence

TOP HEAT

BOTTOM HEAT

BELT RETURN HEAT

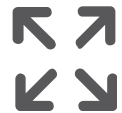


INSTALLED
WORLDWIDE



HIGH LEVEL OF
AUTOMATION

OUT OF
STANDARD



PRODUCT
GAP
DETECTION



HEAT
RECYCLING



STONE BELT

premium product
with crust,
high moisture and
volume



BAGUETTE



CIABATTA



RUSTIC
BREAD



DINNER
ROLLS



KAISER
ROLLS



HAMBURGER
BUNS



HOT DOG
BUNS



TWISTED
BRETZEL



BRETZEL
BUNS



BRETZEL
ROLLS



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We design and manufacture Industrial Tunnel Ovens, Travelling Proofers and Machines for the bread, pizza, and other baked products. We have over 30 years of experience, during which we have delivered various projects worldwide, from single components to integrated turn-key solutions, creating genuine and long-term working relationships with our customers. We specialize in innovative high-volume systems with superior quality standards without sacrificing the needed flexibility and personalization, we have a personal commitment to meet the customer needs.



**Enhance your
baking performance**

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