

## TUNNEL OVENS

Our custom Tunnel Ovens are divided into separate zones controlled by their own computerized temperature controller, allowing individual zone control from a remote panel. Our ovens are manufactured with welded structural steel consisting of heavy-duty ship channel, angle, formed channel, and flat bar. The frame is continuously welded and, where feasible, angles are coped for added strength. They are insulated with layers of rock wool insulation on the roof, walls, and floors.

Stainless steel inside skin and exterior stainless steel panels provide a 1" air space insulating barrier on oven walls for safe "cool to touch" operation. Access doors on both sides for cleaning, maintenance, and inspection of the baking process are hinged and equipped with explosion latches.

Depending on the product, the oven hearth features mesh belts with Babbco's autotracking system, or with a variety of steel or stone plates attached to a 4" or 611 pitch roller chain. Automatic take-up provides proper tension for the smooth flow of product through the oven. The shafts are supported by self-aligning, ball bearing pillow blocks with main chain shafts not less than 211 in diameter.

In addition, our ovens are designed to use a variety of fuels, including natural gas, propane, other manufactured gases, oil, and electric.



### DIRECT FIRED

The direct-fired oven utilizes ribbon burners for baking. This method is very popular and extremely effective for the production of high-quality baked products. A direct-fire system offers precise temperature control for even baking.



### INDIRECT FIRED

This oven uses a high-volume circulating fan to deliver heated air through a series of tubes, both above and below the conveyor belt. The ability to simultaneously add steam makes it an ideal method for the production of all types of baked products.

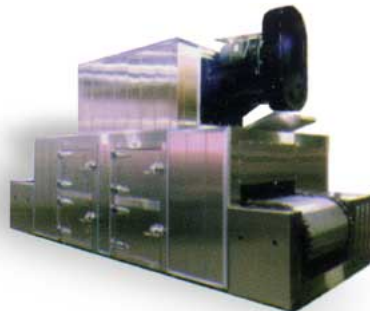
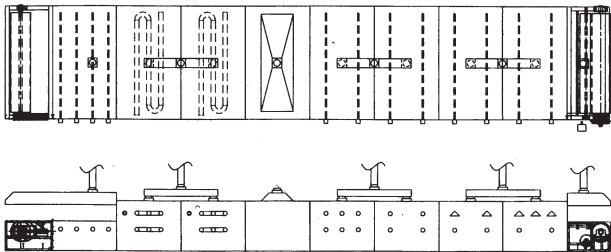
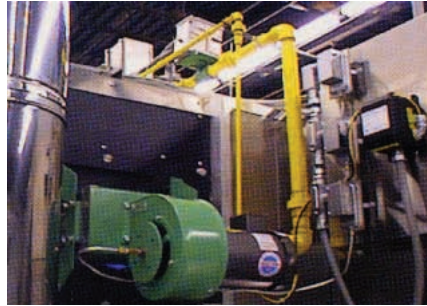


### AIR-IMPINGEMENT

By transferring heat to the product by convection, this method provides you with faster bake time and greater control over a baked product's all-around finished appearance, specific colour uniformity and enhanced sidewall texture.

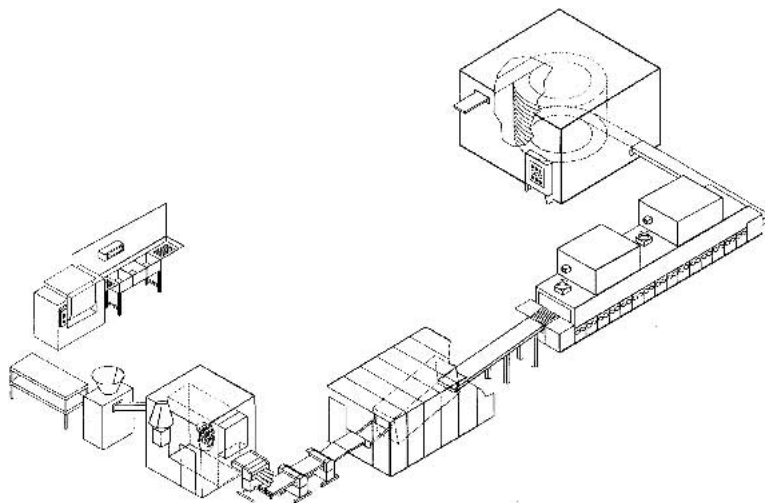
## HYBRID OVENS

The Best Of Everything - Depending on your product, we are able to combine different baking methods into one remarkable oven. This unique "mix and match" ability has brought us to the attention of bakeries around the world. By evaluating the advantages of each method, we are able to design and manufacture an oven that helps you create the best product or variety of products. Additional options include infrared burners for superior control over final product appearance, and radiant tubes. Best of all, Babbco Hybrid Ovens often cost less than our competitors' ovens.



An example of a Babbco Hybrid Oven that was tailored to the needs of a customer is shown in this CAD drawing of a 120-foot oven designed for the production of par-baked frozen products. It combines indirect, direct, and convection oven technology.

Working closely with the customer and utilising the latest CAD, CAD/CAM, CNC machines, and high definition plasma cutting technology, Babb's designers and skilled technicians developed this oven with an indirect steam section at the beginning, direct-fired burners in the center, and high-velocity convection at the end. This custom-developed technology is the best of all worlds, combining rapid but even cooking with the quality of hearth-type baking.



Mesh or steel/stone plates carry the products through the fully insulated oven divided into zones. The temperature can be regulated independently in each zone by means of a PLC control that allows for the programming of a wide number of parameters including temperature, humidity, cooking time, and the regulation of convection air velocities.