



KOENIG QUALITYVAC

THE SYSTEM FOR OPTIMIZED PRODUCT QUALITY

ROYAL PRODUCT QUALITY WITH VACUUM TECHNOLOGY

Since production and sales are increasingly taking place at different locations, bakeries have to optimize production volumes and at the same time ensure that the right quantity is available at the best quality at the right time in the stores.

With the Koenig vacuum technology, bread, rolls and pastries (e.g. Danish pastries) can be cooled and stabilized for further processing in just a few minutes.



OVERVIEW OF YOUR ADVANTAGES AND FEATURES:



Improved product quality in terms of freshness, crisp, volume and stability even with gluten-free products.



Quicker (immediate) use of bread possible, e.g. when cutting toast, rye bread, snacks, etc.







Optimized processes:

- baking times shortened by 10-35% (depending on product)
- reduced equipment for deep-freezing
- reduced process times (wage and energy costs)
- flexible use of resources (eg. efficiency increase by reducing cooling times, short-term realisation of production planning)

WORKING PRINCIPLE

The air pressure determines the temperature at which liquid boils. The lower the air pressure, the lower the boiling point. The QualityVac vacuum cooling technology makes use of the physical principle. The technology applies this principle to extract the energy required for this process in the form of heat from the product. As a result, the product is cooled down and is stabilised within the shortest possible time.

A baking trolley with hot part-baked products is brought into the vacuum chamber. The pressure in the chamber is then reduced by means of vacuum pumps so that water evaporates. As a result, the products are cooled down within a few minutes. They can then be stored without freezing at the production plant and eventually finished for consumption days or even weeks later - with practically no loss in quality at retail outlets or at the home of consumers.



Air pressure depending on the height	Height	Pressure	Temperature
	100,000 m	10 mbar	-76° C
Vacuum area	31.000 m	10 mbar	7° C
M	11.000 m	226 mbar	63° C
Mt. Everest	8.900 m	312 mbar	70° C
Mt. Blanc	4.800 m	554 mbar	84° C
Munich	530 m	954 mbar	95° C
	0 m	1113 mbar	100° C

KOENIG QUALITYVAC - PERFORMANCE FEATURES

- process know-how: comprehensive process consulting and training during the installation of the vacuum technology in your production by the Koenig team
- combination of baking and vacuum technology processes with the Koenig Roto Passat SE rack oven
- electric sliding door, opening either to the right or to the left according to customer requirements
- screw pump with ceramic-coated compressor screws (to prevent rusting with subsequent blocking of the compressor unit) for high operational safety and long service intervals
- screw pump can easily be removed for maintenance purposes
- energy-optimized operation
- optimized stable entry ramp
- easily expandable to a double rack unit without additional technical equipment
- cold water unit as optionally available
- floor-level version optionally available

Control & Operation

- simple operation with touch screen and 50 storable program steps
- remote maintenance enabling full access to the entire control unit
- remaining time shown clearly in large letters on the display
- soft start guaranteed in the program

Cleaning & Maintenance

- floor tub to collect the accumulating condensate which is then automatically pumped into a corresponding drain
- removable bottom plate and removable condensate plate enable cleaning of the entire interior chamber. Excess water is led off the condensate drain
- by using a plate heat exchanger with maintenance and cleaning access, replacement after extended operation is not required
- chamber made of stainless and acid-resistant stainless steel (duplex steel)

Service & Installation

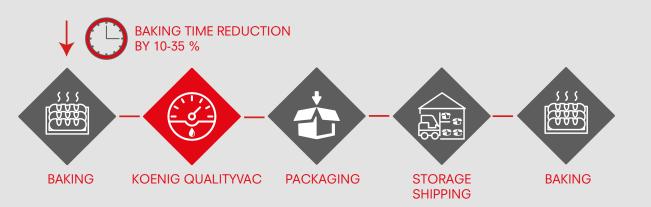
- worldwide service network for the screw pump
- short assembly times and easy installation by the qualified Koenig service team
- use of standard components available worldwide
- robust, tested and durable design
- maximum line availability and minimized downtimes: the entire technology can be exchanged as one unit (in case of repair or service the entire suction unit can be replaced)
- maintenance contract possible upon customer request

APPLICATIONS

1 STABILISATION

Stabilizing and preserving baked or partly baked breads, rolls (buns) and pastries (e.g. Danish pastries or croissants)

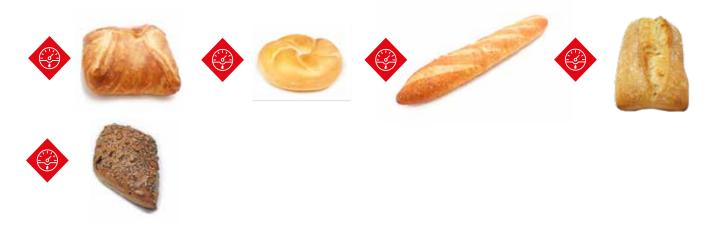




The Koenig QualityVac allows the stabilisation of breads, rolls as well as pastries.

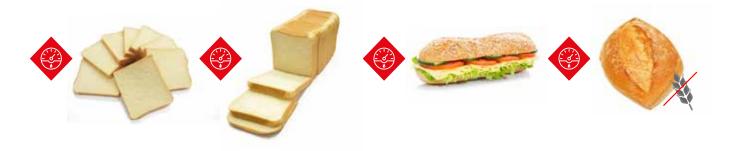
CRUST EXTENSION

Extension of the appearance and crust of baked bread and rolls, which are delivered for example to stores, such as pretzels seeded with salt, with brioche products seeded with sugar or filled pastry. (e.g. pastries filled with curd cheese)



3 COOLING

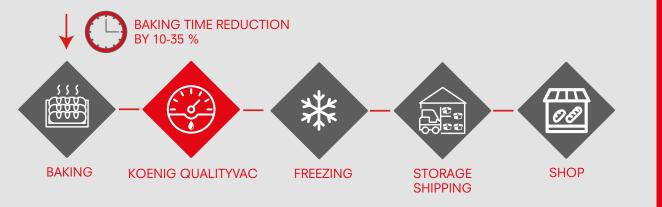
Quick cooling of particularly sensitive products such as panettone, sheet cake, cakes filled with pudding, etc., or of partly baked, topped pizzas to prevent soggy pizza bases. Also ideal for the cooling of products to be sliced such as toast, sliced bread, gluten-free breads and snacks.



4 READY2EAT

Baked products are frozen after vacuum conditioning and can be consumed immediately after thawing with a crunchy crust and fluffy crumb. Suitable for example for baguette, brioche products with decorative sugar, bread rolls, pizza dough or Mediterranean pastries (e.g. flat bread)





Ready2Eat – The Koenig QualityVac allows an immediate consumption of products in the shop.

MASS COOLING

A variety of other applications such as cooling of rice, pudding, pasta, potatoes or large cooked products in commercial kitchens.



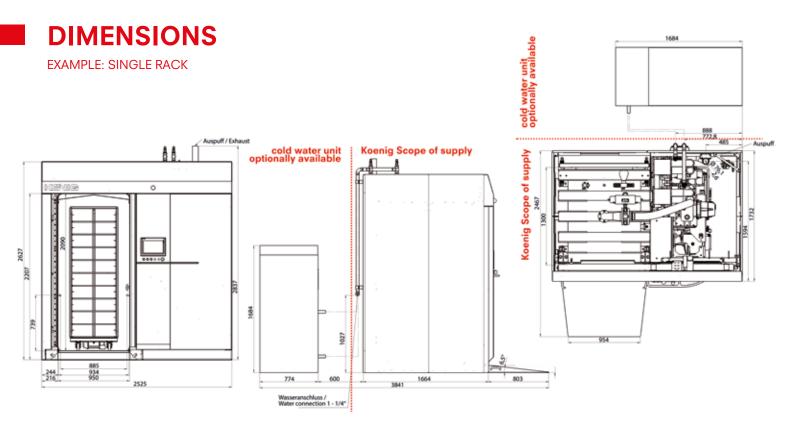
COMPARISON OF TECHNICAL DATA

For easy configuration and dimensioning of the plant size and the possibility for plant extension we designed the Koenig QualityVac with a modular, uniform construction in **3 different basic sizes**.

This ensures that all Euro pallets (800x1200mm) or other derived pallet sizes are suitable for the Koenig QualityVac.

	Single rack	Double rack	Triple rack	
Dimensions W x D x H (usable inner dimensions)	885 x 1,300 x 2,000mm	885 x 2,600 x 2,000mm	885 x 3,900 x 2,000mm	
Dimensions including entry ramp (803mm) W x D x H (external dimensions)	2,525 x 2,467 x 2,837mm	2,525 x 3,770 x 2,837mm	2,525 x 5,073 x 2,837mm	
Doors	1-2	1-2	1-2	
Electrical power supply	3x400V+N/PE, 16 kW	3x400V+N/PE, 16-32 kW	3x400V+N/PE, 16-48 kW	
Compressed air	20 - max. 40 I/min	20 - max. 40 I/min	20 - max. 40 I/min	

The suction capacity is modularly expandable!



TRUST BASED ON EXPERIENCE AND SECURITY OF INVESTMENT

TEST OUR MACHINES AT THE DEMONSTRATION CENTER FOR CUSTOMERS!

Any investment that you make will improve your opportunities for success in the future. Profitability can only be guaranteed if the investment is made wisely. Whether this is the case can often only be assessed afterwards. Koenig however gives you the opportunity to check out its machines before spending any money.

To make sure that you don't buy the pig in a poke: Thoroughly test the Koenig machines at our Demonstration Center.

Visit our centers in Graz and Dinkelsbühl. Based on your recipes and raw materials, we will work out the best solution for you until you are fully happy with our suggestion. If necessary, we adjust the units again and start the entire customisation process over again. This ensures that you can offer your customers what they expect from you.

SERVICES AND SPARE PARTS FROM THE MANUFACTURER!

Each machine and unit undergoes a number of test runs with and without dough. Most of our technicians are actually trained bakers. They assemble the machine at our premises and then commission them, using their indepth knowledge of the baking trade. If you should encounter any problems, simply contact our spare parts and service department. We are available day and night from anywhere in the world:

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