# **STAMPING TOOLS**

#### ROUND STAMPED PRODUCTS



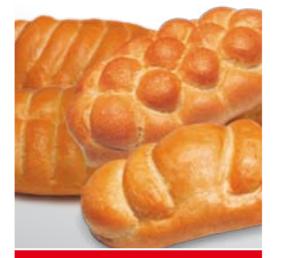
#### LONG ROLLED STAMPED PRODUCTS

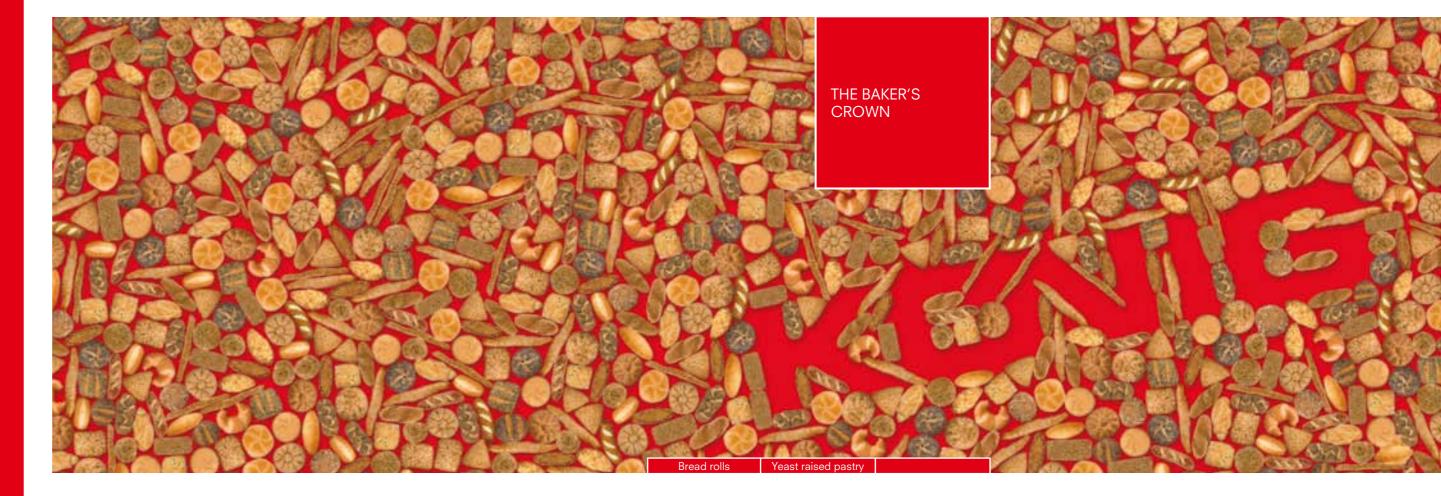
Styrian long roll	Moon	Caterpillar
Wave	Plait	Rogato
Tartaruga	Housky	Marraqueta













HEADQUARTERS

König Maschinen Gesellschaft m.b.H. Stattegger Straße 80 8045 Graz-Andritz, Austria Tel.: +43 316.6901.0 Fax: +43 316.6901.115 info@koenig-rex.com www.koenig-rex.com



**ROLL PLANTS** EVERYTHING YOU NEED FROM ONE SUPPLIER

Е



THE BAKER'S CROWN

4

6

9

14

16

20

21

22





## **PERFECTION WITH INTEGRATED COMPETITIVE EDGE.**

KÖNIG ROLL PLANTS MEASURE UP TO THE LATEST TRENDS.

> When comparing the behaviour of consumers today and fifteen years ago, one thing becomes obvious: customers have become more demanding and expect a choice of products that are fresh and of the highest quality. And one thing can be predicted for sure: this trend will continue into the future.

> This brochure has been compiled with this future in mind: on the following pages, you will be introduced to our complete roll plant range. Each machine is designed to strengthen your position in the competitive market. Whether you sell directly to end consumers or to retailers - machines from the leading manufacturer of roll plants guarantee top quality products. Thanks to their versatility and a design that makes cleaning and maintenance easy, our machines are extremely economical.

#### See for yourself!

#### **CONTENTS**

KCNIG

"Who's Who" in roll plants
S series
M series
L series
Tailor-made plants
Final provers
Hygiene and the Servomat
Test and demonstration centre for customers

## WELCOME TO THE KÖNIG WORLD OF MODERN BAKING TECHNOLOGY.

THE "WHO'S WHO" OF ROLL PLANTS.

König roll plants feature the latest developments in baking technology. The König portfolio ranges from compact units to industrial plants and thus meets the individual requirements of customers in many different ways. This flexibility has made König the number one supplier of roll plants who you can trust.

> S series: This series has been specifically developed for small commercial and shop bakeries, and is also in use as additional equipment in larger companies.

The objective of providing a suitable solution for any bakery has been one of the principles of König and can be followed throughout the company history. Over time, this aim has been achieved, and we are today in a position to meet all customer requirements with excellent equipment.

The S series consists of plants based on the Mini Rex unit with hourly output rates of up to 4,500 pieces.

## M series: Perfect for medium-sized and large industrial producers.

The M series is based on a baking technology of the highest standards. This quality level was of course not achieved over night. In the development of its machines, König makes use of its huge experience in this field, its extensive knowledge of processes and its continued improvement procedures. All its activities are driven by the company's commitment to offer the best possible solutions to all bakers.

The M series includes plants that are preceded by a Classic Rex unit.



L series: First-class plants for large bakeries and industrial producers.

With the L series, König has introduced a new category for the industrial production of quality breads and rolls. It is not only unrivalled as regards the output rate, but also offers excellent product quality, flexibility, efficiency, ergonomics and operational safety. Practically every plant is designed and manufactured to meet specific customer requirements. To do this, we offer our customers comprehensive advice prior to the purchase. In the subsequent design and production, the experience and expertise of the König staff plays a key role.

All plants of the L series are equipped with Industrie Rex models.



## **THE MINOR ONE FROM KÖNIG** FOR MAJOR SUCCESS.

THE ENTRY MODEL OF THE S SERIES FOR UP TO 4,000 PIECES PER HOUR.

#### Mini Rex with DR-RR 400 forming station

The efficient small-scale plant with excellent performance.

- Compact design.
- Two-row (head) machine for fully automated dividing and rounding of wheat doughs and mixed doughs with maximum 40% rye.
- Produces excellent round, long rolled, rolled and folded as well as flat products.
- Also available with Mini Rex Futura for greater weights and output rates.
- Produces 1,800 to 4,000 pieces per hour.
- Ideal for shop bakeries and small commercial operations.
- Intermediate belt with two speeds for transfer, longitudinal rolling and pressing.
- Adjustable calibrating head.
- Netted folding belts.
- Swivelling lower and upper belt for improved ergonomics.
- Teflon-coated collecting tray for manual product removal.
- Excellent user comfort.
- Easy and fast cleaning.

## THE LITTLE GIANT. THE S SERIES HAS GREAT THINGS TO OFFER.

#### Laurin

Compact unit offering huge advantages.

The Laurin from König introduces a completely new plant concept. It focuses on userfriendly operation, high output rate, compact design and attractive price-performance ratio while catering for as many different products as possible.

- Particularly suitable for the production of round breads (buns, scones with raisins, rolls, cut rolls); If combined with a cross delivery unit and adjacent convoluting
- About 3.2 m long.
- Output rate up to 3,000 pieces per hour.
- All machine parts equipped with castors.
- With Mini Rex or Mini Rex Futura head machine.
- No swings pre-proving time spent on proving belt.
- For operation with various, easy exchangeable stamping tools.

Mini Rex with DR-RR 400 forming station baking sheets/trays.

- operated "on the side".

1 PLC system with 50 permanently stored programs in Mini Rex Futura.

<sup>2</sup> Two-row head machine for fully automated dividing and rounding. <sup>3</sup> Rolling (pressing) and folding of dough pieces.





Mini Rex or

Mini Rex Futura

<sup>1</sup> Transfer of the dough pieces from the Mini Rex to the proving belt.

<sup>2</sup> Pre-proving on the movir belt - no swings!

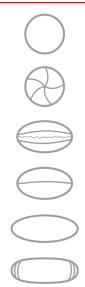
3 Automatic placing of dough pieces on baking sheets or trays.





Danish pastry), formed breads (e.g. kaiser rolls) and long rolled products (standard machine it can also be used to produce croissant-type products including "Kornspitz".







- Automatic placing of products on 800 or 1,000 mm
- Upgradeable with final prover.
- Computer-controlled system with touch screen.
- Simultaneous removal of two trays: the machine can be
- Ideal for small family bakeries and similar companies,
- as a second unit for larger bakeries or in shop bakeries.

### ECO Schnitt

Economical proving, forming and cutting.

- Excellent price-performance ratio.
- Compact design, maximum length 3,170 mm.
- Output rate of between 3,000 and 4,500 pieces per hour.
- Four-row processing in prover swings.
- Integrated long rolling station with retractable pressure board.
- Pneumatic cutting device with 4 easily exchangeable blades.
- Proving time until long rolling: 4 minutes; total proving time: 10 minutes.
- Automatic placing of products onto baking trays (580 x 780 or 600 x 400 mm).
- With adjustable baking sheet support.
- Easy accessibility of all essential components for cleaning and maintenance.
- Movable unit mounted on castors.
- Prover in compact and sectioned design for easier access.
- Long service life thanks to sturdy König stainless steel design of lasting value.

## **GREAT SOLUTIONS FOR ALL BAKERS.** THE KÖNIG M SERIES INCLUDES SIMPLE OR MULTI-FUNCTION PLANTS WITH OUTSTANDING ECONOMY.

#### FCO 4000

Our specialist for kaiser rolls and bread buns.

- Output rate of up to 5,100 pieces per hour in continuous production mode.
- Compact machine for round stamped products.
- Excellent price-performance ratio.
- Machine available with swivelling Classic Rex and castors for easy movement.

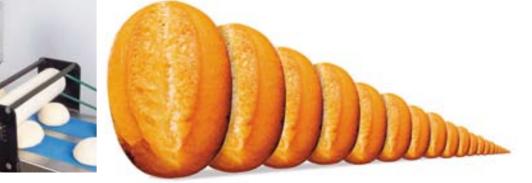


- Excellent processing results thanks to the use
- of quality stainless steel components. Five-row machine.
- With special setting frame for setting face up
- or face down. Setting adjusted to suit standardised
- European baking tray sizes.
- Suitable for wide range of stamping tools mountable with support plate insert.
- Also available with final prover for proving times of approx. 10 or 20 minutes.
- Final prover can be switched on/off separately.
- Available on request with cross delivery for convoluted products .



Prover unit with Mini Rex

or Classic Rex



KONIG



ECO 4000 with preprover and final prover

<sup>1</sup> The optional cross delivery unit caters for the processing of convoluted products.

<sup>2</sup> Special setting frame for setting face up or face down available on request.

<sup>3</sup> Even the most compact model includes only tried and trusted reliable parts and assemblies.







#### **M SERIES**

## ECO Twin

Maximum performance with minimum space requirements.

- Compact combined roll unit for rolls and buns.
- Available with optional cross delivery for convoluted products.
- Output rate of up to 5,000 pieces per hour.
- 6-/5- or 5-/4-row operation.
- Also available with direct transfer system for the for setting of unformed dough pieces or rectangular products (SFR only).
- Space-saving swivel stamping station with quick-change stamping tools and stamping cups.
- High productivity thanks to quick-change cutting stations, stamping tools and Wachauer rounding station.
- Also available with humidifier/seeder unit.
- Upgradeable with final prover.
- Mounted on support frame with castors.
- Setting with retracting unit that is adjusted to suit all commonly used baking trays and sheets.
- Available for operating width of 600 and 800 mm.

#### Combi Line

Can be upgraded with MOC600 ST

seeder

The modular commercial unit grows hand in hand with your business.

- Output rate of up to 9,000 pieces per hour.
- Flexible modular design.
- System based on the tried and trusted Classic Rex (Futura) head machine.
- For 6-/5-/4- or 5-/4-/3-row operation; available for 2-row operation on request.
- Modular design of entire unit allows for easy retrofitting.
- Also available with direct transfer system for the setting of unformed dough pieces. Automatic setting onto baking trays or sheets.
- Available for operating width of 600 and 800 mm.
- Suitable for attachment of cross delivery and convoluting unit for the production of convoluted products; also available with integrated convoluter.
- Excellent processing results thanks to the use of quality stainless steel components.
- Good accessibility of all essential components for cleaning and maintenance. PLC system with 50 permanently stored programs.



ECO Twin









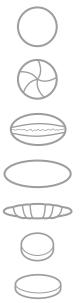
KONIG

1 6-/5- or 5-/4-row operation with an hourly output rate of up to 5,000 pieces.

<sup>2</sup> Can be combined with Artisan SFR head machines for wide range of bread types: round or rectangular, stamped or rolled, cut or pressed, etc.









The Combi Line has been developed as a fully modular unit. It can thus be upgraded at any time with additional components such as a humidifier/seeder unit, convoluting station or cutting station.



# **REDEFINING VERSATILITY!**

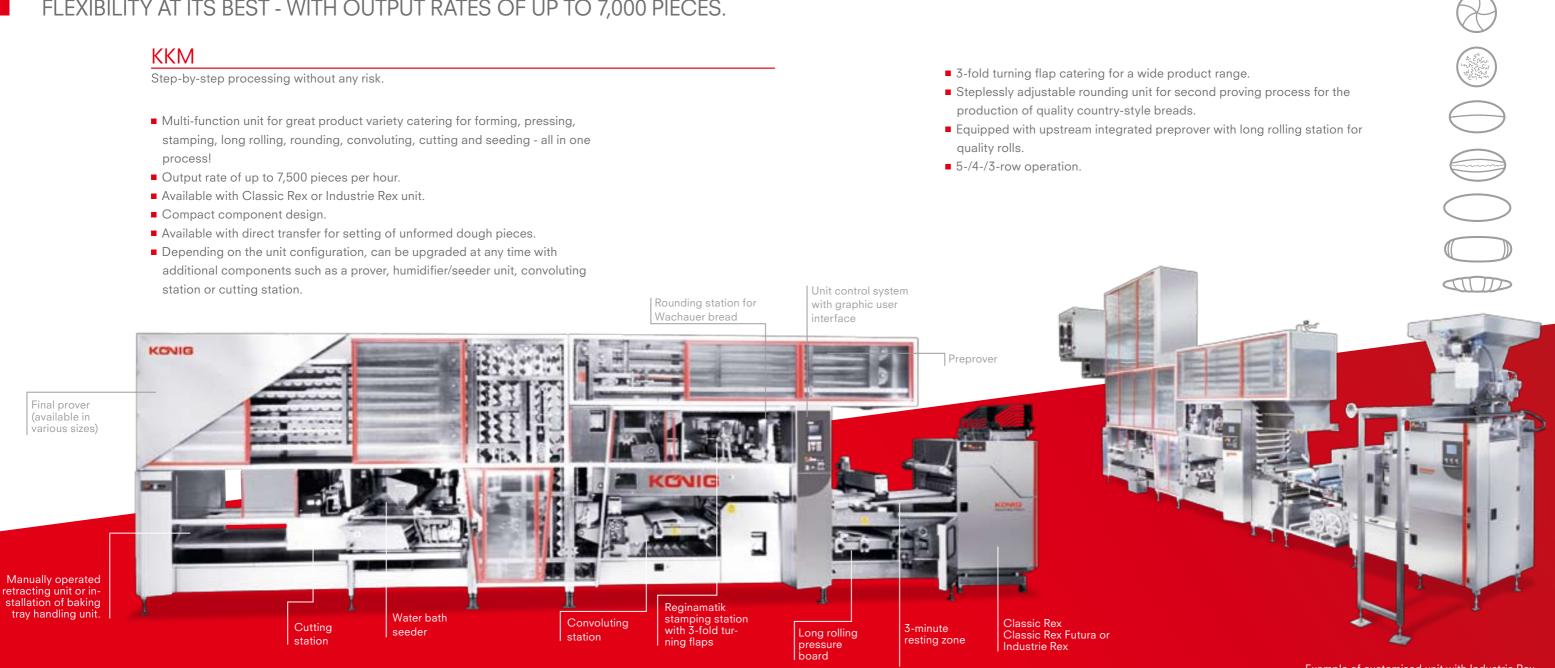
FLEXIBILITY AT ITS BEST - WITH OUTPUT RATES OF UP TO 7,000 PIECES.

#### KKM

Step-by-step processing without any risk.

- Multi-function unit for great product variety catering for forming, pressing, stamping, long rolling, rounding, convoluting, cutting and seeding - all in one process!
- Output rate of up to 7,500 pieces per hour.
- Available with Classic Rex or Industrie Rex unit.
- Compact component design.
- Available with direct transfer for setting of unformed dough pieces.
- Depending on the unit configuration, can be upgraded at any time with additional components such as a prover, humidifier/seeder unit, convoluting station or cutting station.

- 3-fold turning flap catering for a wide product range.
- Steplessly adjustable rounding unit for second proving process for the production of quality country-style breads.
- Equipped with upstream integrated preprover with long rolling station for quality rolls.
- 5-/4-/3-row operation.









Example of customised unit with Industrie Rex, extended final prover and cleaning station with infrared sterilisation.

1 Smart solution for the storage of additional rounding drums and accessories.

2 Tried and trusted Reginamatik stamping station for perfect patterns.

3 Integrated convoluter, also available as upgrade.

4 Optional cleaning station with brushes and vacuum clea



#### **M SERIES**

# **PERFORMANCE COMES FIRST.**

L SERIES MACHINES PRODUCE UP TO 18,000 PIECES PER HOUR.

#### KGV Combi 2000

Following in the footsteps of large-scale units.

The KGV Combi 2000 combines excellent product quality with unrivalled economy.

- Available with Classic Rex or Industrie Rex.
- Maximum output rate of 6,000 to 18,000 pieces, depending on head machine.
- Available with or without humidifier/seeder station and final prover.
- Made in chrome-nickel steel.
- 800 mm working width of unrivalled productivity.
- Available on request with direct transfer for setting of unformed dough pieces.
- One-man operation.
- Ergonomically designed machine.
- User-friendly manual operation.
- Good accessibility of key components.
- Easy to clean.
- Cable ducts can be inspected at a single glance.
- Also available as fully automated unit.
- Excellent operational safety.

The KGV Combi 2000 cannot be bought off the shelf: each machine is tailor-made after an in-depth evaluation of the customer's requirements and available options carried out by our experts. The machine is then configured and designed accordingly. Thanks to the use of modular assemblies, virtually any desired machine can be assembled.



Tried and trusted KÖNIG seeder for single-sided or double-sided seeding, easy to clean.

KGV Combi 2000

KONIG

2 Long rolling unit with RR technology: each dough piece is properly placed in the rolling unit and then transferred to the swing.

**This knife makes all the difference:** sharp, low-cost blade, easy to exchange, cleaned after every cut.

<sup>4</sup> Direct transfer system for special products: treatment in upright prover.

 Reliable Reginamatik stamping station: perfectly stamped breads from 30 g restaurant rolls to 85 g rolls for deep-freezing.

Combi 2000 model options								
Head machine	Preproving time	Number of strokes	Туре	120b.RR prover	Output rate	Output with 4rows	Output with 5rows	Output with 6rows
Classic Rex Classic Rex Futura	4+6 min	25	5rhg/Schn4-260	277 bel.	NB600	6,000	7,500	-
Industrie Rex	4+6 min	33	5rhg/Schn4-320	334 bel.	NB600	7,920	9,900	-
Industrie Rex	4+6 min	40	5rhg/Schn4-400	415 bel.	NB600	9,600	12,000	-
Industrie Rex	4+6 min	50	5rhg/Schn4-500	496 bel.	NB600	12,000	15,000	-
Classic Rex Classic Rex Futura	4+6 min	25	5rhg/Schn6-260	277 bel.	NB800	-	-	9,000
Industrie Rex	4+6 min	33	5rhg/Schn6-320	334 bel.	NB800	-	-	11,880
Industrie Rex	4+6 min	40	5rhg/Schn6-400	415 bel.	NB800	-	-	14,400
Industrie Rex	4+6 min	50	5rhg/Schn6-500	486 bel.	NB800	-	-	18,000
Classic Rex Classic Rex Futura	4+6 min	25	6rhg/Schn5-260	277 bel.	NB800	-	7,500	9,000
Industrie Rex	4+6 min	33	6rhg/Schn5-320	334 bel.	NB800	-	9,900	11,880
Industrie Rex	4+6 min	40	6rhg/Schn5-400	415 bel.	NB800	-	12,000	14,400
Industrie Rex	4+6 min	50	6rhg/Schn5-500	496 bel.	NB800	-	15,000	18,000





## **REACHING THE PINNACLE OF PERFORMANCE.**

THE L SERIES CATERS FOR THE PRODUCTION OF UP TO 36,000 PIECES PER HOUR.

#### High-performance industrial units

- Monoline or multi-functional units catering for a virtually unlimited range of products.
- Output rate of up to 36,000 pieces per hour.
- Industrial design for three-shift operation.
- Modular system for customised configuration: suitable for buns, round and long rolls, "Kornspitz", doughnuts, etc.
- Can handle multiple cutting and seeding processes, suitable for bagel production, etc.
- Can be upgraded with final prover with insulated housing and controlled climate.
- Suitable for upgrading with swing cleaning, suction and infrared disinfection station.
- Quality stainless steel design.
- PLC system with touch panel.
- Equipped with modem for remote maintenance.
- Available on request with CCTV camera and monitor for critical steps in the production process.
- production process.Excellent operational safety.











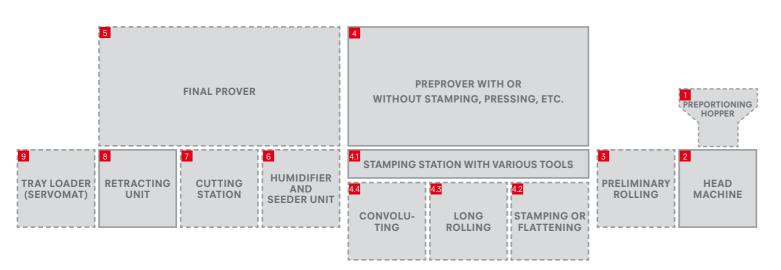


1.5.5

KONIG

KONIG

#### Tailor-made plants



----- optional station/station available as upgrade

— part of basic model

Example of a customised machine

## SAFETY THANKS TO FLEXIBILITY.

KÖNIG HELPS YOU MINIMISE YOUR RISK: EXPERIENCED ADVISERS AND ENGINEERS DESIGN THE MACHINE THAT **EXACTLY SUITS YOUR SPECIFIC NEEDS!** 

# Example of a customised plant

#### No limits as to possible combinations.

The modular system of König units caters for nearly unlimited combinations of machines in one plant. Our tailor-made units can thus be designed from standard components. We are sure that we will also be able to find the best solution for your particular requirements. We are familiar with most traditional bread recipes from all over the world and know thus how to produce these breads in the most economical manner and best quality. If necessary, we will try out various options in our R&D bakery until we are completely satisfied with the result!

## **KÖNIG L SERIES: FIRST CLASS PLANTS.** OUR SOLUTION FOR INDUSTRIAL PRODUCTION.

#### The advantages of the L series extend to every detail.

The functionality and perfection of the L series models is due to the great attention given to every detail of the machine and its impressive performance. See for yourself how excellent operational safety can be combined with top output rates.









#### THE BAKER'S CROWN

## YOUR GUARANTEE FOR BEST RESULTS. FINAL PROVERS FROM KÖNIG.

Nearly all roll plants from König are also available with additional final provers. Final provers facilitate processing and provide additional process safety: the final proving time is optimised for the respective product and remains the same for each batch (in customised plants, the operator can select between various final proving times).

This does away with the time-consuming manual turning of the dough pieces, as the product is placed with the right side up on the baking trays or belts for transfer to automatic ovens or cooling units.

The automatic plant can also be equipped with cutting stations, for example for the double cross cut for croissants in multiple row production units.

#### Final provers made to measure

The König final provers can be adjusted to suit your specific operation. They are available in the standard machine widths of 600, 800 an 1,000 mm. Alternatively, you can choose provers of 1,600, 2,000, 2,500 or 3,000 mm in width that fit the adjacent continuous oven or cooling unit (generally designed as spiral freezers). For doughnut plants, we offer provers with nominal widths of 1,000 and 1,300 mm.

- The number of swings and thus the size of the final prover is determined by the desired proving time.
- Climate controlled with heating and humidifier, monitored with thermostat and hygrostat.
- Efficient sterilisation of the empty switches with UV cold-cathode tubes as standard.
- Drying zone with cross flow blower and heating for empty swings.
- Stainless steel design.
- Also available with separate housing and controlled climate or with optional cleaning station.

## **NO COMPROMISES.** OPTIMUM CLIMATE AND HYGIENE AT EVERY STEP.



#### Climate-controlled provers with housing

The König final provers are also available in a housing made using insulating panels. Such provers are equipped with an electronically controlled climate unit that ensures optimised constant proving conditions. For this purpose, the prover is equipped with a heating, cooling, humidifying and dehumidifying system.

Encased units are easier to clean, as there are no side panels attached to the frame. Residual flour and dough simply drops to the floor and can be taken up at the end of the shift with a brush or a vacuum cleaner.

## Hygiene equipment

Mould spots are very difficult to prevent. König is sparing no resources to improve its proving swings and the cleaning and sterilisation options for its provers.

Apart from the standard drying zone, the following combinations have proved successful for large provers:



ground.





AUTOMATION WITHOUT COMPROMISE.

#### Servomat

The Servomat is the automatic tray stacking device of König. It is designed to transfer full baking trays (or other product carrying devices) from the setting unit of the processing plant to the rack oven or similar unit. In other words, the baking trolley is loaded automatically and made ready for baking. Where large quantities are to be processed, this saves a lot of time, freeing up labour for other tasks!

- No need to halt the plant when the baking rack is to be changed.
- Suitable for all standard oven racks and baking trays.
- Processing rate up to 200 trays per hour.
- Can be positioned at the front or the rear of the plant; also available as a double model for both ends (= 400 trays per hour).
- Industrial model equipped with programmable control system.
- Automatic baking tray detection.
- Also available with "shunting station" that caters for the use of two trolleys, whereby operator intervention and a change of trolley is only necessary after the second trolley has been filled.



#### 1 Swing cleaning station

After every production cycle, each swing is individually cleaned with rotating brushes in a closed station, whereby it is held upside down: the brushes enter the swings from the bottom, and all residue can thus drop to the

#### 2 Extractor system

The dust generated during brushing is extracted by means of a highperformance explosion-proof industrial extractor system and transferred into a dust bag that can easily be changed.

#### <sup>3</sup> Infrared sterilisation

After the mechanical brushing and vacuum cleaning, the swings are moved along a row of powerful infrared lamps where they are sterilised for a predefined period of time. In contrast to conventional UV radiation, this treatment goes beneath the surface, as the swing covering is heated to a temperature of approximately 125°C, at which all germs and spores are killed.

The infrared sterilisation can be configured in such a way that all swings are treated after each production cycle which is the standard procedure for three-shift operation. Alternatively, a special treatment programme can be run at the end of the shift or production run.





# **TRUST BUILT ON POSITIVE EXPERIENCES AND SECURITY** OF INVESTMENT.

## TEST OUR MACHINES AT THE TEST AND DEMONSTRATION CENTRE!

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

To make sure that you don't buy the wrong machine: Thoroughly test the König machines at our Test and Demonstration Centre.

> Visit our centres 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.

#### Test before you buy

Test our equipment before you decide on your investment. Use your own ingredients and run our machines under realistic conditions at our Test and Demonstration Centre. Contact us today for an appointment.

#### König Maschinen Gesellschaft m.b.H.

Wiener Straße 186, 8051 Graz, Austria TEL.: +43 316.6901.0 FAX: +43 316.6901.115 info@koenig-rex.com www.koenig-rex.com

## SERVICES AND SPARE PARTS **FROM THE MANUFACTURER!**

Each machine and plant undergoes a number of test runs and is then run in with dough. Most of our technicians are trained bakers. They assemble the machines at our premises and then commission them, using their in-depth 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.

During office hours:	+43 31		
Outside office hours:			
For machines and units:	+43 66		
Ovens::	+43 66		







6901.0 64.505 69 01





## **KEY**



ROUNDED

e.g. Danish pastry, doughnut, scones with our without raisins, buns, etc.



#### **ROUNDED AND STAMPED**

e.g. kaiser roll, buns with star, football, etc. patterns -> see overview



#### **ROUNDED AND LONG ROLLED STAMPED**

e.g. long roll, pleated bread, Marraqueta, etc. → see overview



**ROUNDED AND LONG ROLLED CUT** e.g. crispy rolls



ROUNDED AND LONG ROLLED e.g. pain au lait, etc.



#### ROUNDED AND LONG ROLLED FOLDED

e.g. hot dog bun, etc.



ROUNDED AND CONVOLUTED e.g. Austrian "Salzstangerl", "Kornspitz", etc.



**TWICE ROUNDED** e.g. "Wachauer" bread, rosette products, etc.



**ROUNDED AND FLATTENED** e.g. Hamburger buns, etc.



#### ROUNDED, LONG ROLLED AND FLATTENED

e.g. Italian-style rolls

König also caters for special products such as for example "Mantovani", which are rounded, convoluted, turned and convoluted again.

Together with the customer, our engineers are able to develop special solutions to cover specific needs. In the past, König has been able to manufacture machines for products that previously required time-consuming manual forming, with subsequent automated processing (including proving, seeding, cutting, setting, etc.).





