

think process!



Werner & Pfleiderer
Bakery Technologies

ROTOTHERM® Green
ENERGY-EFFICIENT BAKING
WITHOUT COMPROMISE

WP Bakery Technologies



WP BAKERYGROUP



We are WP.

We are **WP Bakery** Technologies. For more than 140 years we have been developing technical solutions for bakers. We build, install and maintain baking ovens, machines and production lines for all kinds of bakeries from artisan enterprises to full-scale industrial production lines. World-wide. MATADOR®, our multi-deck oven, is a legend in bakery technology. Within the **WP BAKERYGROUP** we are the experts for every type of oven and the feeding systems that best work with them, for dough processing lines and for vacuum cooling systems.



We are a company of the **WP BAKERYGROUP**, which means we cover the entire process chain of bakery technology for all purposes ranging from nest artisan to large industrialized production, for fresh and durable baked goods. We are the only supplier in the industry with that all-round capability, making us market leader in the eld, worldwide. We produce everything the market needs. Our machine equipment covers everything from dough processing, dough dividing and moulding, baking in multi-deck, rack and tunnel ovens, automated feeding, proofing and frying through to vacuum cooling.



WP Bakery Technologies

We have been working for bakers for a long time, and we're good at it. Our customers use our products all over the world to get best bakery results. We are always looking for the better solution, better technology, ever better products. We observe the market very closely and know what customers are looking for. Which is why we are constantly looking for new ways, always in close collaboration with our customers.

We are highly innovative and always have our eyes on tomorrow's developments – **FutureWork** is our passion. For more than 140 years we have been developing new and innovative baking technologies – for multi-deck ovens, rack ovens, wood ovens, tunnel ovens, in-store ovens. Our patented brand ovens MATADOR®, ROTOTHERM®, UNITHERM®, PELLADOR® and MEGADOR® are used day-in, day-out for best results in bakeries all over the world. We make absolutely sure that our customers' production lines run without interruption, which is what our **ProductionCare** is all about.

>>> like to know more? www.wp-l.de



ROTOTHERM Green

WP Bakery Technologies

ROTOTHERM® Green

TECHNOLOGY FOR BEST QUALITY BAKING RESULTS

Your oven makes a crucial contribution to the success of your bakery. The quality of the baking products is significantly determined by it, and its energy consumption has an immediate effect on the economic efficiency of your business.

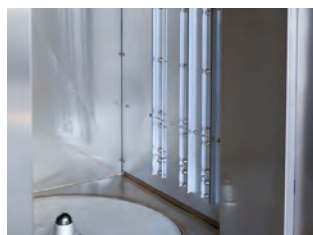
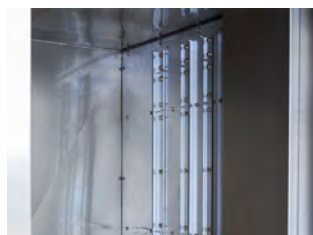
Profitable oven technology therefore combines best quality baking results with high energy efficiency. The **ROTOTHERM® Green** was optimized exactly to that end!

Six unique features of the ROTOTHERM® Green guarantee energy-efficient baking without compromise.





**GREAT
PERFORMANCE,**
LITTLE
CONSUMPTION



Oven tuning with efficient heat exchanger



State-of-the-art engines with smaller cubic capacity thanks to new technologies deliver top performance – and consume even less fuel. WP engineers have very intelligently transferred this successful trend to the **ROTOTHERM® Green**.

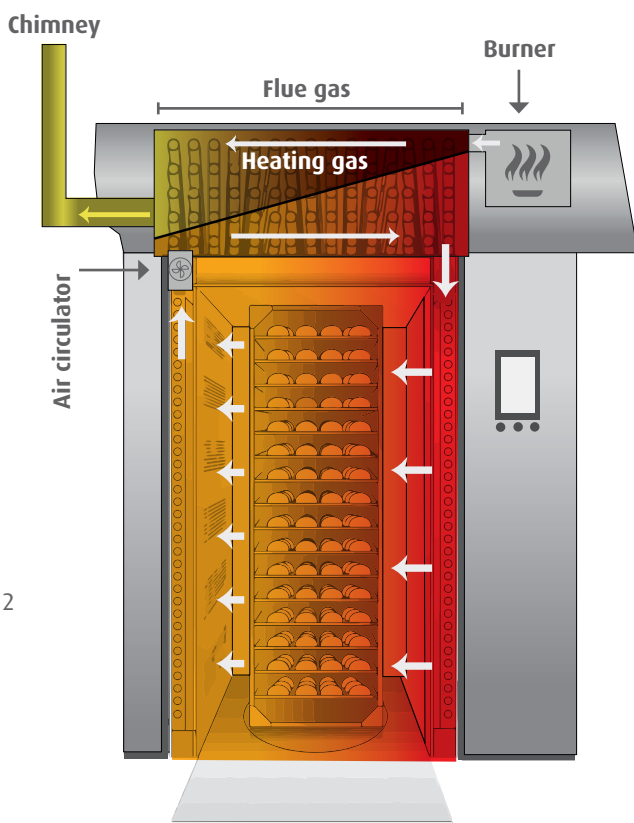
A smaller burner with reduced connected load and combined with an innovative heat exchanger serves as the "motor" of the rack oven. Optimized technology that uses less fuel and yet achieves excellent baking results at the same time. This works for a very simple reason: the efficient heat exchanger now exploits energy that previously escaped unused through the chimney to the maximum.



FURTHER ADVANTAGES:

- **Quality of bakery items:**
 Crisp, tender flaky crust, juicy crumb thanks to optimum application of energy.
- **Service life:**
 Durable thanks to special WP steel.
- **Saving effect:**
 28.7 % less energy consumption, certified. *
- **Amortization:**
 Lowest energy cost per piece.
- **Environment:**
 Energy consumption reduced by 25 % and lower CO₂ emissions are environmentally-friendly.*

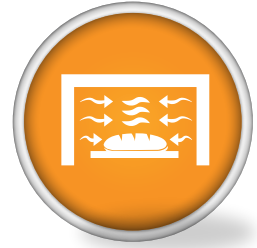
* compared to the previous RE 1020 model from 2012



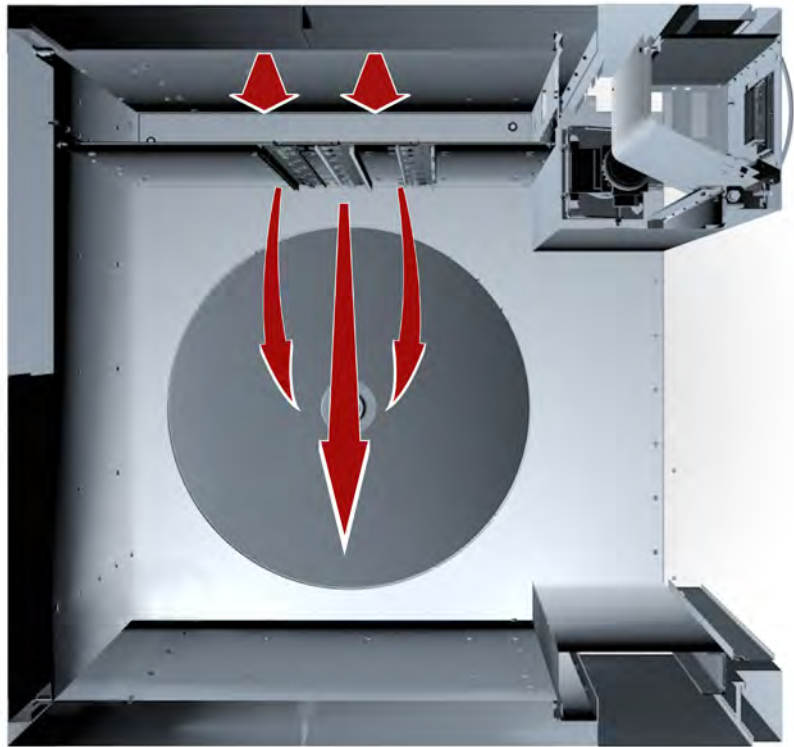


TREND-SETTING **BAKING**

OPTIMIZED AIR FLOW FOR BEST QUALITY BAKING ITEMS



The direction is right with the **ROTOTHERM® Green!** The air is accurately directed onto the product over the entire jet wall. The result at every point of the baking trolley is constant baking quality. Moreover, the optimized air flow applies more energy on the dough pieces, shortens the baking time and makes your baking items particularly juicy.



FOR YOU, THIS MEANS:

- Consistency and reproducible quality.
- Optimum distribution of heat and steam.
- Juicier baking items.
- More output per hour.



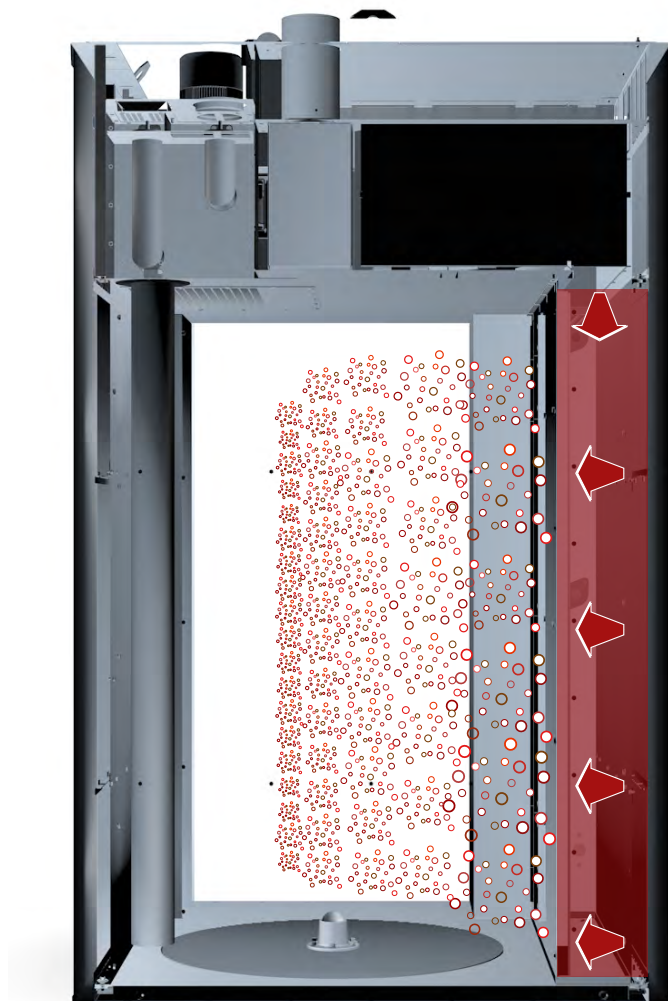
FULL STEAM **AHEAD!**

EXCELLENT STEAM FOR HIGHEST DEMANDS

ROTOTHERM® Green has an excellent vapor performance. Its steaming device really steams it up! Its rich steam creates juicy baked goods. Visually and in terms of flavor a delight your customers will love!

FOR YOU, THIS MEANS:

- Particularly consistent steam for juicy baked items.
- More volume thanks to rich steam.





WP THERMOPACKAGE

GROUNDBREAKING INSULATION = EXCELLENT SAVINGS



What do you do when you are cold? Of course, you wrap yourself up nice and warm from head to toe. That is just what we have done **with** the **ROTOTHERM® Green**. What hat and coat are for people, **WP THERMO PACKAGE** is for ovens – an entirely new insulation concept.

The full-surface insulation, the separated floor, the lowerable ramp and the steam proof door seal secured all around keeps the precious heat and the steam inside the oven and minimizes heat loss. **ROTOTHERM® Green** thus saves on energy you would have to pay dearly otherwise.

FURTHER ADVANTAGES:

- Full-surface high-tech insulation.
- Lowerable ramp and door seal all around, thus reduced heat loss (steam proof).

FOR YOU, THIS MEANS:

- The floor only heats up to less than 100 °C. The strain on the floor in the bakehouse therefore is considerably less.
- No condensation build-up on the floor means improved value retention of the oven.



Bakehouse floor



WP NAVIGO 3

The automobiles of the future will navigate through traffic by themselves. For the **ROTOTHERM® Green** the future has already begun with **WP NAVIGO 3**. The software is so intelligent that you can sit back, relax and hand over the steering wheel – or in other words: the fully automatic control of the oven.

WP NAVIGO 3 ...

- ... is easy and intuitive to operate.
- ... allows for individual adjustment of temperature, air recirculation speed and steam.
- ... guarantees consistent high quality baking results.
- ... optimizes burner operating times and thus reduces energy costs.
- ... imports existing recipes from previously used baking programs.
- ... grants access to authorized users only via password assignment.
- ... with **WP ISOTHERMIC BAKING**, the partial loading automatic.
- ... can be linked via **WP BakeryControl** (option).
- ... supports the operating personnel with **WP ASSISTANT**. Easy-to-understand short videos explain cleaning, care and maintenance.



WP SmartControl

Usability, production reliability and high degree of availability – this is what WP SmartControl stands for. In practical terms, this means: WP machines and equipment are easy to use, feature identical menu-assisted operation with uniform icons, colors, and procedures and provide powerful, secure remote diagnosis and maintenance, upon request.





HYGIENE

A CLEAN AFFAIR!



Avoid dirt, detect dirt, remove dirt. Sounds good in theory. But how can you manage this in the labor-intensive daily bakery routine? Just perfectly – with the **ROTOTHERM® Green**! Because the oven is designed to be meticulously cleaned in next to no time.

- Consistently dry floor thanks to innovative floor insulation.
- Dirt zone restricted to area around the rotating table.
- Smooth inner walls where dirt can hardly stick.

The **ROTOTHERM® Green** can be cleaned in next to no time. This saves you working hours every day that you can make much better use of than to clean.

LONG SERVICE LIFE

Well kept and maintained machines last longer. To make maintenance just as easy as the cleaning we have optimized a number of details on the **ROTOTHERM® Green**. In summary, these kind of enhancements extend the service life of your valuable oven considerably.

FOR YOU, THIS MEANS:

- Cleaning time reduced to a minimum.
- High degree of practicability.
- Maximum value retention.



WP CleanTec

Dirt should not accumulate in the first place. If it cannot be avoided, it must be easy to detect and to remove. This is the concept of WP CleanTec. It is foresighted designs, clever machine details and innovative materials that help implement it – for maximum hygiene!



ROTOTHERM® Green OPTIONS

THE OPTIONS ARE YOURS!

Aluminum or steel rims, automatic transmission or gear shift? You equip a new automobile with accessories according to your needs. This is what you should do with a new oven even more so.

The **ROTOTHERM® Green** offer a great deal of options. So you can adjust your oven individually to suit your needs and your assortment of products – for top products that delights your customers and that allows you to stand out from your competitors.

Four options that make your **ROTOTHERM® GREEN** just as unique as your assortment of products!



WP Thermogate



WP Variopilot



WP IEC



WP BakeryControl



WP CoreProbe



WP THERMOGATE

THE QUALITY TURBOCHARGER FOR BATCH-ON-BATCH BAKING

Just as a turbocharger multiplies the sprint power of a sports car, does **WP THERMOGATE** power up the performance of the oven heating. This considerably shortens heating time! It allows you to produce more baked goods per hour with real batch-on-batch baking.

The quality turbocharger renders the production process faster and improves quality at the same time. With **WP THERMOGATE** you are bound to produce premier class baked goods.

FUNCTIONAL PRINCIPLE

Position 1

WP THERMOGATE can be activated with a push of a button before changing the baking trolley. The burner continues to run in a controlled manner and heats up the air in the closed energy block.



Position 2

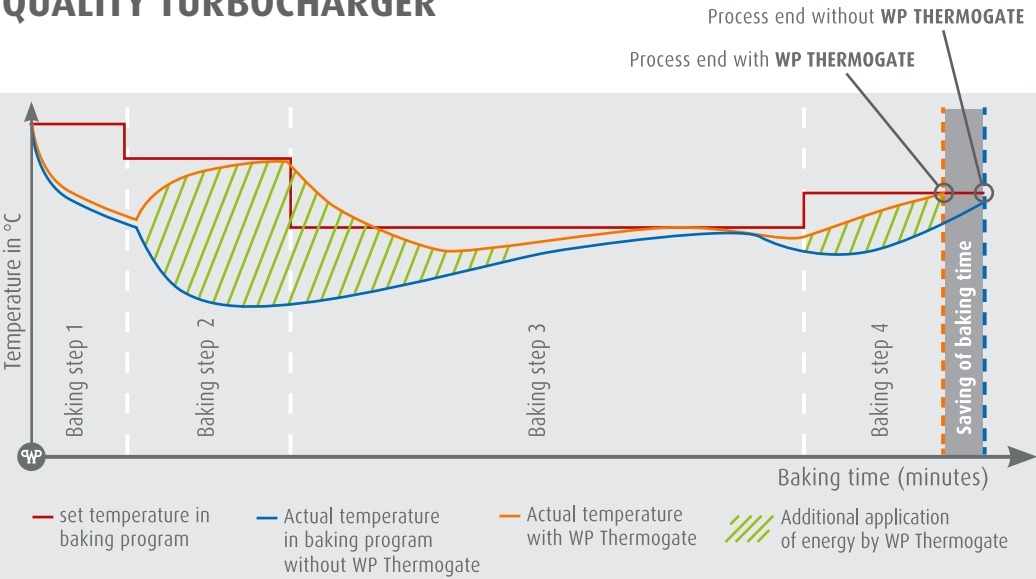
The baking program is started after change of the trolley. The steam works in a quiet atmosphere with the **WP THERMOGATE** closed. The burner continues to run in the closed energy block.

Position 3

The **WP THERMOGATE** opens after steam injection. The continuously heated energy block without any delay immediately provides the required energy. Best baking results are therefore guaranteed.



QUALITY TURBOCHARGER



REDUCTION OF BAKING AND LOADING TIMES

e.g. for small baked goods

WITHOUT WP THERMOGATE



WITH WP THERMOGATE



YOUR ADVANTAGES:

- Juiciest baked goods with beautiful crust break and more volume.
- 10 % shorter baking time thanks to optimized application of energy.
- Real batch-on-batch baking.
- Increased baking capacity per hour.
- Burner protection through by-pass, no overheating of the burner.





FOR EVERY BAKED GOOD THE CORRECT AMOUNT OF RECIRCULATED AIR

You certainly drive slower in urban areas than on the freeway if you intend to arrive at your destination in an optimal manner. The **WP VARIOPILOT** is just as precautionary. It controls the amount of air in the baking chamber – perfectly adapted to the requirements of the respective end product.

LARGER AMOUNT OF AIR FOR MORE POWERFUL BAKING

- Faster heating
- Shorter baking time
- More crispness
- Better crust break
- More volume

REDUCED AMOUNT OF RECIRCULATED AIR FOR SOFTER BAKING

- Juicier baking items
- Shiny surface

Its variable, finely adjustable setting options make the **WP VARIOPILOT** truly unique! This way you can bake an even wider assortment with best quality results.



WP BakingQuality

Sophisticated bakers expect machines and systems with which they are able to produce premium-quality baked goods. We call this technology WP BakingQuality.

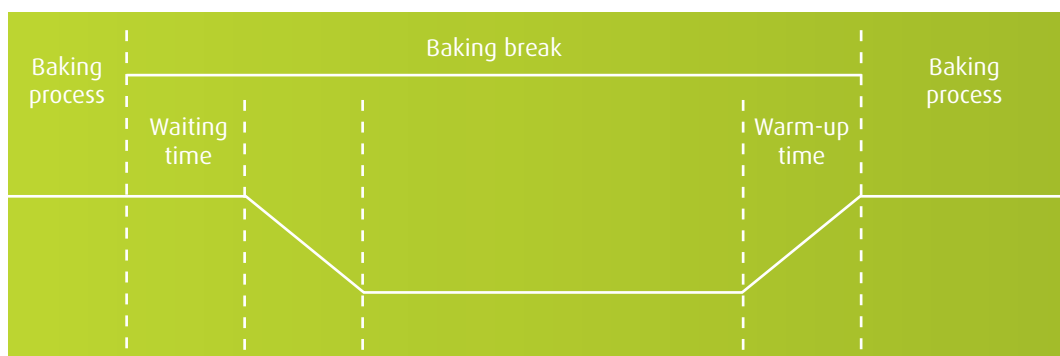


WP INTELLIGENT ENERGY CONTROL (IEC) THE AUTOMATIC ENERGY SAVER

The start-stop system in the automobile turns the engine off independently when you are waiting at a red light. You can thus save on gas without even having to do anything.

WP IEC works just as comfortably. During a baking break, the intelligent software reduces the oven target temperature via a stand-by function. This automatically reduces your energy costs. The automatic start function heats back up to the required target temperature in time before the next baking process. And you're ready to go – just like when the traffic lights jump to green.

- No **wasted energy** through by unnecessarily continued heating of the oven.
- Unique finished product thanks to start of the baking process at **target temperature**.
- Particularly **effective** for businesses with production-related baking breaks.



WP GreenEnergy

Lowest possible energy consumption – maximum efficiency: we develop innovative technical solutions that conserve valuable energy resources, that are less environmentally harmful and that reduce energy costs of bakeries with this requirement in mind.



WP BakeryControl

QUALITY THROUGH TRANSPARENCY

- The central software for your bakery
- Suitable for all WP baking ovens (plug & play installation)
- Storage, display and export of oven, recipe and production data

PRODUCTION



OPTIMIZATION



STATISTICS



YOUR BENEFITS FOR MORE QUALITY

- ✚ Efficient utilization of the ovens
- ✚ Reduction of idle time
- ✚ Optimization of baking sequence
- ✚ Noticeable gains in freshness
- ✚ User and rights administration
- ✚ Available on all devices with internet connection
- ✚ Personalized recipe management
- ✚ A 360° view of your baking processes

SAFE ▶ **BETTER** ▶ **DIGITAL**



WP COREPROBE

YOUR SUCCESSFUL ENTRY POINT TO A SMART BAKING FUTURE

WP CoreProbe is the additional module for core temperature measurement in your WP ROTOTHERM® Green. You will be reliably supported in your daily routine and your products will always be perfectly baked. WP CoreProbe – increased process reliability and optimum documentation of your baking processes.

JUST THE RIGHT THING FOR EVERYONE

We offer the WP CoreProbe core temperature sensor in three equipment variants:

- Display of the measuring results on the **WP NAVIGO 3** control
- Display of the measuring results on the **WP NAVIGO 3** control and evaluation on your local computer (local BakeIT cloud)
- Display of the measuring results on the **WP NAVIGO 3** control and evaluation in the BakeIT cloud

YOUR ADVANTAGES

- Even better baking results and a baking time reduced by up to 20 %
- Increased process reliability, especially with semi-baked products
- Continuously improved quality due to the use of core temperature data
- Greater capacity and reduced energy consumption thanks to shorter baking times
- Simplified compliance with hygiene regulations, for example HACCP hygiene indicators



ROTOTHERM® Green *drive through*

WITH TWO DOORS GERMS DON'T STAND A CHANCE – THE OVEN AS A HYGIENE LOCK

The second door of the ROTOTHERM® Green drive through enables the oven to be used as an efficient germ and hygiene lock. When you need to produce baked goods requiring separate production and logistics areas, for example to ensure that the baked products are kept germ-free before being packed, this model of the tried and tested ROTOTHERM® Green rack oven with front and rear doors (drive through) can demonstrate definite advantages. This can be just as important in bakeries in large stores and supermarkets as in the case of baked products containing egg or gluten-free products.

The oven can function as an actual hygiene lock, as the doors are also interlocked to prevent them from simply being passed through.

HYGIENE LOCK

- Separation of production and packing stages

PROCESS OPTIMIZATION

- Rationalization in the production process
- Interfaces in the production line are avoided



WP NAVIGO 3

- Control at the front door when the oven is loaded
- Indication of the remaining baking time and baking chamber temperature as well as the stop button are located at the oven rear
- Option to control additional baking at rear of oven (removal point)

**REMOVAL AT
REAR OF THE
OVEN**



**LOADING AT
PRODUCTION
ACCESS POINT**

ENERGY-EFFICIENT BAKING WITHOUT COMPROMISE

The best features of the ROTOTHERM® Green are your guarantee of highly energy-efficient baking without compromise also in a drive through unit.



ROTOTHERM® Green HEAVY DUTY

THE HEAVY-DUTY WORKER AMONG THE RACK OVENS

The Rototherm Green HEAVY DUTY is the perfect solution when it comes to baking large quantities of a product in the rack oven, when the rotating table load is very high due to the product to be baked (e.g. sandwich bread, tin assemblies), or when rack trolleys of larger model sizes are used.

The Rototherm Green HEAVY DUTY is the heavy-duty worker of the Rototherm Green series with all proven features and options. Profitable oven technology for best quality baking results with maximum energy efficiency.

THE THREE UNIQUE FEATURES OF THE ROTOTHERM GREEN IN THE HEAVY DUTY VERSION.

- For 2 rack trolleys 580 x 780 mm/600 x 800 mm
- For rack trolleys up to 1560 mm diagonal
- Rotating table load of up to 750 kg



ENERGY-EFFICIENT BAKING WITHOUT COMPROMISE

The best features of the ROTOTHERM® Green are your guarantee of highly energy-efficient baking without compromise also in the HEAVY DUTY version.





ROTOTHERM® Green CONCLUSION

YOU WILL BE ENTHUSIASTIC ABOUT THIS OVEN!

THE MOST IMPORTANT FACTS AT A GLANCE:

- Best quality baking results without compromise.
- 28,7 % energy savings, reduces energy consumption and is environmentally-friendly.*
- Optimum air flow – for maximum product quality.
- Excellent steaming – for highest demands.
- Innovative insulation concept minimizes heat loss.
- Intelligent, fully automatic oven control
- For maximum hygiene requirements – easy to clean, easy to maintain.

* compared to the previous RE 1020 model from 2012

Model	ROTOTHERM® Green + ROTOTHERM® Green drive through		ROTOTHERM® Green HEAVY DUTY
Option	1020	1280	1560
WP VARIOPILOT (variable air recirculation)	✓	✓	✓
WP THERMOGATE (loading position)	✓	✓	✓
WP INTELLIGENT ENERGY CONTROL (IEC)	✓	✓	✓
WP CoreProbe (core temperature sensor)	✓	✓	✓
WP BakeryControl	✓	✓	✓
Increased baking chamber (+140mm)	✓	✓	✓
Rotating table drive with soft start	✓	✓	-
Damper flap	✓	✓	✓
Flue gas heat exchanger	✓	✓	✓
Oil/gas blower-type burner (ELCO/Weishaupt)	✓	✓	✓
Flue gas and steam merging adaptor	✓	✓	✓
Electric heating	✓	✓	-
Extended ramp length (380 to 1,000 mm)	✓	✓	✓
Rotating table reinforcement to kg	450	550	-





POSITIVE **EXPERIENCE**

TEST THE **ROTOTHERM® Green** YOURSELF

Dazzling performance, pleasant comfort, easy handling: when buying an automobile, you put the advertising claims through their paces on a test drive.

You can put the exceptional features of the **ROTOTHERM® Green** to the test in one of the professionally equipped baking centers of **WP BAKERYGROUP**.

In the end, nothing is as convincing as your own experience! Bring your original raw materials and your individual recipes for your own personal baking test to sample the baking quality of the **ROTOTHERM® Green**. We are convinced that:

You will be impressed!



think process!



SOMETHING YOU CAN RELY ON!

One glance at the WP quality seals tells you the areas in which the WP machines excel.

WP BakingQuality

Sophisticated bakers expect machines and systems with which they are able to produce premium-quality baked goods. We call this technology WP BakingQuality.



WP SmartControl

Usability, production reliability and high degree of availability – this is what WP SmartControl stands for. In practical terms, this means: WP machines and equipment are easy to use, feature identical menu-assisted operation with uniform icons, colors, and procedures and provide powerful, secure remote diagnosis and maintenance, upon request.



WP GreenEnergy

Lowest possible energy consumption – maximum efficiency: we develop innovative technical solutions that conserve valuable energy resources, that are less environmentally harmful and that reduce energy costs of bakeries with this requirement in mind.



WP CleanTec

Dirt should not accumulate in the first place. If it cannot be avoided, it must be easy to detect and to remove. This is the concept of WP CleanTec. It is foresighted designs, clever machine details and innovative materials that help implement it – for maximum hygiene!



WP Blue Value

WP Blue Value ensures with comprehensive service and support that our machinery runs continuously and operationally reliable over the entire life cycle.



think process!



OUR **BRANDS**

WP BAKER'S EQUIPMENT

WP PIZZA

WP DONUT

WP ROLL

WP TOAST

WERNER & PFLEIDERER LEBENSMITTELTECHNIK GMBH

von-Raumer-Str. 8-18 // D-91550 Dinkelsbühl // Germany // Fon +49 9851-905-0 // Fax +49 9851-905-8342 //
info@wp-l.de // www.wp-l.de // www.wpbakerygroup.com