Master of Cooking

More is more with the GEA CookStar Turbo 1000
When less is more...
Less is more when it comes to costs. We help you keep the cost per kg low by reducing the cost of ownership. Thanks to: high yield and capacity, efficient use of resources, up to 50% shorter cleaning cycles and reliable engineering.
More is more!

There are times when ‘more’ is better. And the new generation GEA CookStar Turbo 1000 certainly offers more to meat and poultry processors. More in terms of capacity, cooking sections, performance and flexibility. So whatever you’re cooking, roasting, browning, drying or steaming, the GEA CookStar Turbo 1000 will more than meet your expectations.

**More capacity**
Having invented and perfected an industrial oven that matches the quality of cooking in professional kitchens or at home, we’ve further boosted its capabilities to meet another business priority: cooking at very high volumes. The GEA CookStar Turbo 1000 is the world’s only 1000 mm double spiral oven you can now specify with up to 14 tiers. This gives you 72 feet (22 meters) more belt to load, and a total effective cooking length of 525 feet (160 meters).

**More cooking sections**
The GEA CookStar Turbo 1000 is also the world’s only three-phase double-spiral oven. The (patented) impingement section between two main cooking sections boosts yield, improves color and widens the application window. It also means cooking times are up to 30% faster than 2-zone ovens. This adds up to higher productivity.

**More performance**
Capacity is not the only reason to choose the GEA CookStar Turbo 1000. Its cooking performance is another major plus. It gives you the potential to boost yield by up to 3 percent by retaining moisture in the products. And its heating capacity has been increased by 1,36 mBTU (400 kW) giving you 7,16 mBTU (2100 kW) at 392°F (200°C). For roasting applications you can even raise the temperature up to 464°F (240°C). The independently controlled air speeds in the sections with active climate control (energy saving passive climate control is an option) gives you some pretty serious cooking capability.

**More flexibility**
Next up is flexibility. The GEA CookStar Turbo 1000 cooks muscle pieces, whole chickens, bone-in, skin-on, coated, marinated products, ready meals and fish. It roasts perfectly without coloring or additives. And you can steam products with lower air speed for better moisture retention, and even dry them at a lower dew point.

...and more experience!
With a GEA CookStar Turbo 1000, you get more than stainless steel. You gain access to GEA’s vast experience in helping customers get the best from their industrial ovens. The CookStar has an installed base of more than 400 ovens worldwide – and machine number one is still reliably working. Constant development over the last 25 years has made the GEA CookStar the master of cooking. Invest in one, and join the masters of cooking.
Passion, performance and reliability

The GEA CookStar Turbo 1000 is founded on three pillars: a passion for cooking, a drive for performance and a proven commitment to reliability.

A passion for cooking
The challenge of cooking on an industrial scale is duplicating the flavor, texture, mouth feel and look of chef-prepared or home-cooked food. So with the GEA CookStar, we didn’t start with a machine. We started by understanding your applications, processes and markets. Then we designed the CookStar around them. And we’re proud of the result. In fact, we’re so confident it will more than meet your expectations, we accept the challenge: show us your product and we’ll cook it to perfection. With passion!

"Our GEA CookStar contributes to achieving a higher production yield."  
A satisfied Chinese customer

The drive for performance
Because the GEA CookStar Turbo 1000 uses a unique combination of horizontal and vertical air flow in three sections, it delivers consistent cooking quality, with very low variation across the width of the belt. Furthermore, you get total control over crispiness, juiciness, texture and color. It also has the largest heating capacity on the market. In a nutshell, the GEA CookStar’s performance brings you:

- Flexibility - cook, roast, brown, steam, dry and heat
- Yield - up to 3% improvement compared to existing ovens
- Productivity - up to 30% faster than two-zone ovens
- Capacity - more tiers, longer belt, longer production runs (72 hours)
- Energy efficiency - savings up to 7%

"We work closely with GEA to get the best out of the CookStar."  
A satisfied Canadian customer
Our commitment to reliability

Performance and capacity mean little if your oven keeps stopping. Unplanned downtime is disastrous. So we design our ovens to be extremely reliable. Scheduled downtime is kept low by fast cleaning and excellent access for maintenance. The robust construction and proven engineering keeps unplanned downtime to a minimum. And if the unexpected does happen, GEA has a global service organization backed up with dedicated spare parts programs, rapid response times, remote diagnostics and years of experience. We’ll keep your CookStar up and running, shift after shift, year after year.

“Our GEA CookStar has been running day and night for ten years and we’ve never had an hour of unplanned downtime.”
A satisfied Dutch customer
Unique three-phase cooking and roasting oven

Evolved over two-and-half decades, the GEA CookStar Turbo 1000 is now in its third generation. GEA invented the spiral oven and we consistently refine the technology and add new processes to give you more cooking possibilities.

**Working principle**
The GEA CookStar Turbo 1000 combines horizontal air flow in the spiral sections. This unique configuration means the hot air and super-heated steam is directed to areas where needed. The vertical air flow is concentrated in the impingement section (between the two main cooking sections), and in addition to producing superb roasting results, this section enhances the overall cooking efficiency. The combined airflow concept results in 20 to 30% shorter cooking times. The graph in the figure below shows a typical temperature profile through the oven.

**Total control for repeatable results**
A menu-driven control panel gives you total control over temperature, dew point, air circulation speed and cooking time. With the correct settings, the oven is able to achieve a higher yield than comparable size ovens with 100% vertical or horizontal air flow. The cooking conditions in all three cooking sections are independently controlled using an active balancing system. This approach maximizes section separation.
Humidity assist and active section balancing
The new generation oven features GEA Humidity Assist, which is a dew point control system that saves four to eight hours on weekly maintenance compared to hygrofil systems. It also does not require daily operational handling. An alternative passive exhaust system for section balancing is also available as an option. This makes the most efficient use of costly steam, and is able to create sufficient section separation for most industrial cooking applications.

Hygiene and cleanability
The oven is designed for hygiene and cleanability. It features a Clean-in-Place (CIP) that uses a unique inside-out spray system that reaches all strategic areas. The CIP system incorporates nozzles integrated into drums and independent tanks and circulation systems per section. These features help reduce the time required for the cleaning cycle by 10 to 15%. Chemical and water usage are also reduced.

The effectiveness of the cleaning enables up to 72 hours continuous operation. Further hygiene refinements in the latest generation CookStar include a belt support profile that is optimized for cleaning, removable belt brushes, a removable outfeed conveyor and an (optional) automated belt washer sieve. The belt washer removes debris from system to prevent clogged sieves during production. It is particularly effective for heavily marinated products and roasting applications.

Operational flexibility
Your future cooking requirements can be influenced by consumer trends, market fluctuations and raw material availability. So we have not only designed the GEA CookStar Turbo 1000 to be flexible in terms of cooking applications, we have also made it adaptable in terms of operation. The modular design, which features reversible direction of rotation and infeed position, facilitates factory and production line layout changes.

Test before you invest
Seeing is believing... if you want to test new cooking requirements, just show us your product and we’ll cook it to perfection in our Technology Center in Frisco (US) or Bakel (NL). Contact your local sales representative to make an appointment so we can show you that more is more...
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 index.

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