



mit uns **technisch überlegen**

---

# Leading Technology for Transformer Production

---

transformer lines

---

## Future-driven Knowledge

Our company history from its birth to date is a signpost for a strong future. Founded in 1948 as a visionary one-man business, today GEORG is a successful family-owned company and a global player. We link the experiences of several generations to meet the technical challenges and to create new market impulses.

What we have in common is our belief in entrepreneurial sustainability. Our employees with their passion for technology, as well as our common responsibility for what shall be preserved, are always in the focus of all our actions.

This attitude finds its expression also in the faithful, cooperative relationship with our customers and suppliers who are an essential part of our culture. For them we use our specific knowledge and skills in order to develop progressive solutions, thus producing superior technical results. That is the GEORG Way.



## Reliable Solutions

Proven in transformer plants and service centers all over the world GEORG transformer lamination cutting lines are known for their reliability, accuracy and productivity. We develop machines fitting to the individual customer's needs, with fixed shears or swing shear configuration, whether with simpler stacking systems or fully automatic E-stackers.

Our experience in transformer production lines also leads us to develop perfect slitting lines for grain oriented electrical steel. With our wide range of core assembly tables, we supply production equipment from coil to finished core.

GEORG does not only focus on core production. Corrugated wall production lines for distribution transformer tank production and robot systems for tank welding are leading solutions in tank manufacturing.

---

## Wide Range of Customers

Small and medium-size companies need a reliable partner, which supports them during the complete life time cycle of their machine. Many of these companies – family-owned, such as the GEORG company – successfully operate GEORG machines for more than 30 years.

The partnership between these customers and GEORG is often more than a supplier-customer-relation. With our reliable standardised ecoline range, we offer affordable solutions in core cutting even for very small transformer manufacturers.

On the other hand, many of our customers are big multinational corporations. The various needs of their individual plants all around the world are discussed and lead to new technically superior solutions by working in close cooperation. Innovative technology and strong partnerships are necessary for being prepared for the future.

# Passion for Technology

---

**World-wide availability:** on site with GEORG specialists from our national and international subsidiaries and agencies, by remote-access or via our service-hotline.

---

**Modernization** of your existing lines by updating.

---

**Facing the future** with our independent research & development department: for superior solutions for your benefit.

---

**Training to learn** all about your GEORG machine in our customer centre.

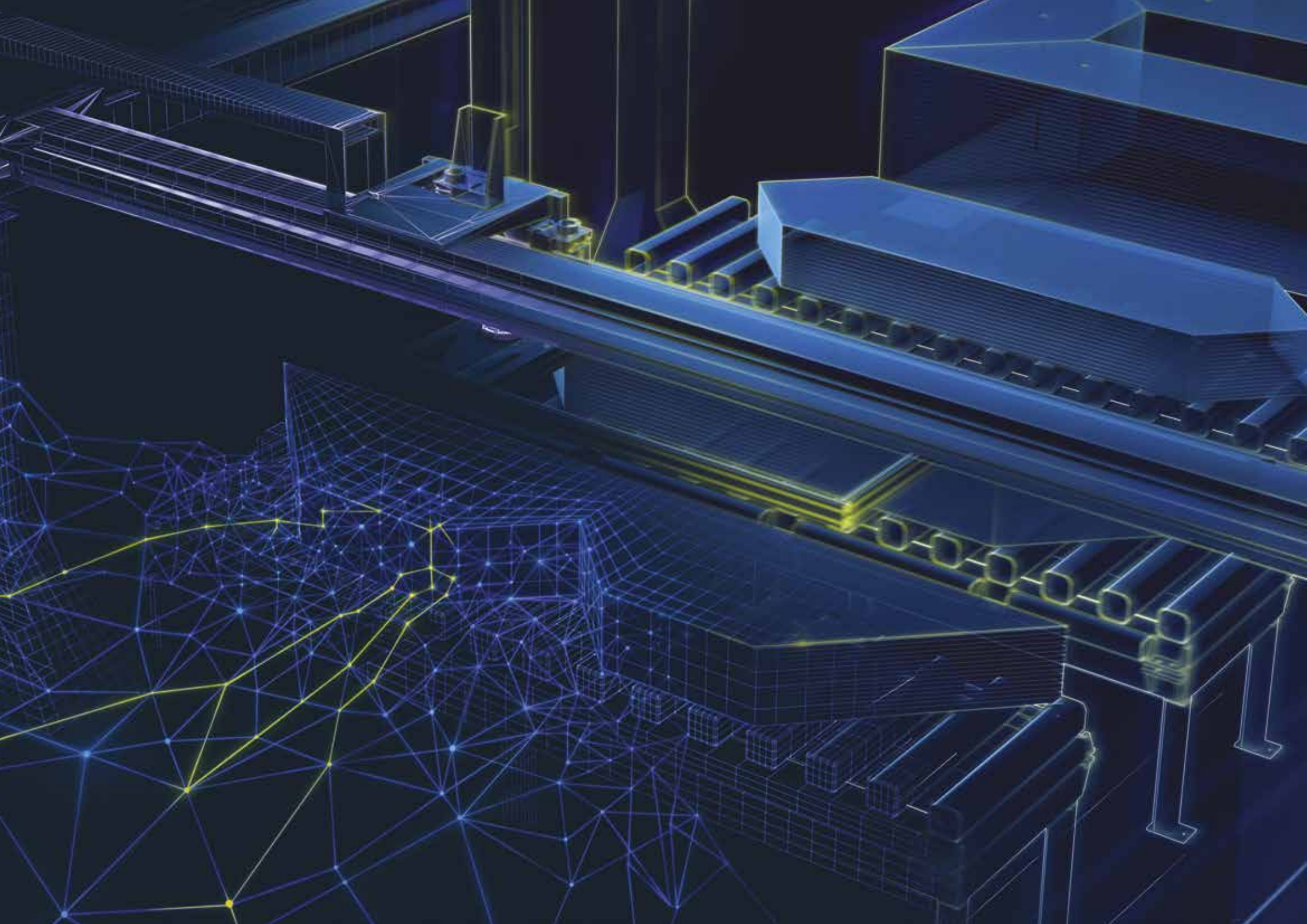
---

**GEORG production lines** for the transformer industry are 'Made in Germany' from the mechanical to the electrical system for decades.

---

**GEORG components** or control systems.





---

## Create Added Value

Companies need innovations. They are the power for technical progress. GEORG has a passion for technology which is combined with experience, knowledge and creativity.

Equipped with these good tools, GEORG does state-of-the-art research. We always listen to the customer, develop and place extraordinary goods on the market. Only the one who is in contact with customers and suppliers can optimize and improve its own processes, create value and design more efficient line concepts. Sometimes customers and their challenges have to be solved but also the pioneering spirit of our own engineers takes us further or even both together. This leads to technical solutions which bring our customers forward and puts them in the position to be technically and economically superior.

## Get Smart Benefits

GEORG production lines are an answer for high productivity and efficiency of the production process:

- > Superior production speeds
- > Short set-up times
- > High degree of automation
- > First quality line components
- > High line availability
- > Long lifetime
- > Low maintenance costs
- > Low energy costs



---

## Product Range



**GEORG precisionlit**  
Slitting lines



**GEORG precisioncut**  
TBA core cutting lines



**GEORG autostack**  
Off-line automatic core stacking systems



**GEORG precisionstack**  
Core stacking tables

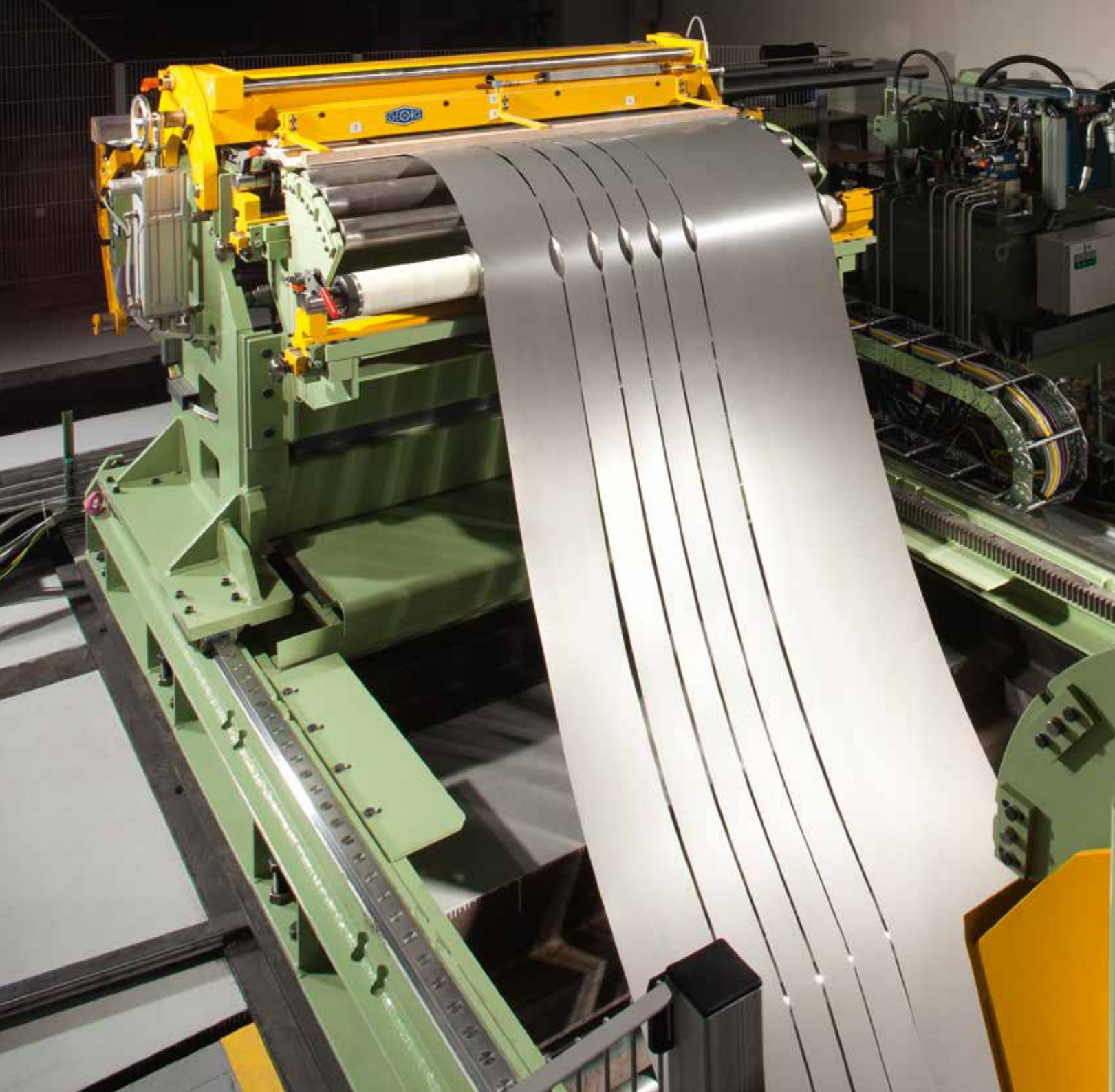


**GEORG ultracorrugation**  
Tank wall production lines



**Special Core Production Lines**  
For wound, amorphous or toroidal reactor cores





## GEORG precisionlit

### Slitting lines

#### Benefits

- > High level of cutting accuracy by means of high precision shear
- > Low burr and low camber slitting process due to optimized shear design
- > Convenient strip infeeding with movable tension unit
- > By various pneumatic systems the tension can be adjusted individually - resulting in high winding accuracy.
- > Thickness ranges between 0.20 and 0.65 mm or up to 1.0 mm
- > Special machine configurations for 0.18 mm minimum strip thickness

#### Quick Facts



**Coil weight**  
Of 6 or up to 12 t



**Strip width**  
Up to 1,250 mm



**Line speed**  
Of 140 m/min or  
up to 200 m/min



**Low camber  
slitting process**



# GEORG precisioncut

TBA core cutting lines

## Benefits

- > High output/throughput by minimizing tool times and high production speeds
- > Expensive scrap minimized
- > Electric operated shears and notches minimize maintenance work
- > Exact sheet lengths and low burr cutting
- > Wide range of stacking systems
- > Highest reliability in core production

## Quick Facts



### Strip width

Depending on machine type up to 1,250 mm



### Sheet length

Depending on machine type up to 6,000 mm



### Output

Up to 190 sheets per minute







## GEORG autostack

Off-line automatic core stacking systems

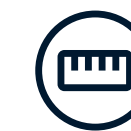
### Benefits

- > Processing of complete and half logs
- > Production of flat yokes
- > All types of step lap
- > Utilization of existing core stacking tables
- > Interface to GEORG core cutting lines
- > High accurate stacking
- > 100% repeatable stacking quality
- > Adjustable gaps
- > Reduced mechanical stress
- > Reduced transformer losses
- > Labour cost savings
- > Data management for core production

### Quick Facts



**Lamination Width**  
From 70 up  
to 1020 mm



**Lamination Length  
(Center Line)**  
Up to 5000 mm



**Stack Height**  
Up to 1600 mm



# GEORG precisionstack

Core stacking tables

## Benefits

- › For layer by layer stacking or for insertion of lower yoke sheets in pre-stacked leg logs
- › For hydraulic or for crane erection
- › From 1 ton capacity up to 290 tons and greater capacity
- › With stacking pins or side stops or corner stops
- › Can be equipped with pre-stack storage racks and scaffoldings
- › Can be equipped with additional pressing and strapping units

## Quick Facts



**Capacity**  
Up to 290 t



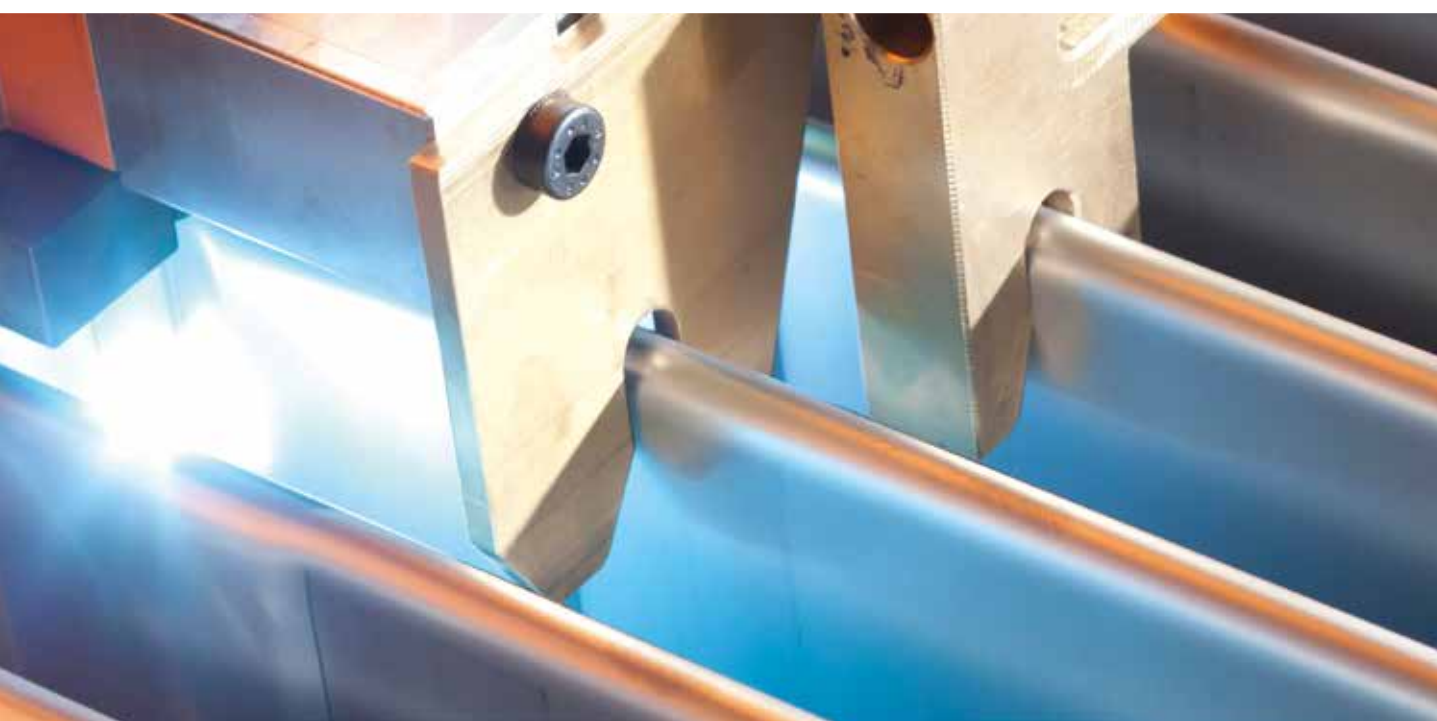
**Stacking height**  
Up to 1,800 mm



**Number of legs**  
Up to 5







## GEORG ultracorrugation

Tank wall production lines

### Optional Units

- > Quick tool changing systems
- > Semi-automatic levelling and insertion system for reinforcement rods
- > Embossment spot welding machine
- > Reinforcement strip spot welding machines
- > Edge bending units
- > Clamping manipulators for assembly and welding of the fin walls
- > GEORG robotweld systems

### Quick Facts



Strip width  
Max. 1,600 mm



Panel length  
Max. 3,000 mm



Fin height  
Max. 400 mm



---

## Special core production lines

For wound, amorphous or toroidal reactor cores

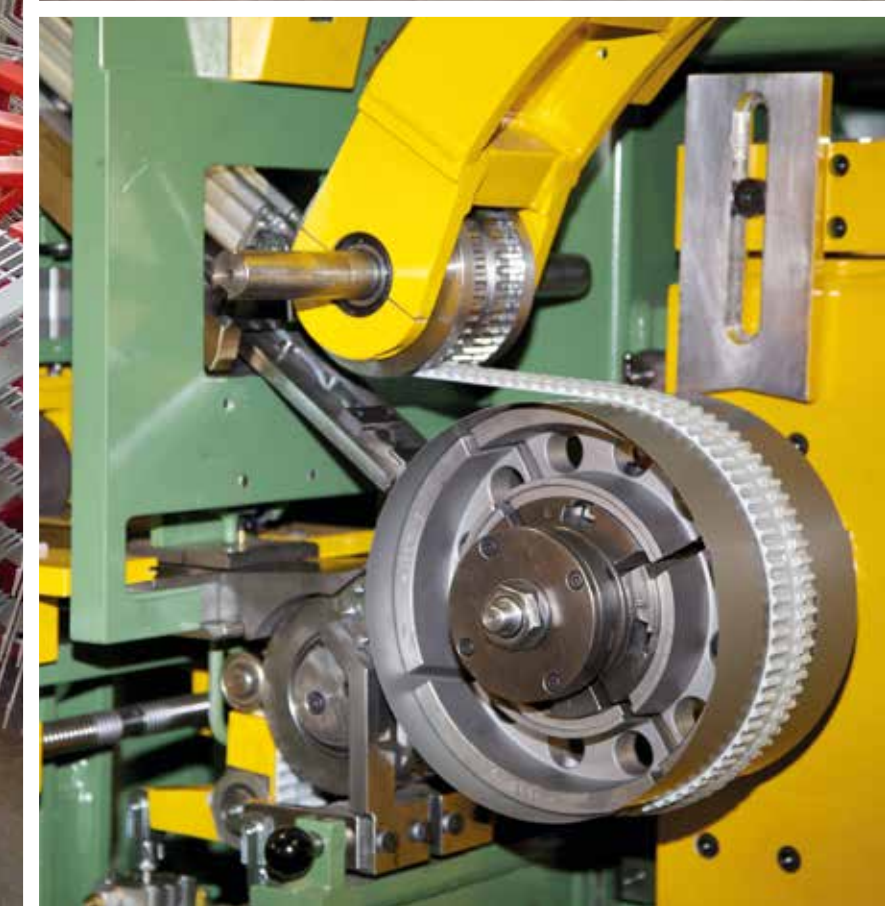
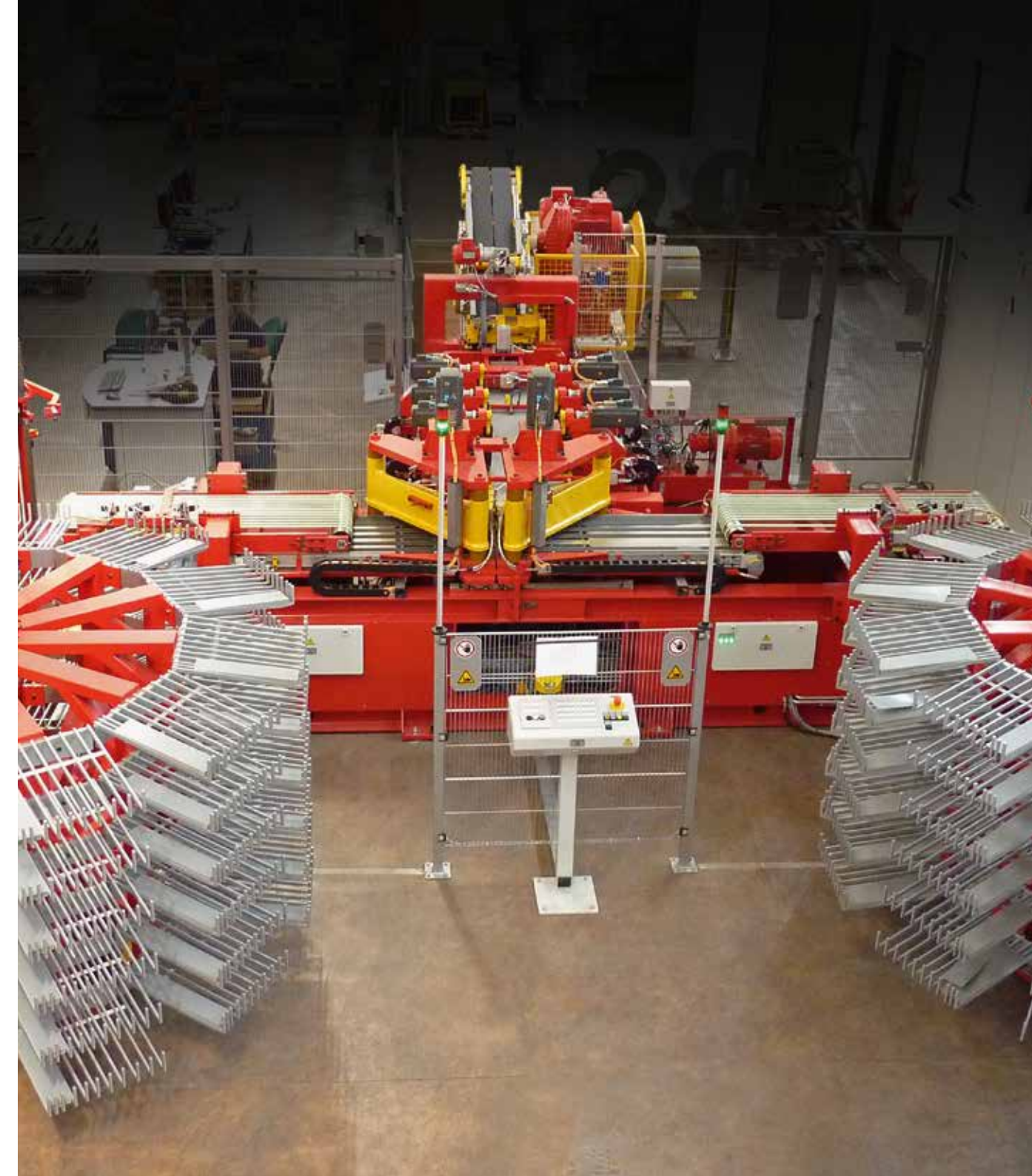
### Line Types

In addition to our classic precisioncut core cutting lines for step-lap stacked transformer cores, GEORG has developed advanced core cutting machines for other core designs.

The **GEORG precisioncut 230 amorph** is our solution for cutting laminations for amorphous cores. With speeds of 150 m/min the machine outperforms all other solutions on the world market.

The **GEORG precisioncut 500 reactor** is used to cut and stack laminations for toroidal reactor cores. It can be equipped with robot systems and large storage carrousel.

With our **GEORG precisioncut 300 wound** we are offering a high speed production line for distributed gap wound cores. Its eccentric shear is a sophisticated solution for high volume production cutting without stopping.

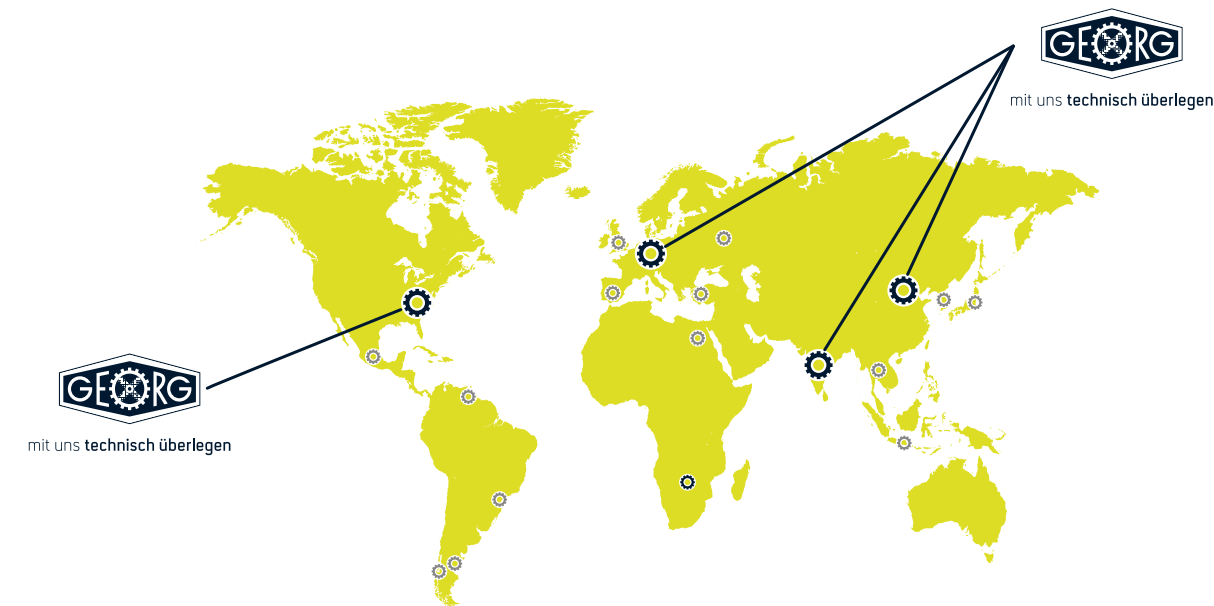




## Service with Real Added Value

The **GEORG protectionworld** Life Cycle Quality Management offers our customers an all-round package for the entire life cycle of their machine. Our services range from planning and consulting to production, monitoring, strategic maintenance, troubleshooting and comprehensive training concepts.

The **GEORG protectionworld** Life Cycle Quality Management helps to lower the operational costs of the machines significantly and to rise the profit of our customers.



## GEORG protectionworld

Life Cycle Quality Management



Continuous availability and competent support offered within the GEORG protectionworld.



A 'peace of mind package' that includes the various service packages and assures customers' protection, safety and quality.



Any support that guarantees the performance, strength and effectivity of the machine. This includes quick reaction and support in case of damage.



Improving and modernizing the efficiency and lifetime of the machine, this is forward thinking and the step into the future.



Product and financing solutions from one source.



All further educational offers around the GEORG product line and technological advice on the current state of possibilities.

---

What are your challenges?

Get in touch.  
[trafo@georg.com](mailto:trafo@georg.com)





mit uns **technisch überlegen**

**Heinrich Georg GmbH**  
Maschinenfabrik

Langenauer Straße 12  
57223 Kreuztal, Germany

Phone +49 2732 779-158  
Fax +49 2732 779-340

Email [trafo@georg.com](mailto:trafo@georg.com)  
Web [georg.com](http://georg.com)