



AM
RUCOMA



INNOVATION MEETS PRECISION: PERFORATION REINVENTED

More than a century of mechanical engineering experience combined in one solution

Perforating used to be a combination of many different machines. Today, the Ring Group offers a forward-looking solution: multiple processes intelligently integrated into one system.

From the initial idea to development, commissioning and maintenance we support you in every way. Our claim: Technology at the highest level, individually adapted to your requirements.

Competence meets progress

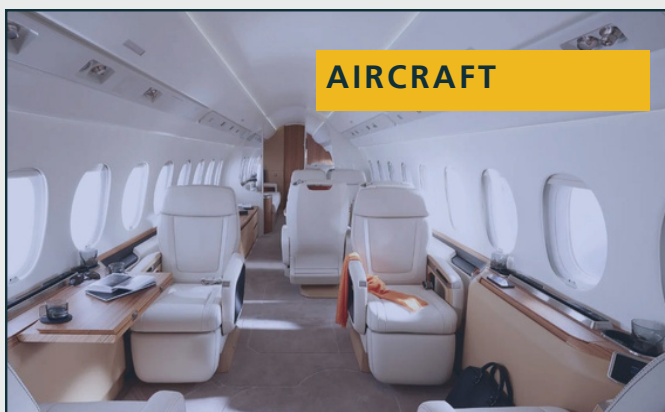
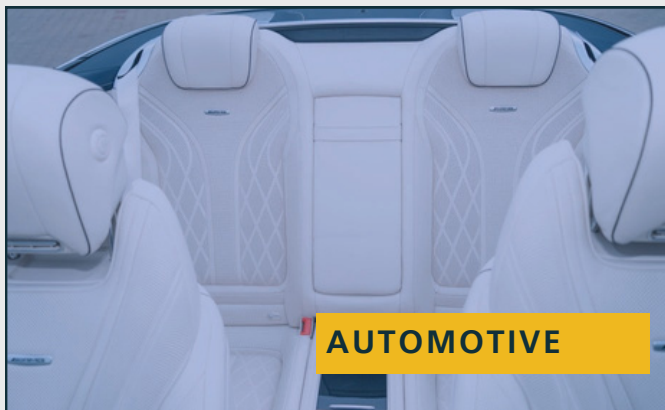
Our technicians and engineers, supported by highly motivated young professionals, are constantly working on the further development of our systems. The result is high-performance machines with innovative perforation technology that are precise, efficient and future-proof.
INDUSTRIES

The future is our present

Terms such as Industry 4.0, digital twins and the Internet of Things are not just trends for us, but part of our everyday life. Our software engineers develop digital solutions that revolutionise every-day production with enthusiasm and passion.

Ahead through innovation

Our customers benefit from numerous world firsts that we have successfully brought into market. These innovations give our partners decisive competitive advantages and secure their technological leadership in their industry.



APPLICATIONS

- Seats
- Headrests
- Door trim
- Headliner
- Accessories
- Flooring
- Fashion
- Shoes
- Medicine
- and much more

AT YOUR SIDE FROM THE VERY BEGINNING

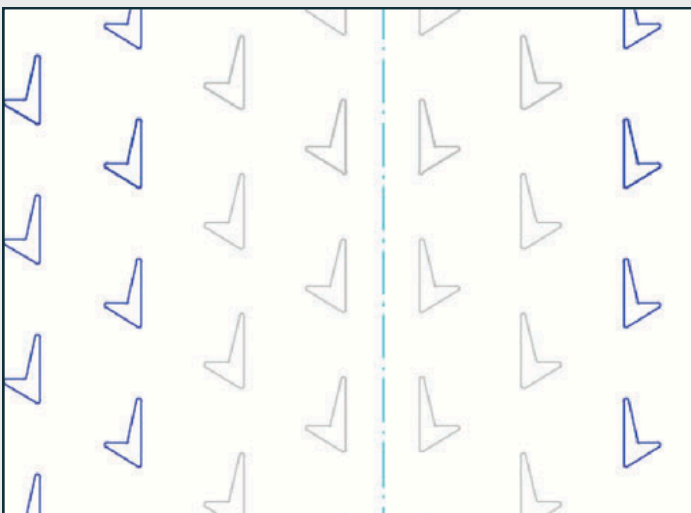
FROM THE IDEA TO THE PERFECT HOLE PATTERN

Development / Implementation / Partnership

For us, hole pattern development does not begin in production, but in dialogue with you. We support you in realising functional and costefficient perforation solutions right from the design phase. Our team checks technical feasibility, optimises samples and ensures that form and function are perfectly coordinated. With continuous support from a personal contact person, you maintain an overview at all times, from the initial design to approval.

Our services:

- Development of technical sample perforations
- CAD/Software-supported data processing
- Customised tools for special requirements
- Integrated testing processes (e.g. air flow measurement, visual inspection)



MACHINE AND TOOL MANUFACTURING

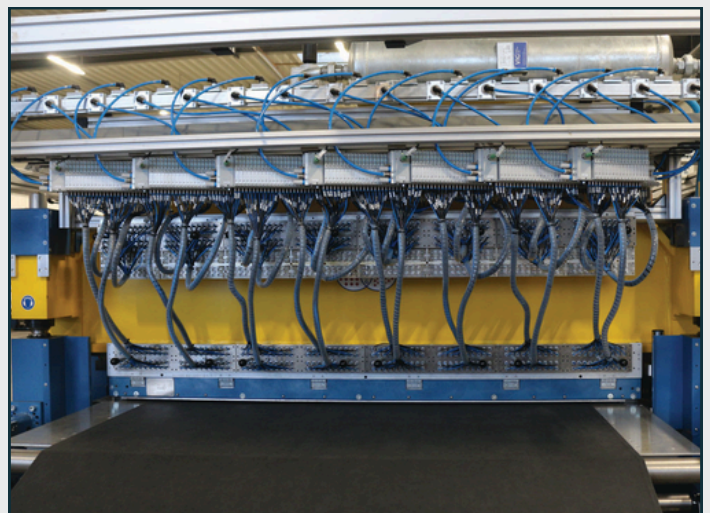
MADE BY RING GROUP

Since our foundation, machine and tool manufacturing has been the heart of the Ring Group. It is not only the basis of our innovative strength, but also the key of highest quality in the implementation world wide. Everything from a single source: From design and manufacturing to assembly, all processes are carried out internally – efficiently and precisely.

Our manufacturing expertise:

- In-house tool development
- State-of-the-art machinery (including CNC milling machines, eroding technology, hardening equipment)
- Closely integrated teams and short communication channels
- Strict quality control and documented testing processes

With our combination of technology, experience and flexibility, we not only supply tools, but also tailor-made solutions that make your production faster, safer and more future-proof.



STATE-OF-THE-ART CNC PERFORATION SYSTEMS

CNC perforation technology

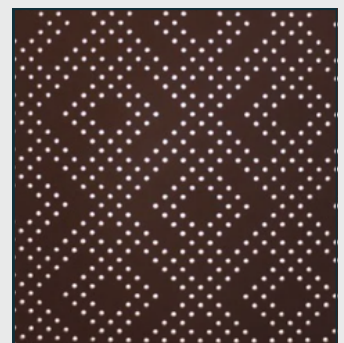
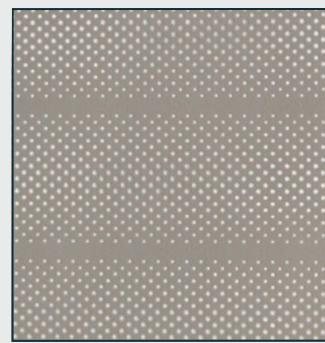
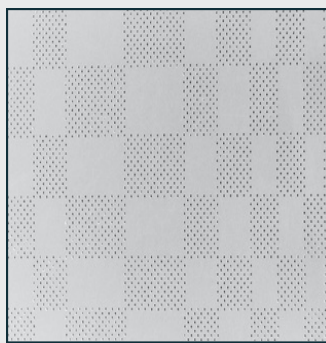
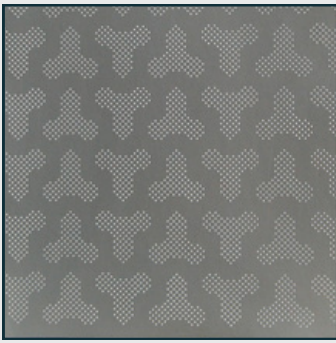
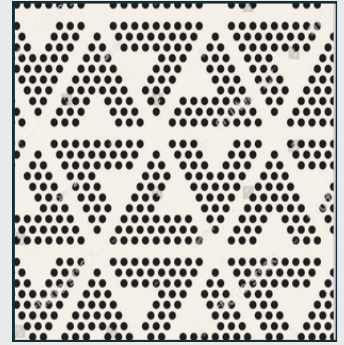
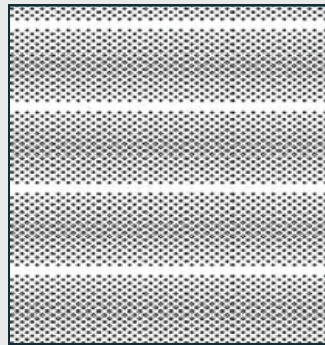
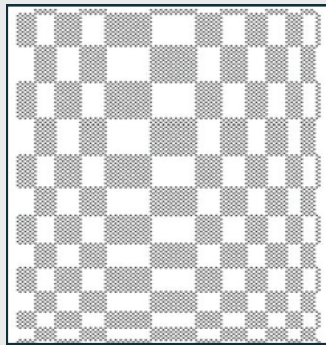
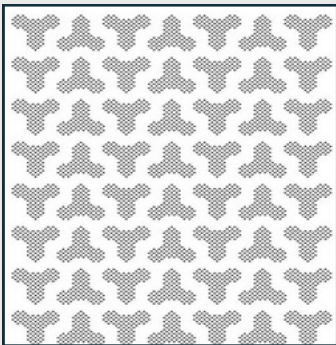
- Various pins possible
- Up to 22 different tools in a single operation
- Many possibilities from round to rectangular and other shapes
- For prototype development and small series production

Technical data:

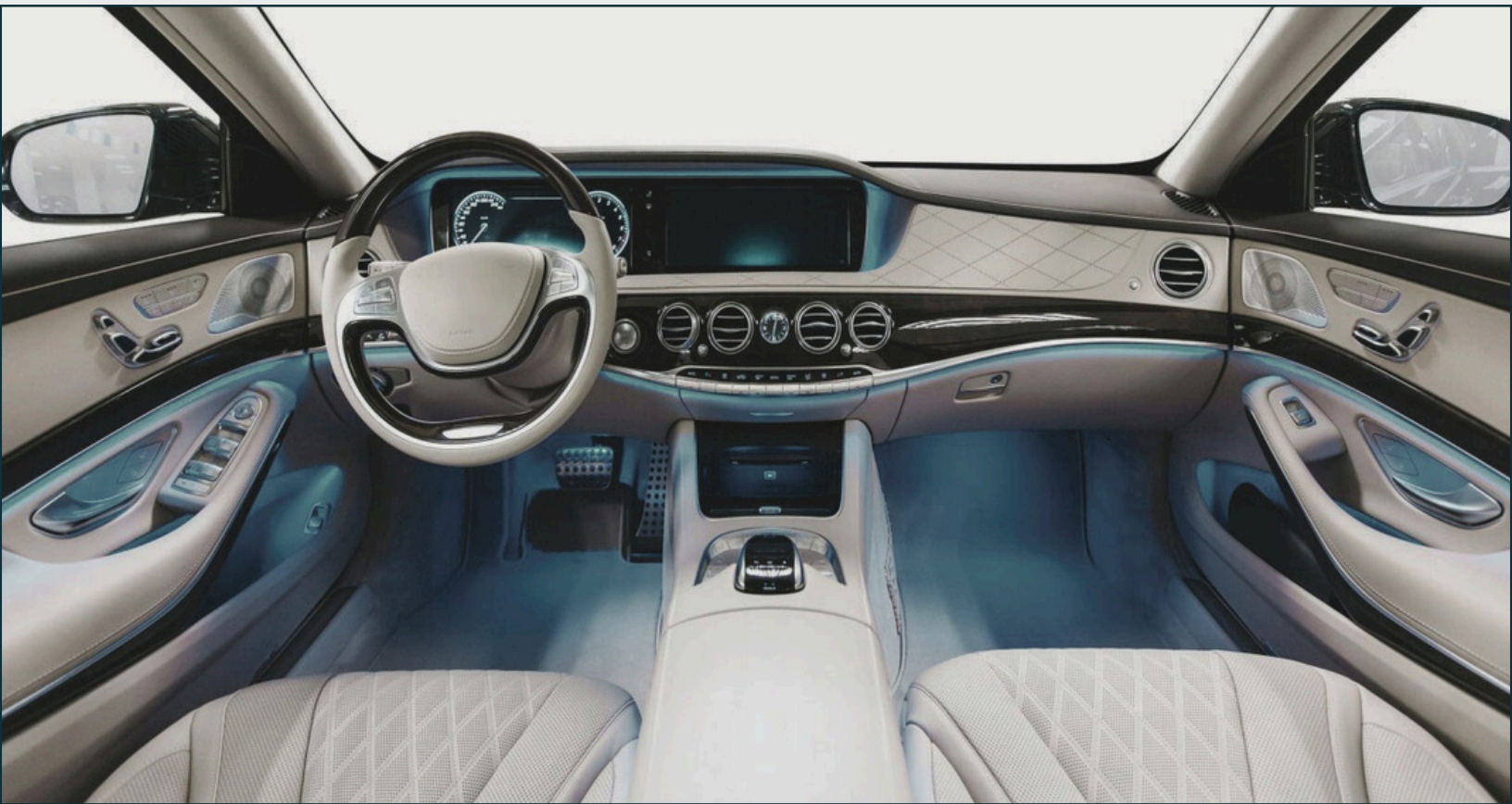
Working width: 3000 x 1500 mm up to
Strokes: 20 strokes/sec.



From the idea to execution in just a few minutes



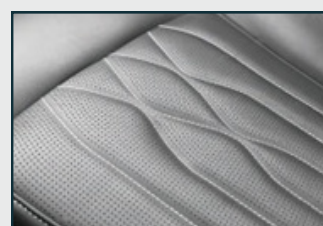
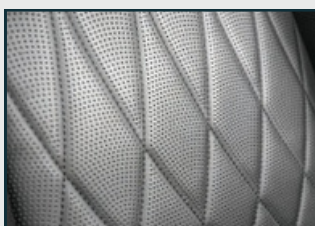
PRECISION IS OUR STANDARD



Our new generation of perforating machines combines state-of-the-art technology with decades of experience in the field of perforating. Developed in response to the industry's keen interest in high-performance solutions, they offer reliable performance for all types of materials and blanks. They have been specially designed for tools with a large number of perforating punches, resulting in improved perforating quality. You also benefit from significantly longer production times, allowing you to work more efficiently and cost-effectively.

Due to the compact design of our machines, you need little space for production, our machines enable a fast workflow and achieve impressive cycle rates up to 300 punches per minute. Intuitive operation ensures easy handling and efficient use.

Ideal for use in the shoe, leather, clothing, upholstered furniture and automotive industries, our machines are the perfect solution for efficient perforation of your cut-to-size pieces and roll to roll.



PRECISION IN PERFORMANCE

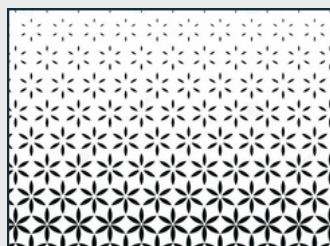
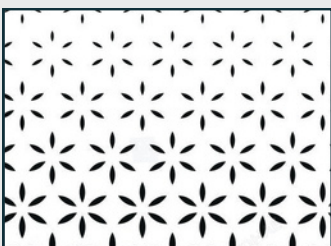
ME

- Hide and show of pins – flexible and precise.
- Working width 800 mm - 2000 mm
- Variable configuration of all tools
- Up to 300 strokes per minute possible, depending on the design and configuration of the machine
- Variable pin configuration within a tool
- Up to 4 full rows of pins in one tool, „also here, each pin can be controlled individually“
- One tool for a wide range of designs
- Ideal for designs with high variability



ME-Q

- Hide and show of pins – flexible and precise.
- Working width 800 mm - 2000 mm
- Variable equipment for all tools
- Up to 300 strokes per minute possible, depending on the design and equipment of the machine
- Variable pin configuration within a tool
- Up to 4 full rows of pins in one tool, „also here, each pin can be controlled individually“
- One tool for a wide range of designs
- Ideal for designs with high flexibility and variability
- Patented cross shift: placed perforation without repeat



STANDARD TECHNOLOGY

STANDARD ST

- Reliable performance tried + tested
- Working width: 800 mm – 2000 mm (special sizes on request)
- Up to 300 strokes/minute
- Classic perforation technology
- Adjustable to project requirements
- See options



HD MACHINE (heavy duty)

- Extra punching power for demanding materials.
- Ideal for strong materials & high throughput rates
- Precise perforation possible
- Design variety despite robust workmanship
- See options



AQC automation & convenience

Options:

- Automatic tool change (up to 5 tools in the magazine)
- Tool clamping without screws
- Industry 4.0-ready – interfaces for smart production
- Quick to change over & easy to maintain



ONE STROKE

Ring perforation technology for higher quantities

ONE STROKE

- High output rate
- up to 8 parts per minute
- Perforation with a single punch
- Hydraulic clamping
- Tool change slide in and slide out
- Automatic height adjustment
- Roll material (e.g. PU/PVC) possible



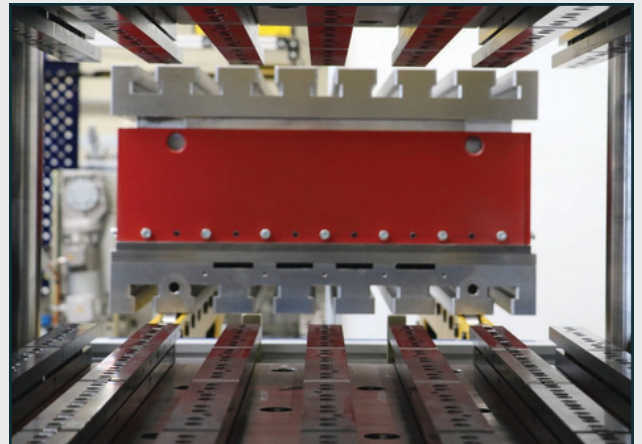
Technical data:

Punching force:
100 tonnes to 300 tonnes

Special perforation for high quantities
With different surfaces 100 x 100 mm to 1000 x 1500 mm

Surface versions:
100 x 100 mm to 1000 x 1500 mm
WZ 1200 x 750 (max 900 x 700) punching area

Dimensions/weight:
Width: 4250 mm with support rail for tooling
Height: 3285 mm
Weight up to 21 t depending on version



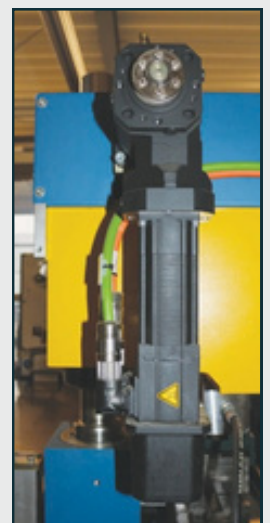
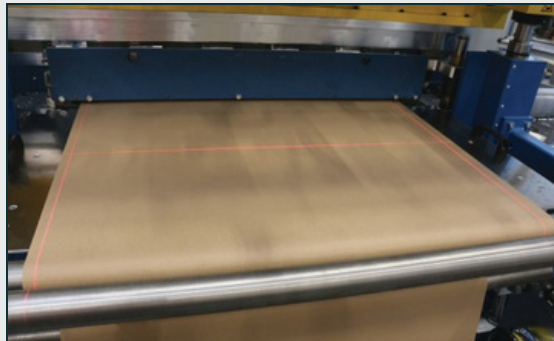
Optional:

Automatic loading and unloading - Up to 20,000 pins with 1 stroke



OPTIONS:

- Gap variants for punched perforations and designs via various feeds
- Position laser for precise alignment of the material
- Projector
- Industry 4.0
- 4-column design
- RFID tool recognition
- Automatic tool setup
- Servo height adjustment
- Powered winding and unwinding from 250 kg
- Laser projection for creating contour cuts
- Roll perforation system
- Plate perforation system (PU/PVC plates)
- Tool repeat up to 150 mm
- Programmable repeat control (for free gaps)

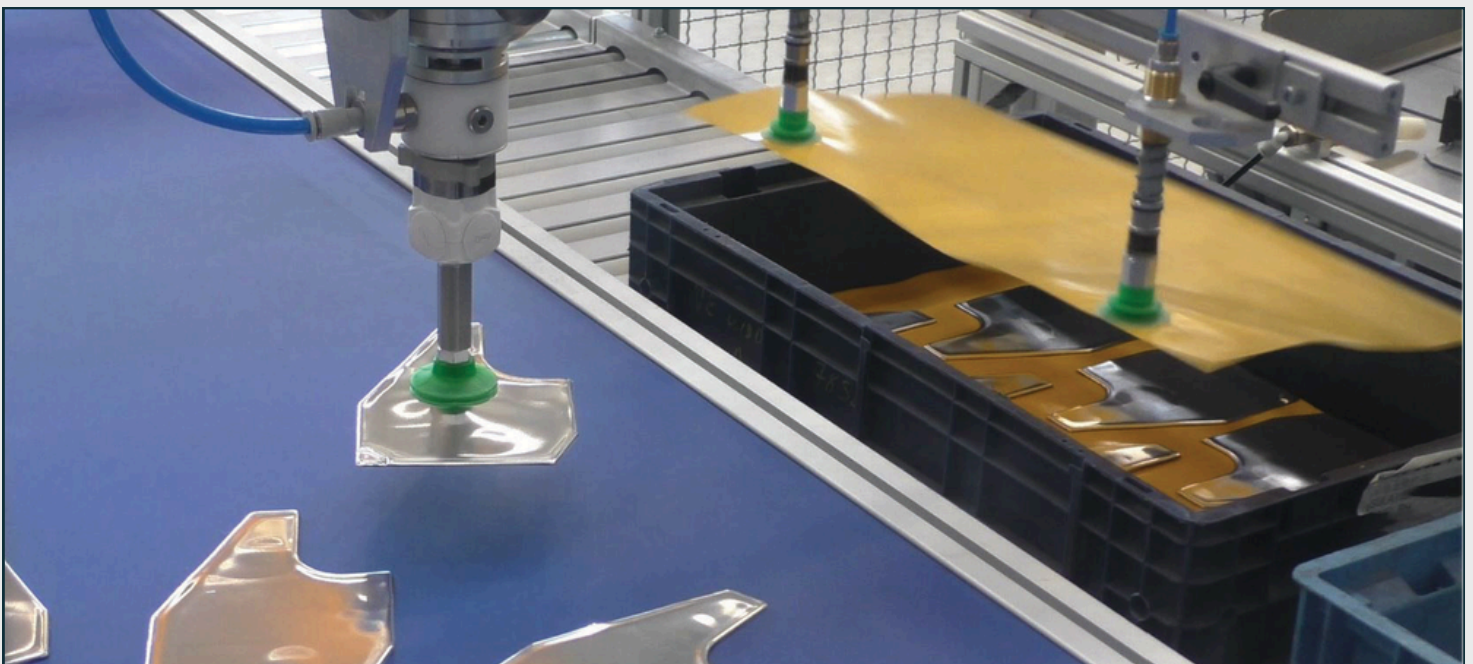
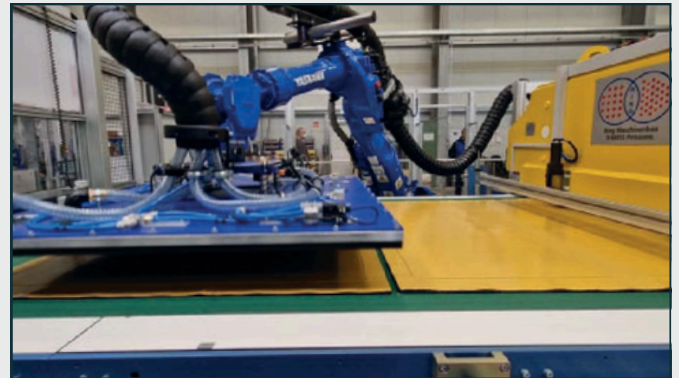
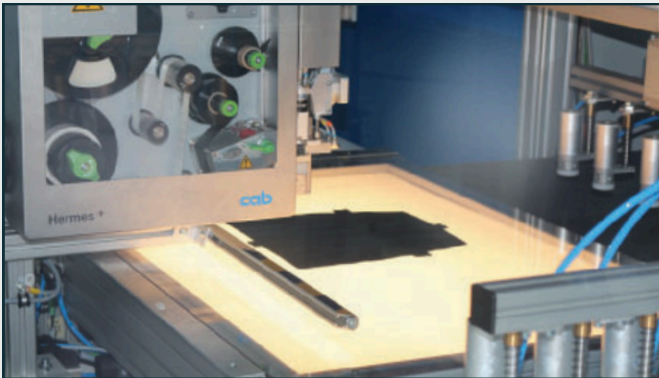


AUTOMATION

Technical processes for higher efficiency & safety

Automation allows many production tasks to be performed more efficiently and safely, for example through:

- Use of automatic loading and unloading systems with robots or handling modules
- Interlinking of individual processes with suitable conveyor and handling technology.
- Integration of various marking systems such as printing or labelling units
- Quality assurance using image processing systems
- Use of rotary indexing tables and much more.
- We are happy to support you in implementing your projects!



SERVICE PERFORATION

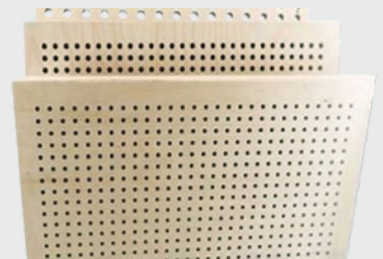
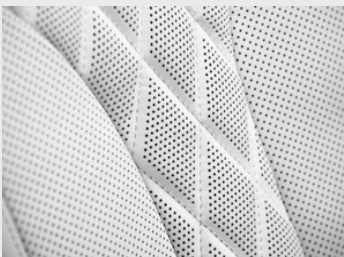


Precision is the key

Quality and efficiency are our top priorities. With various locations worldwide, more than 50 state-of-the-art machines and a wide range of tools, we are the market leader of service perforation. This enables us to produce quickly, flexibly and cost-effectively for you regardless of whether it's small series, trial phases or serial production. As a reliable contract manufacturer, we rely on German quality: all products are manufactured in Germany and impress with their precision and durability.

Your solution for high-quality perforation products

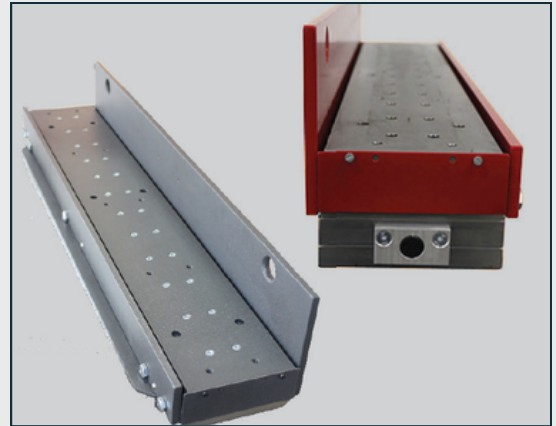
Our innovative technology makes it possible to manufacture products for a wide range of industries and applications. Our customers are in the field of automotive industry, caravan, aircraft, cruise & ferry, textile, medical, footwear & fashion, sound insulation, building technology sectors and many more. Rely on our expertise and benefit from tailor-made perforation solutions – precise, reliable and efficient.



TOOLS / SPARE PARTS

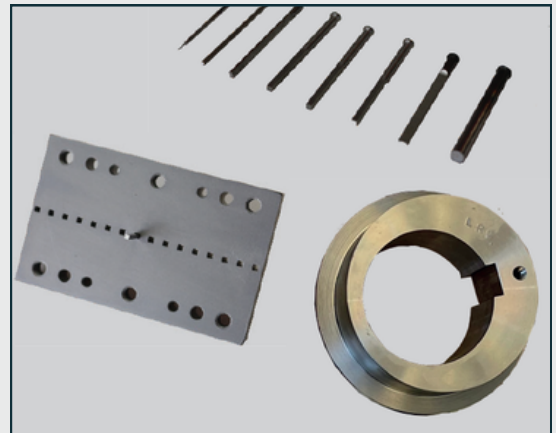
NEW TOOLS

Optionally adapted to your products and your demands Our tool plant primarily manufactures and maintains the perforating tools for our and your perforating machines. Tools are often manufactured specifically to customer requirements. Cutting tools and other special perforating tools are manufactured on state of the art CNC machines. This ensures the highest possible quality and short production times. Rely on our expertise and benefit from tailor-made perforation solutions – precise, reliable and efficient.



SPARE PARTS

Our service – we are here, when it counts If a component on your machine or tool breaks, our dedicated team is always on hand to help. We assess the damage, provide you with suitable solutions, send replacement parts directly to you, or send our technicians to your company to provide rapid on-site assistance. In many cases, replacement parts can even be shipped on the same day so that your production can continue without interruption. Talk to our staff – together we will find the best solution for you.



TRAINING

Optional and optimal training for your employees
Optimal maintenance and precise adjustment of perforating machines and tools lead to improved quality and longer lifetime.

Training on your tool:

- Regrinding
- Assembly
- Alignment
- Installation



NOTHING IS IMPOSSIBLE

SPARE PARTS

REPAIR SERVICE

We repair every component of your system that we supply exclusively with original spare parts. Repairs are carried out by our experienced service team. If necessary, we can also provide support for third-party systems at any time to ensure smooth operation.

REPLACEMENT AND WEAR PARTS SERVICE

Our service team provides expert advice and delivers original spare parts quickly and on time. That means for you, reliable production and no unnecessary downtime costs.

OUR SERVICES

- Information about costs and delivery times
- Personal advice for initial equipment
- Spare parts concepts tailored to your individual needs, based on our experience
- Preventive maintenance
- We inspect your system, analyse its current condition and evaluate it. We can detect damage in time before it leads to downtime.

WHAT WE DELIVER

- Assessment of the current status
- Checking electrical and mechanical functions
- Determining repair and maintenance requirements
- Identifying defects and risks

SERVICE PROMISE

If you have any questions or would like to arrange a service appointment, please do not hesitate to contact us – we are here to help.

SERVICE

REMOTE MAINTENANCE

You can contact our specialists via our telephone service, who will provide you with competent and helpful support in the event of acute problems. If necessary, we will access your system remotely via the Internet to quickly locate and specifically remedy any malfunctions.

REMOTE MAINTENANCE

Via augmented reality glasses. Our innovative service product with AR glasses enables direct communication with video transmission between our service team and you. This allows us to see your system live and ensure even better remote maintenance.

MAINTENANCE AND SERVICING

To ensure the longevity of your machines, we recommend service and maintenance contracts carried out by our experienced specialists. They replace defective parts, identify hazardous areas and advise on necessary repairs. After maintenance, you will receive a test report with recommendations. The maintenance intervals are monitored by our team so that you are informed on time about upcoming appointments. Systems with a maintenance contract have priority status in the event of malfunctions.

Companies do not need their own service teams or expensive specialists, as our service takes care of maintenance. This extends the service life of your systems and can delay investment intervals.

Maintenance is carried out every 6 or 12 months, depending on the type of system and usage. Exact dates are agreed in advance by telephone. Our service team checks all electrical, mechanical, hydraulic and pneumatic components, as well as their functions and wear.

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