



GSR



GSR SILVER TOOL HOLDERS

**TRADITION MEETS INNOVATION**

THREADING TOOLS  
Gustav Stursberg

GSR SILVER TOOL HOLDERS

# INNOVATION MEETS EFFICIENCY

**Dear customers,**

at GSR we constantly strive for improvement. Therefore, we have rethought a well-known product. Two aspects were at the forefront: a higher performance as well as a more environmentally friendly production method.

The result is impressive: the new GSR silver tool holders with matt black handles and a light blue body.

From idea to completion, every single step was "100% made by GSR".

Look forward with us to a beautiful and powerful product!

**Your GSR-team**

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THE GSR THINK TANK

# EFFICIENCY MEETS SUSTAINABILITY

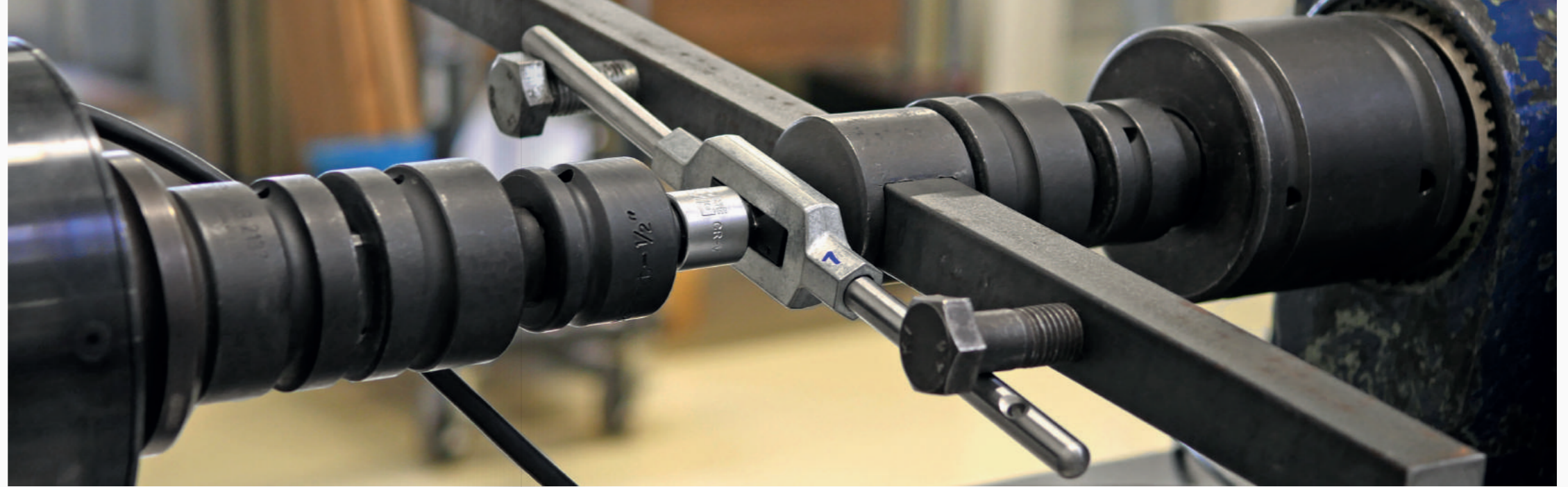
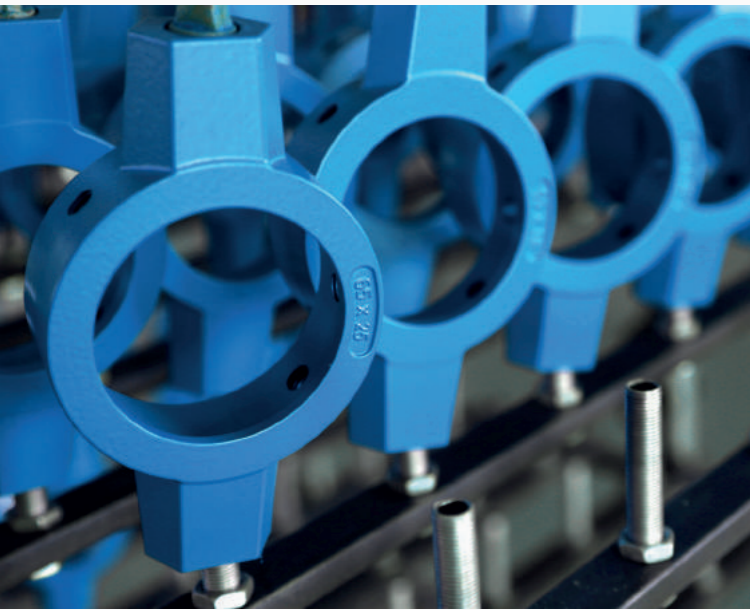


## Everything 100% made by GSR

Economic efficiency and a careful treatment of the environment were the two most important criteria for the redesign of our production.

Now all work processes can be carried out in our own factory. This allows maximum of flexibility in production and permanent control of the individual manufacturing processes.

Consistent quality and compliance with the relevant legal regulations under our own control are thus guaranteed.



## From 3D model to prototype

Thanks to the latest technology, the journey from an idea to a finished product is short and efficient.

First, the idea is technologically prepared and visualized with CAD systems. With the help of 3D printers, functional models are created, tested and revised again.

The digitalised data then forms the basis for automated mould construction as well as CNC machine tools.

Thus, our products are realized in a simple and effective way and subsequently manufactured industrially.



## Environmentally friendly production

The production of our new tool holders was completely redesigned. Processes and materials that have a sustained negative impact on the environment were rigorously avoided.

For the surface treatment of the tool bodies, we use a new type of closed-circuit system for powder coating. The applied powder 100% utilized. There is no exposure to the environment and no raw materials are wasted.

For the handles, we have completely renounced coating with chrome plating. Instead, we use an environmentally friendly burnishing and nitriding process for surface refinement. The result is a smooth surface with an even coating. It protects the metal material against corrosion and is impact and scratch resistant with a very thin coating.



## Certified performance improvement

The new tool holders were designed with the clear objective of making the basic tool body more resilient. We have chosen the maximum torque until breaking as an objective criterion for this.

In cooperation with the VPA (an authorised Testing Institute for Tested Safety (GS) marks in Remscheid, Germany), we have developed a method to measure the torque until breakage. In a series of tests, we then compared conventional tool holders with our new GSR silver tool holders.

The results are clear: the new geometry with the GSR honeycomb design in combination with a hot-chamber die-casting process and the base material Zamak 5 provides significantly higher torques in the class of zinc die casting tools.

In comparison with standard tools, differences of up to 120% were found. For the user, this means less risk of breakage and thus more safety.

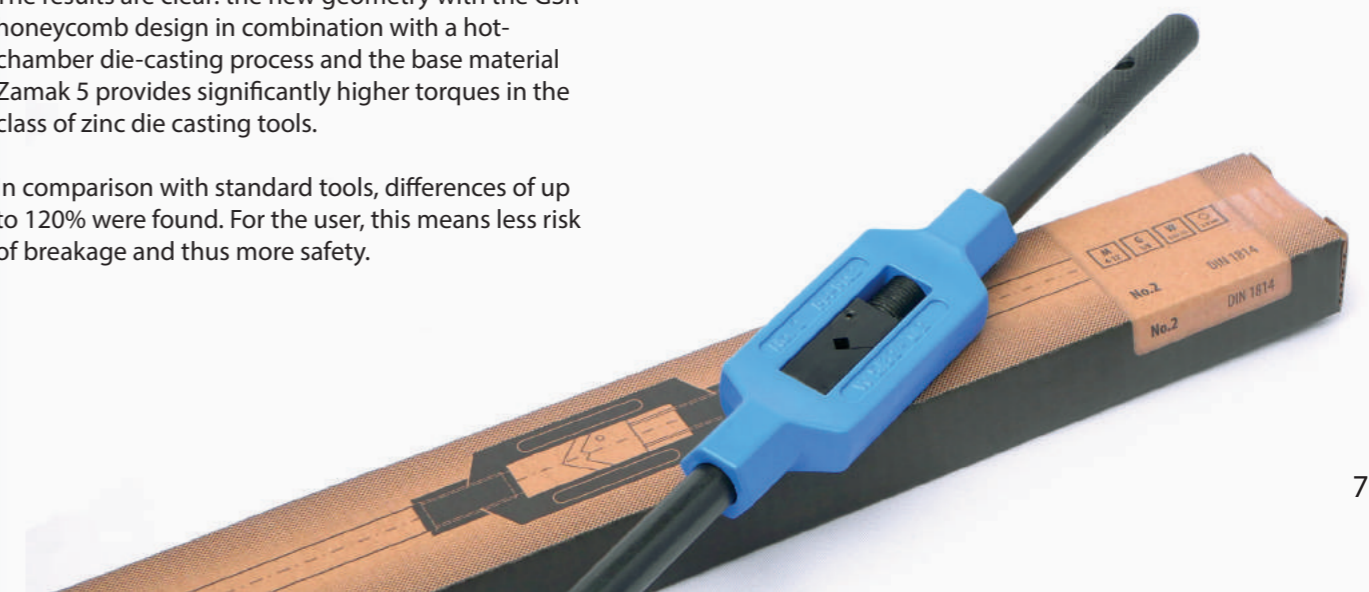
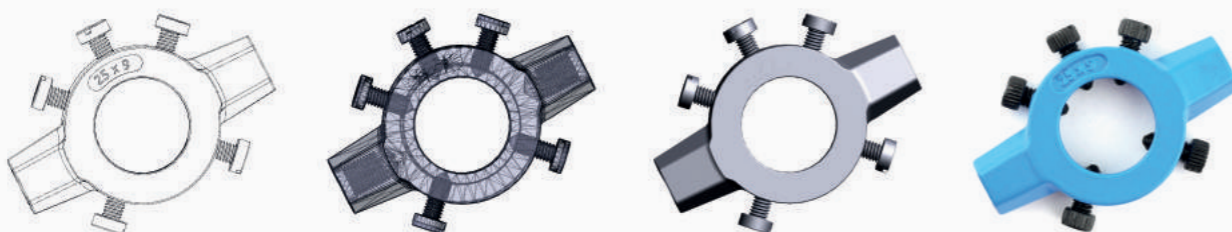


## Sustainable packaging solution

Using plastic bags as packaging offers the advantage of protection of the product while having it clearly visible. However, plastic is an environmental burden that we want to avoid at all costs.

This is why we have decided to pass on visibility and use a folding box made of recyclable material. The monochrome print and the new design have resulted in a modern packaging.

Sustainability can also be appealing!



THE GSR HONEYCOMB DESIGN

# SUSTAINABILITY MEETS DESIGN

The elegant honeycomb design defines the visual impression of the new GSR tool holders. But this modern look also has a solid technical background:

The geometric shape of the tool body makes the tool holders more resilient by a multiple compared to tools without the honeycomb design. For example, the adjustable tap wrenches are up to 80% more resilient, die holders even up to 120%.

In addition to that, the tool body is made of the zinc die-cast alloy Zamak 5 in a hot-chamber die-casting process. Zamak 5 has a lower ductility than other alloys and an overall higher tensile strength. This prevents blowholes (defective cavities in castings), which results in products with particularly close tolerances and sophisticated surfaces. However, the improved performance is not at the expense of the environment: Zamak 5 has a very low melting point, is resource-efficient, and recyclable.

The tool body surface is then finished with a baked powder coating in light blue. Together with the matt black handles, the entire product gets the characteristic GSR brand look. Like all tools of the GSR silver product line, the new tool holders are of high-quality workmanship, durable, and universally applicable.

A direct comparison of the fractures makes it clear: the new GSR silver product (left) has, unlike the conventional product (right), no cavities, so-called blowholes.



## Round die holder acc. to DIN EN 22568

### KNURLED HANDLES

for better grip during the work process

### BURNISHED FIXING SCREWS

for safe securing of the round die

### ZINC DIE-CAST BODY

made of Zamak 5 with environmentally friendly powder coating

### BLACK HANDLES

made of burnished and nitrided machining steel

### INCREASED PERFORMANCE

through improved geometry of the tool body: the honeycomb shape

PRECISELY CRAFTED COMPONENTS

## DESIGN MEETS PRECISION

The handles of the new tool holders are made of machining steel. After they were lathed on a CNC machine, the fine thread for the connection with the tool body was roll forged. The section at the end of the handles was further equipped with a cold-formed knurling to make the tool more grippy and prevent the hands from slipping during the working process. Finally, the handles were finished in black with an environmentally friendly burnishing and nitriding process.



The clamping jaws for holding tools with a square shank according to DIN 10 are made of tool steel. They have been eroded and are therefore particularly precise.

The adjustable tap wrench also has a so-called working hole in the unscrewable handle. A spindle toggle can be inserted there. This allows the clamping jaw to be tightened with a higher torque, yet with the same effort and the square shank tool to be better secured.

The clamping jaws themselves have been precision-eroded and hardened. The movable jaw can be adjusted play-free via a fine thread. It was also equipped with a cotter pin. This safety device is located in a guide groove within the movable handle. This stabilises the jaw on the movable handle. The cotter pin in combination with the guide groove is used to secure the connector against axial displacement. This ensures the safe use of the tool at all time.

Adjustable  
tap wrench  
acc. to DIN 1814

### WORKING HOLE

for mounting the spindle toggle and clamping with higher torque

### CLAMPING JAWS

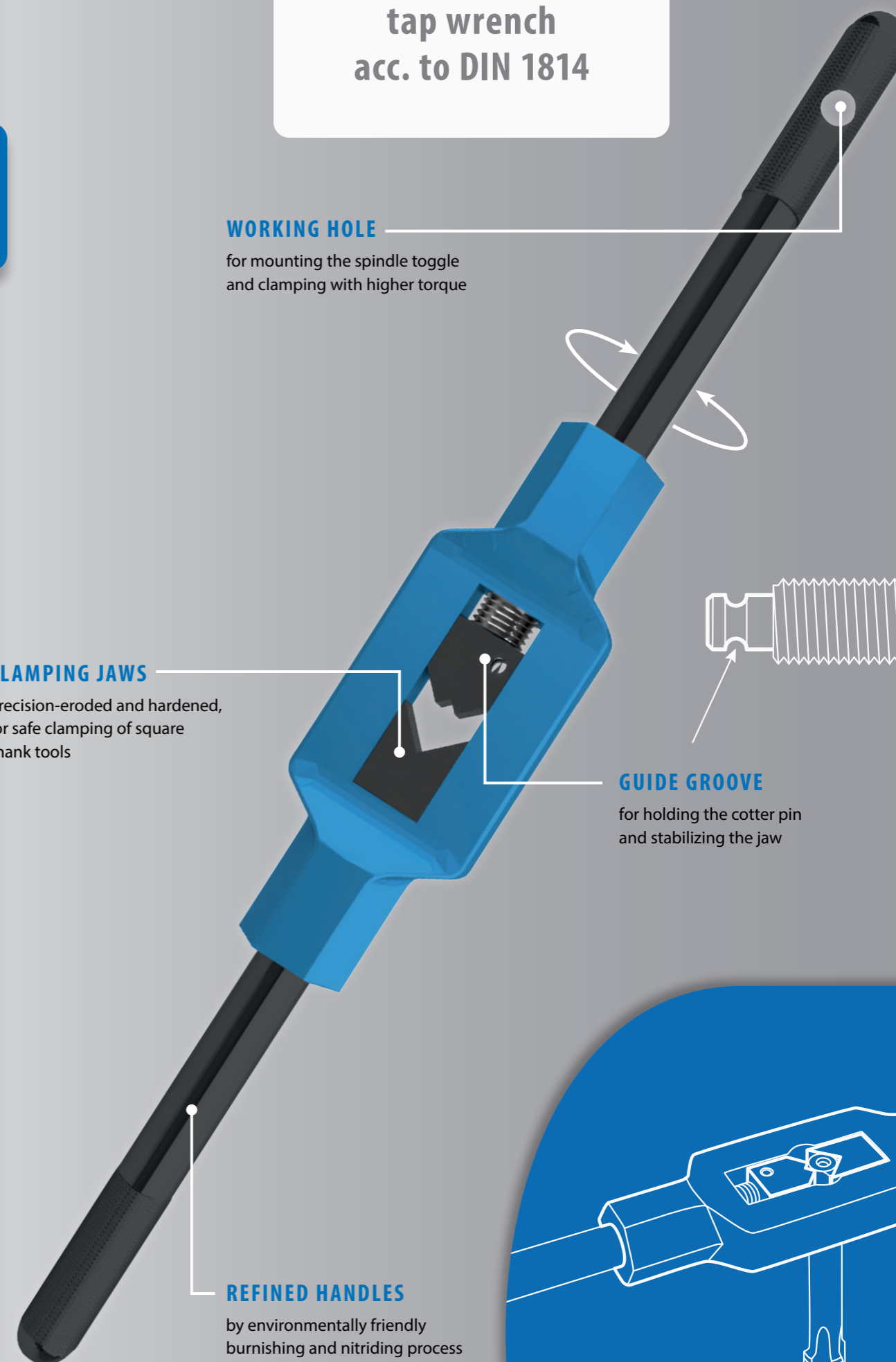
precision-eroded and hardened, for safe clamping of square shank tools

### GUIDE GROOVE

for holding the cotter pin and stabilizing the jaw

### REFINED HANDLES

by environmentally friendly burnishing and nitriding process



No. 2 M4-M12

The GSR silver tool holders  
in action!  
SCAN HERE:



or under  
<https://bit.ly/gsr-silver-tool-holders>

**GSR silver product** high-performance  
precise products one step ahead  
**versatile** optimised  
**practical** in-house production  
**powerful** Can take more!  
**quality** individual of tool holders  
reliable the new generation  
solid ecological  
When visions become reality  
Zamak 5  
**sustainable** efficient  
as versatile as our customers  
adaptable design  
**100%** made by  
**GSR** modern high-quality sturdy  
certified **exclusive** worry-free package  
resource-efficient **new**

GSR SILVER TOOL HOLDERS

# EXCEED ALL EXPECTATIONS

GSR Gustav Stursberg GmbH Schmiedestraße 4 42899 Remscheid, Germany Fon +49 2191/5833 Fax +49 2191/52769 Mail [info@gsr-germany.de](mailto:info@gsr-germany.de)

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[www.gsr-germany.de/en/](http://www.gsr-germany.de/en/)

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