

The image features a 3D rendering of a metal chip being cut from a roll. The chip is shown in a curved, floating position above a series of parallel metal strips. The SIMTEK logo is positioned in the upper left corner. The background is a gradient of gold and yellow, suggesting a high-temperature or industrial environment.

**SIMTEK**

Controlling chips.  
Increasing productivity.  
**Reducing costs.**

## Reduce your costs with 3D-lasered chip forming geometries

SIMTEK precision tools stand for high performance and process reliability.

Thanks to 3D-lasered chip forming geometries, we increase this performance and process reliability even within the most difficult machining conditions.

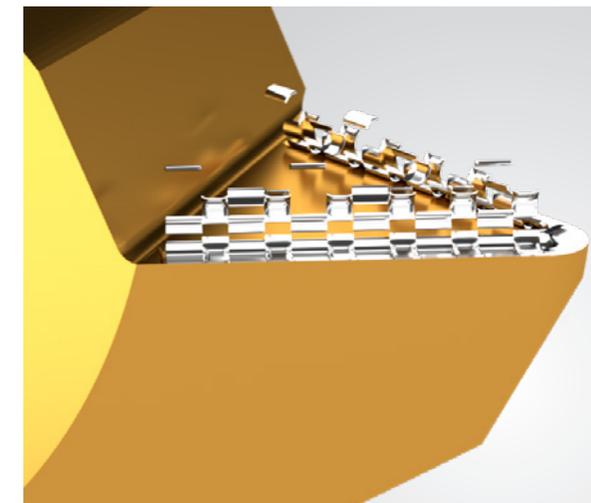
The basis remain precision-ground carbide tools from SIMTEK, in the quality you know and expect from us since 1994.

Depending on the application, we expand these with 3D-contoured, lasered chip forming geometries. These geometries follow a wide variety of objectives, but mainly two: **to reduce your costs and increase your productivity.**

Hundreds of challenging customer-specific machining applications have already been solved with SIMTEK's lasered chip forming geometries in the recent past.

On the following pages we show you exemplary solutions.

Feel free to contact us any time.

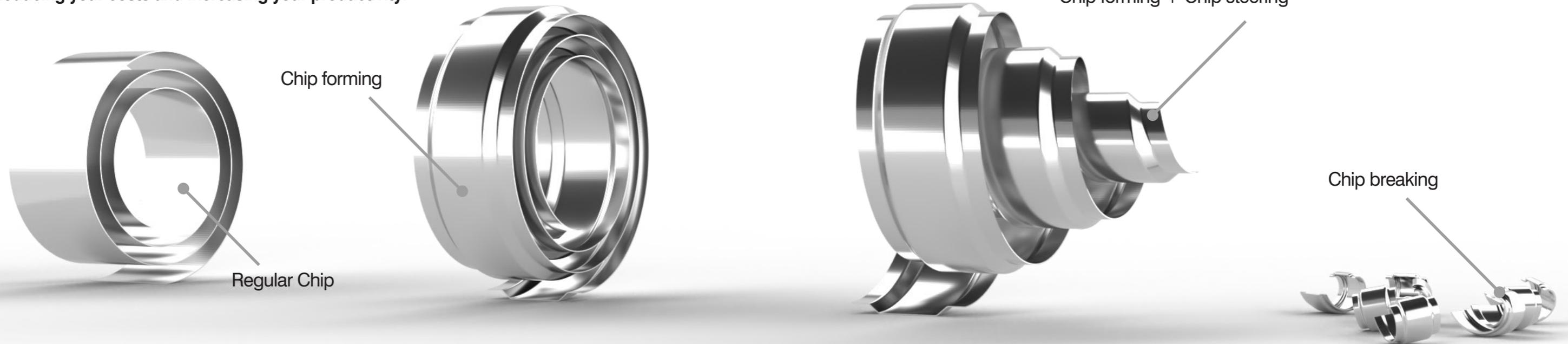


## Optimum chip control is of decisive importance for economical machining.

Reducing non-productive time, avoiding 100% controls: there are many reasons to ensure optimum chip control in series production. SIMTEK offers highly precise, 3D-lasered chip forming geometries, which are specifically adapted to your machining application. According to the requirements, the chips are shaped, steered, segmented, broken or, by combinations of these control mechanisms, removed from the machining area.

During the whole process, we focus on two things above all:  
**Reducing your costs and increasing your productivity!**

+ Reducing costs  
+ Increasing productivity

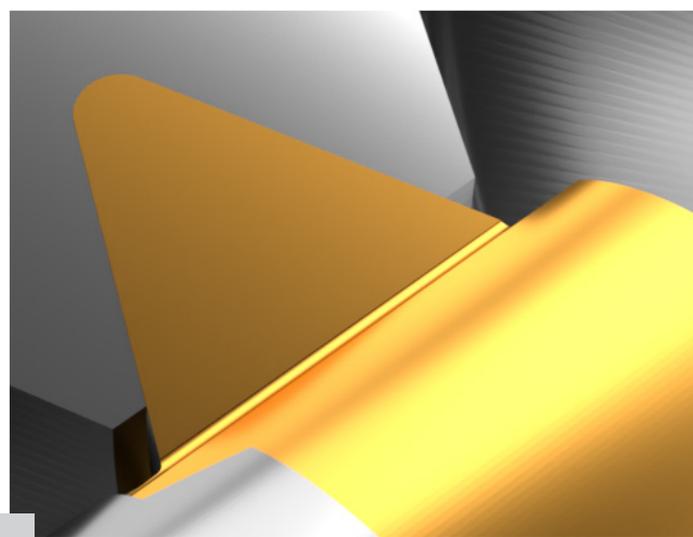


Exemplary application

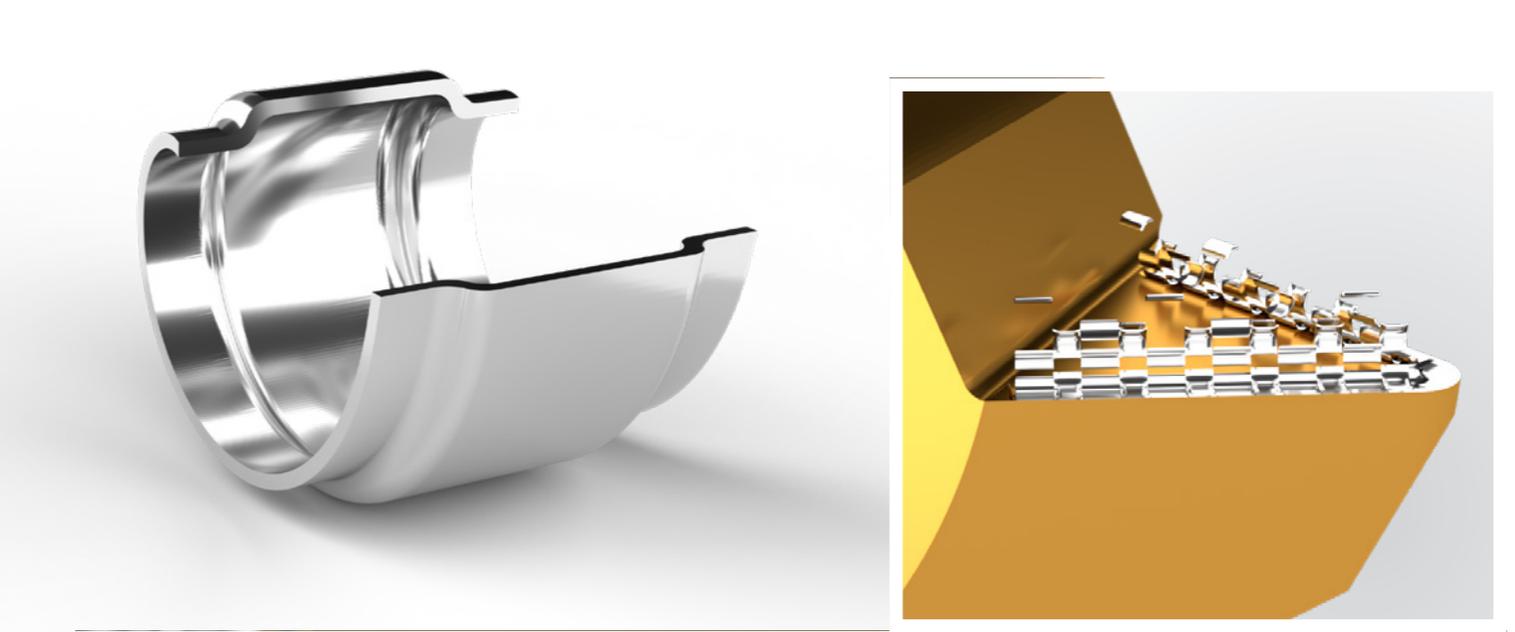
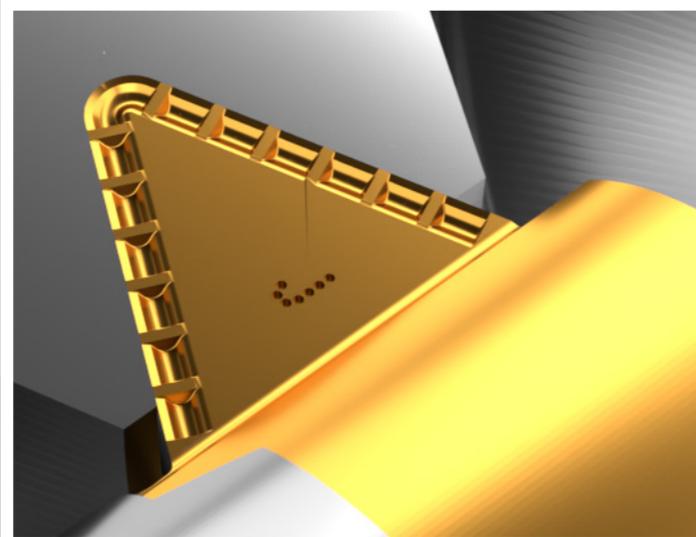
## Segmenting, forming and breaking of the chip thanks to 13 lasered chip forming pockets.

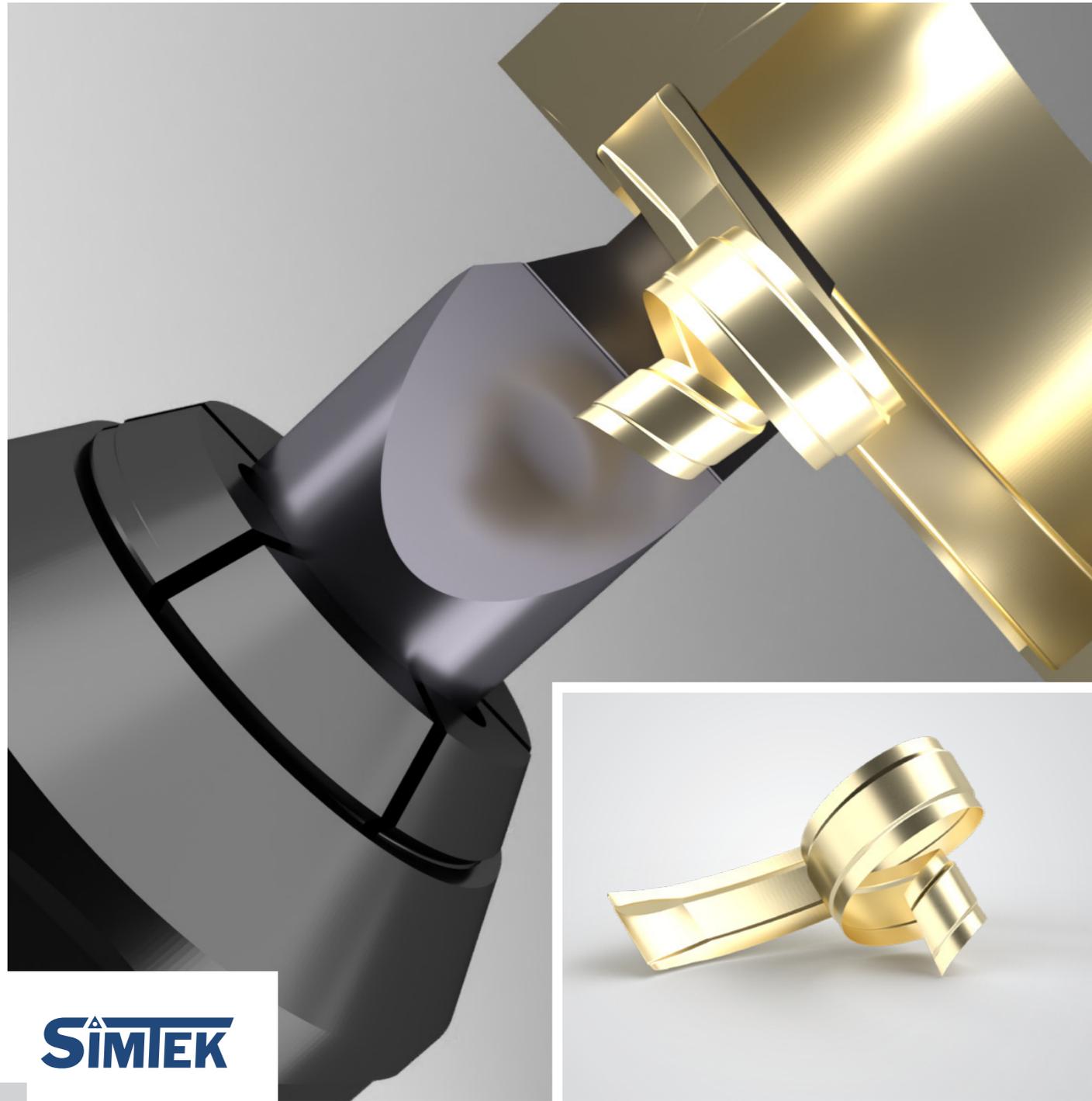
The conversion of this customized threading application was carried out with the goal to reduce non-productive times. The reason for the previously high nonproductive times was a chip forming that was difficult-to-control and could not be solved with conventional methods for chip control.

Initial situation



Application-specific chip control using 13 lasered chip forming pockets



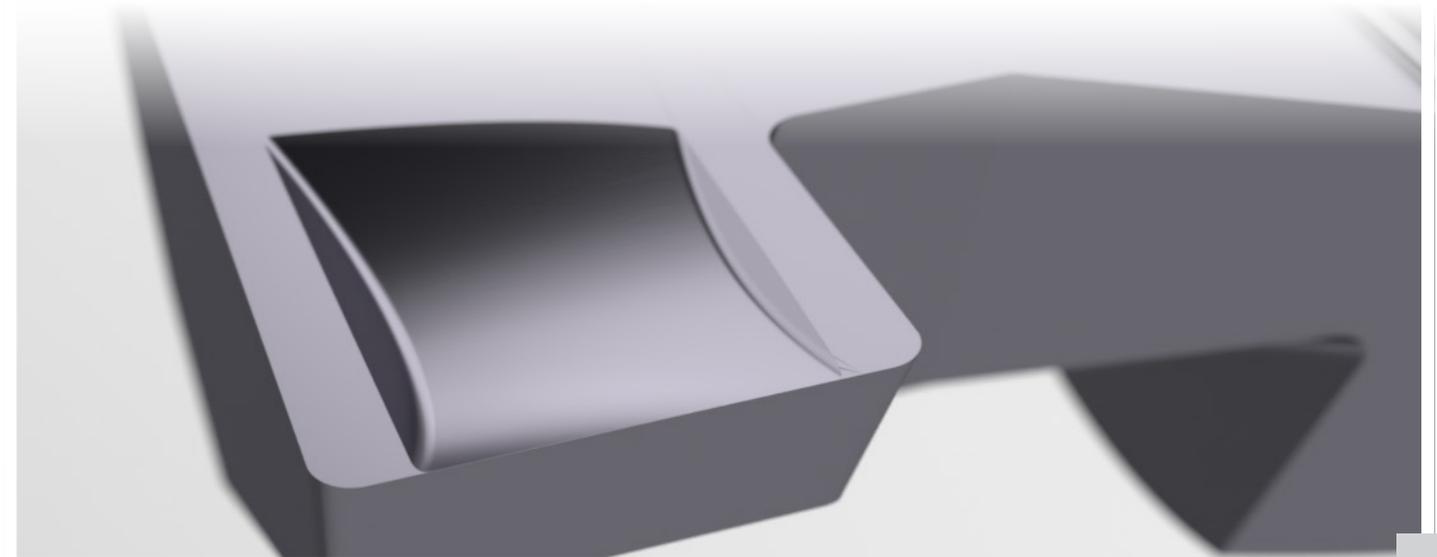


Exemplary application

## Controlled steering of long-chipping materials thanks to 3D-contoured, lasered chip forming pocket

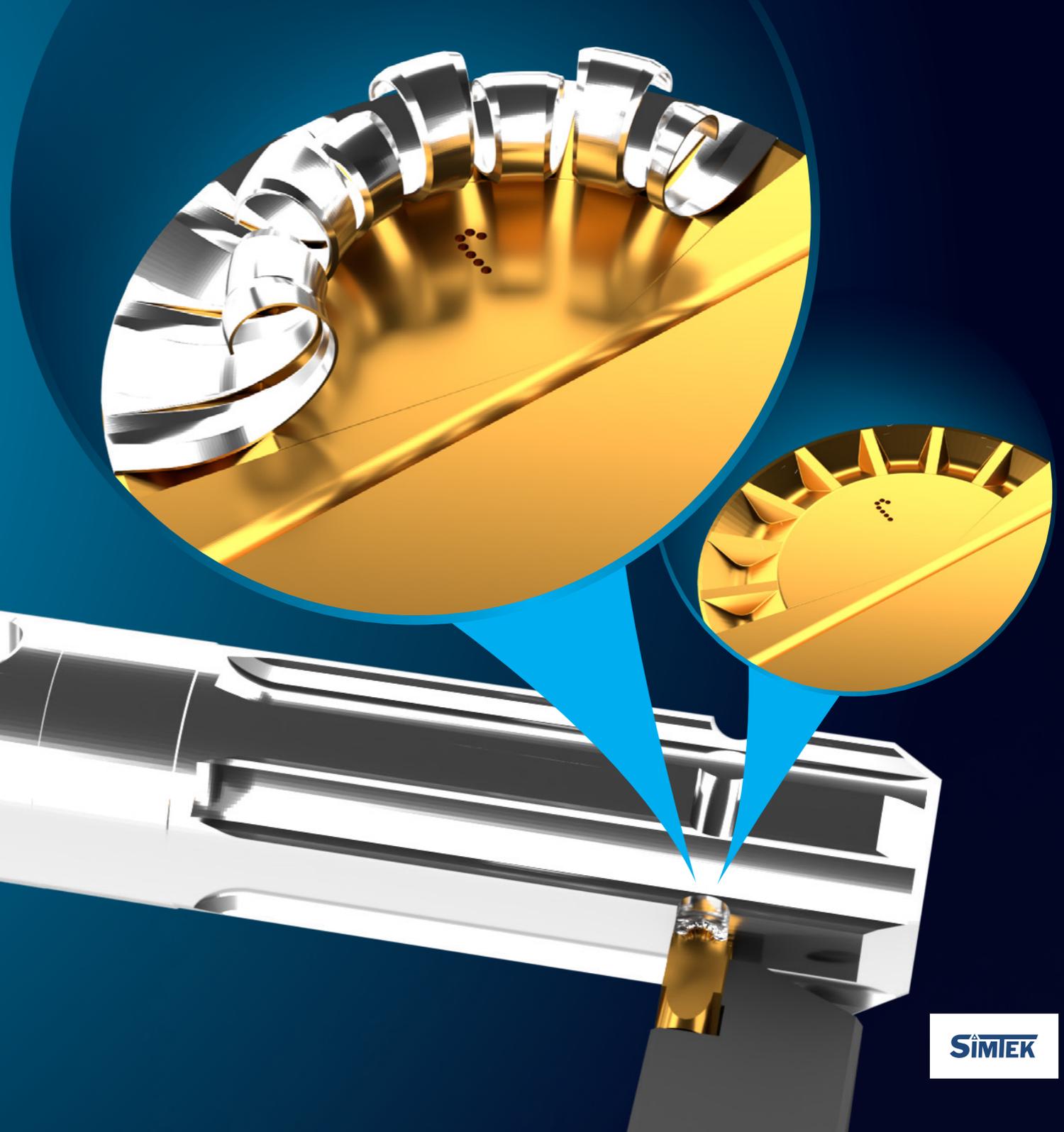
For long-chipping and difficult-to-control materials, such as lead-free copper and brass, 3D-contoured, lasered chip forming pockets are exceptionally suitable. Especially during internal machining applications with small bore diameters, chips can be steered out of the component in a safe and controlled manner this way. Machine downtimes can be significantly reduced or even avoided altogether as a result.

3D-contoured, lasered chip forming pocket



Controlling chips.  
Increasing productivity.  
Reducing costs.

Contact us, we will be glad to be at your service:  
[www.simtek.com/contact](http://www.simtek.com/contact)



## Optimum cutting grades as a basis for optimum chip control.

Our GRADIUM cutting grades are optimally adapted to the requirements of a wide range of machining operations and materials. They are the basis for the high performance level of the SIMTEK precision tools.

Each SIMTEK tool is developed and ground with the highest precision and care, is based on application-specific carbide and, in case of GRADIUM cutting grades, is finished on state-of-the-art coating machines within the SIMTEK Group.



**GRADIUM**

GRADIUM X6  
GRADIUM X7  
GRADIUM X8  
GRADIUM X4  
GRADIUM X5

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