

Customized clamping solutions with precision

For individual tool and
workpiece clamping

Hand in hand for tomorrow



More than
85,000
customized clamping
solutions



SCHUNK

Precision clamping solutions

Workpiece and tool clamping in the micron range

For more than 40 years SCHUNK has been developing and manufacturing expansion toolholders and expansion arbors for highly exact lathing, milling, boring, serrating, grinding, checking, mounting and balancing. As an experienced partner, SCHUNK provides its expertise in hydraulic expansion, hybrid, and purely mechanical clamping technology and develops tailored solutions in partnership with you.

Tailor-made perfection.

From the initial discussion through to integration of the finished clamping element in your processes, you benefit from our customer orientation and development expertise. By providing an individualized engineering design, we ensure optimal adaptation of the clamping device to the workpiece and machine. As more than 85,000 successful customized solutions for extreme requirements show: SCHUNK offers perfectly made-to-measure precision clamping technology.

Your partner for precise clamping solutions

- + Customized clamping solutions
- + Optimal surface clamping for very high torques
- + Multiple workpieces can be clamped
- + Easiest handling
- + Maximum run-out and repeat accuracy down to ≤ 0.003 mm
- + Excellent vibration damping



It's time to use your machine's full potential! 100% solutions for clamping technology

It is our claim, to make you sustainably competitive with our clamping solutions. It makes no difference to us whether you are striving for greater efficiency for your clamping task, or have to rely on innovative approaches to solutions in the search for feasibility.

**Your direct contact to the specialist department
Special Hydraulic Expansion Technology**

Tel. +49-7133-103-2555

Mail: sonderdehnspanntechnik@de.schunk.com

The SCHUNK Solution Guide

Solves 85% of all individual requirements

With the SCHUNK Solution Guide, we offer you one contact person for all clamping tasks. You receive maximum variance in the precision range with minimum set-up times. Due to the separation of functional components subject to wear, you also achieve high cost efficiency.

- Advantages:**
- + Suitable for I.D. and O.D. clamping
 - + Available mechanical, hydraulic or hydro-mechanical
 - + Membrane chucks available
- Customer benefits:**
- + Production of a family of parts
 - + Variant production with similar geometry for small and medium series
 - + Just-in-time work orders with high cost efficiency

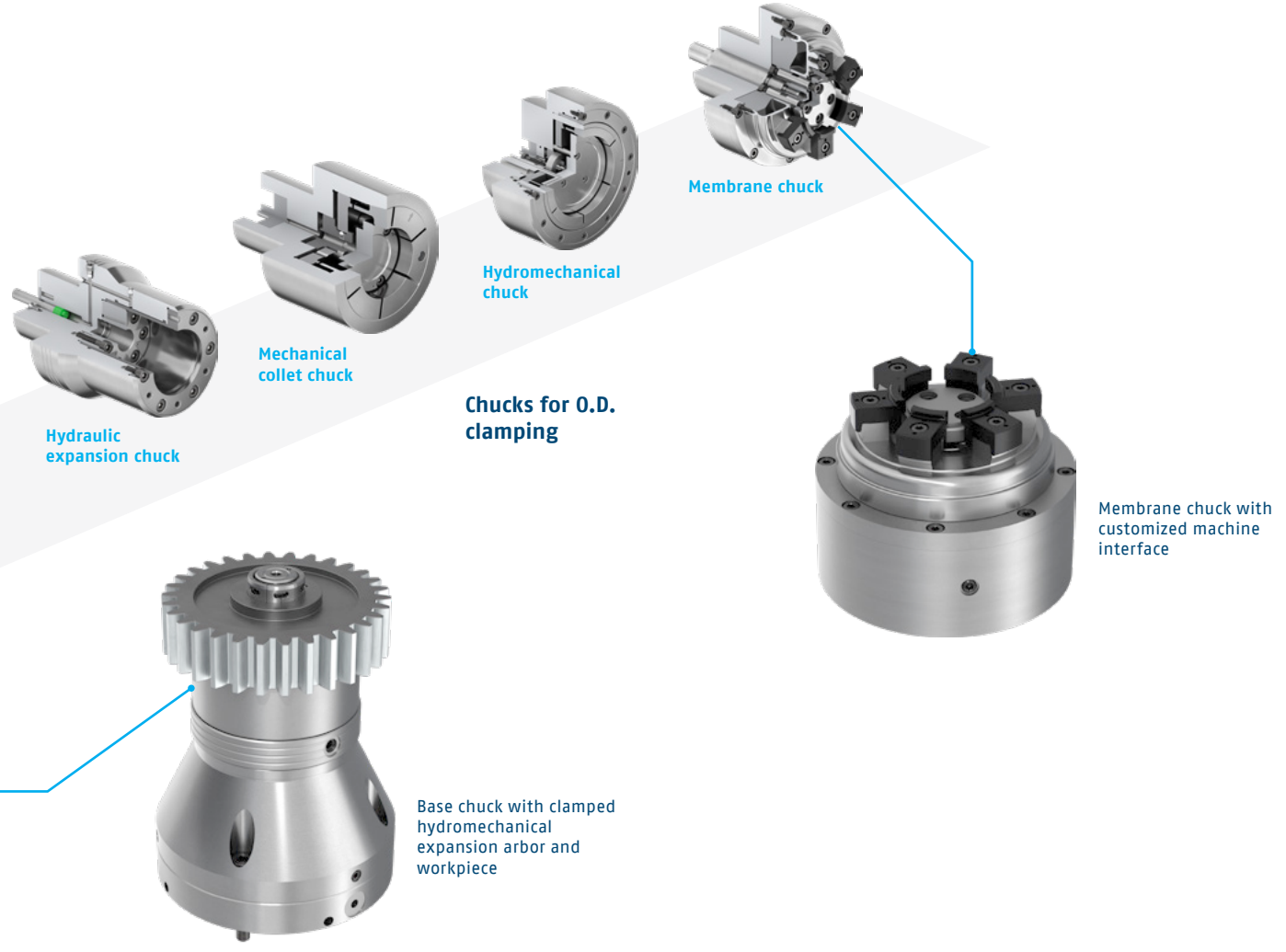
Your machine interface



There are two variants of the Solution Guide:

- Variant 1**
- Clamping tools adapted to machine interface with low part variety and no or few set-up operations
- Advantages:**
- + Highest accuracy
 - + Only one interface to the machine

- Variant 2**
- Clamping tools adapted to base chuck with high part variety and many set-up processes
- Advantages:**
- + Base chuck adaptable to any machine interfaces
 - + A daption of the respective model series
 - + Highest flexibility
 - + High accuracy due to base chuck with pullback effect
 - + Simple, standardized interface on the clamping tool

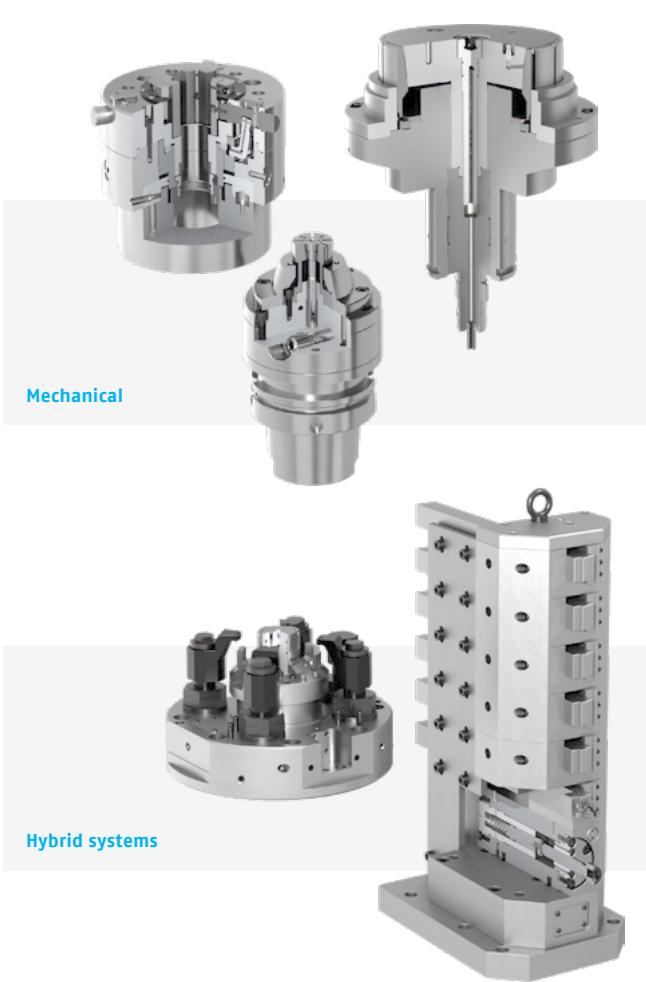


SCHUNK clamping technology special solutions

For the remaining 15% of all individual requirements

For your clamping tasks outside the Solution Guide, we can advise you precisely according to your requirements based on our more than 40 years of experience. In terms of efficiency, variance, precision, and robustness of the clamping devices, we can offer you versatile basic modules to generate a customized solution for you.

Via simulation, which we offer as an option, we generate the suitable clamping device for you. These can be either purely mechanical, purely hydraulic or a hybrid solution. For special solutions that require corresponding internal contours, we also manufacture clamping devices for you using additive manufacturing technology.



SCHUNK Simulation Services

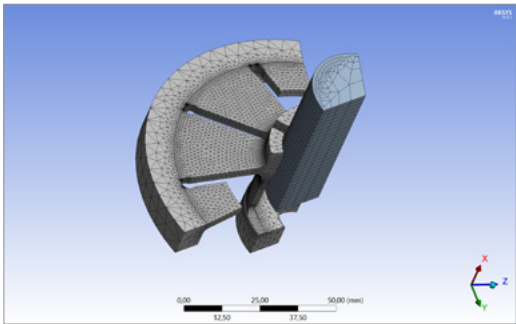
Perfection for your special cases

To optimize your machining process, we simulate your tool and workpiece clamping. We offer you a precise design of the clamping device for your production process. Other simulation options can be performed after technical clarification. We will be happy to provide you with a customized offer for this.

These are the advantages of a simulation:

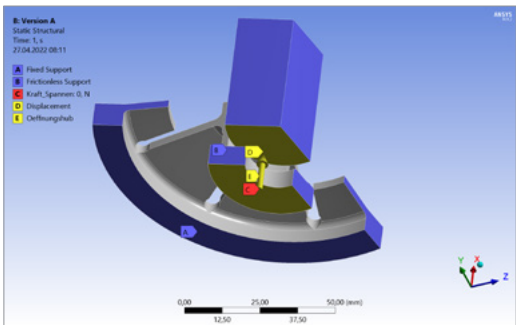
- + Process reliability
- + Precise design of the clamping device
- + Longer service life of the clamping device
- + Shortening time to the market

This is how the simulation works:



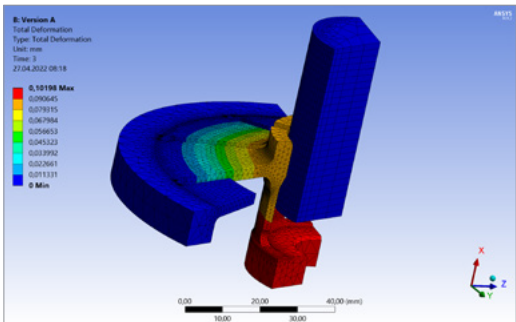
1. Analysis of the initial situation and joint definition of requirements

- Define requirements for accuracy, deformations and clamping forces
- Evaluation of the clamping situation, boundary conditions and loads



2. Simulation and evaluation

The results provide information on the clamping forces, deformations, stresses, and service life



3. Optimization potential

Upon customer request, further simulations can be created according to the obtained results



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