

# FORKARDT®





## Our company today

We completed the move from Erkrath in the Rhineland to our new domicile in Reutlingen in Baden Württemberg in 2016.

Our new buildings offer enough space for offices, spacious high-tech CAD-CAM workstations, workshops, logistics and archiving. With optimal, ergonomic equipment, from the offices to the workshops we have created even more efficient working conditions. As a result of the relocation, our team was strengthened with new innovative employees to guarantee that service would be an absolute priority in our restructure.

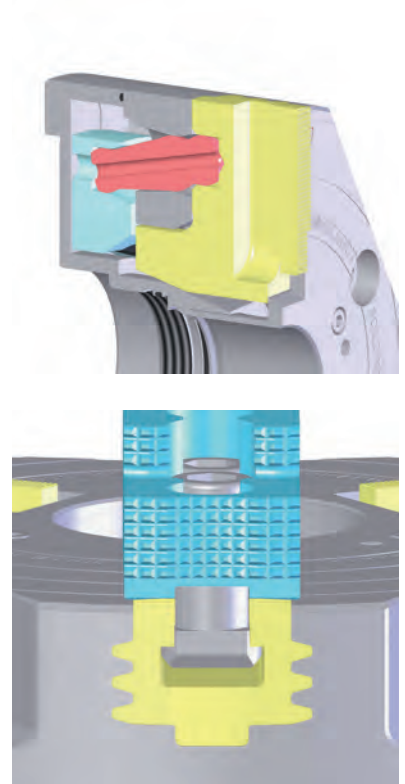
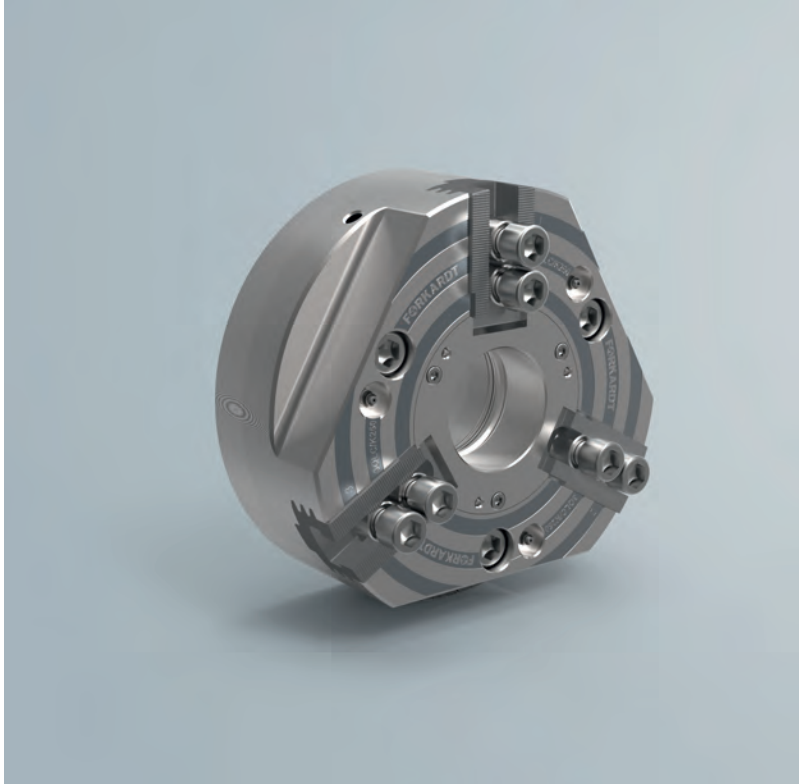
The product range guarantees comprehensive solutions to the clamping technology problems faced by our customers, offering the flexibility of a problem-solver.

Employees trained in assembly and service ensure seamless functionality of clamping devices during operation and rapid support through upcoming refits or necessary repairs.

The requirement for spare parts for our standard products is met thanks to a high-availability warehouse. In the case of special products, high-flexibility production ensures that downtimes are reduced to a minimum, taking into account coordinated planning of consumable parts and training in preventive maintenance.

We are thus well prepared for the future and have full confidence in the new workforce in the Forkardt team.

This is offered as a package to our customers in order to work together in partnership to resolve complex clamping technology problems.



# Economical for serial production

QLC-series power chucks

## Fields of application

- Medium- to high-volume production
- Suitable for use in heavy-duty cutting and delicate finishing operations

## The advantages

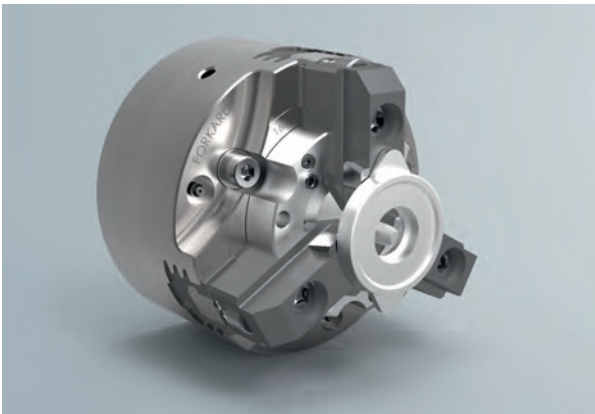
- Lower unit costs – by reducing processing times
- Using centrifugal force compensation, 20% higher speeds than conventional chucks
- High concentricity – thanks to the backlash-free wedge hook mechanism
- Low-maintenance thanks to the multi-profile jaw guide (patented)
- Forced circulation lubrication (patented)
- Optional quick-change jaws
- 5-year Forkardt warranty





## Small and fast

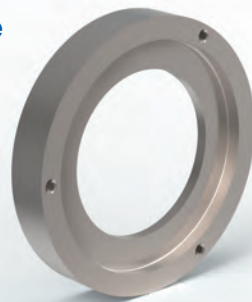
3 QLC 140



### Fields of application

- Medium- to high-volume production
- Machining of small parts

### Sample workpiece



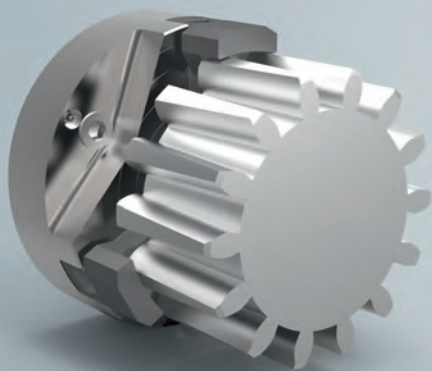
### The advantages

- Extension of the tried-and-tested QLC series to Ø 140
- Multi-profile jaw guide (patented)
- Forced circulation lubrication (patented)
- Backlash-free wedge hook mechanism
- Speed up to 8,000 rpm – centrifugal force compensation



## Shaft machining

3 QLC AG 200

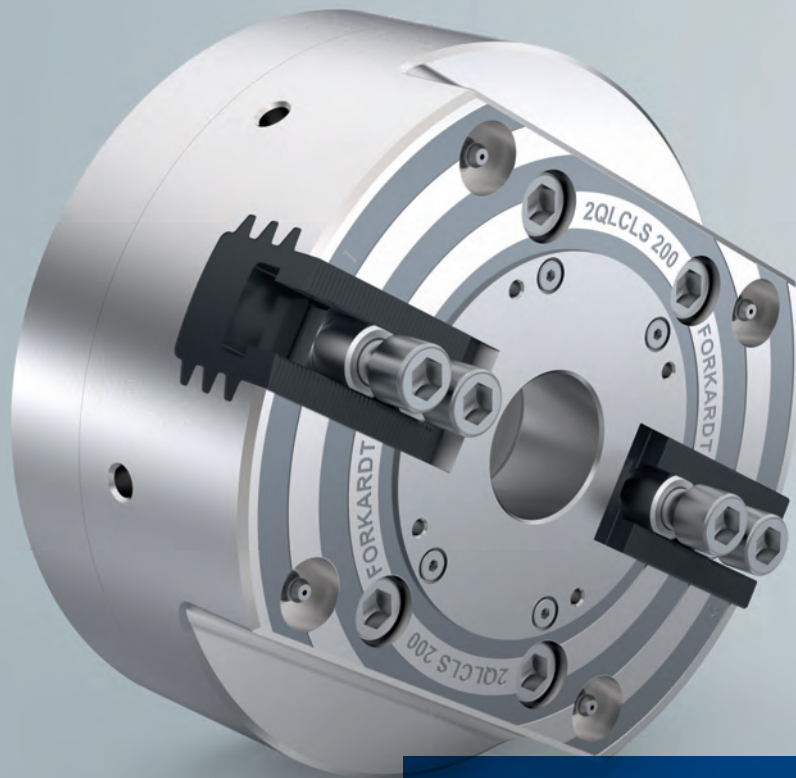


### Fields of application

- Medium- to high-volume production
- Shafts

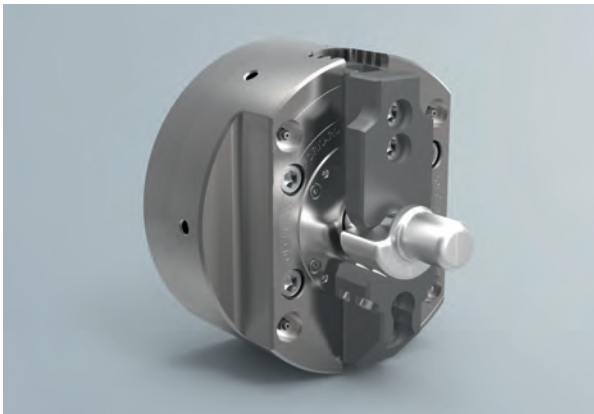
### The advantages

- Smooth compensation at high clamping forces
- Adjustable axial tightening for an optimal fit on the centring tip
- Interchangeable and finely adjustable centring inserts
- Can be converted to centric clamping for general machining



## Extra-long stroke

2/3 QLC LS 200 (Long Stroke)



### Fields of application

- Medium- to high-volume production
- Workpieces with large diameter variants
- Parts with heavy geometry (overlapping clamping)



**Sample  
workpiece**

### The advantages

- Up to 100% larger jaw stroke
- 2- und 3-jaw design



## Extra-large borehole

3 QLC KS 250 (King Size)



### Fields of application

- Medium- to high-volume production
- Particularly for bar feeding

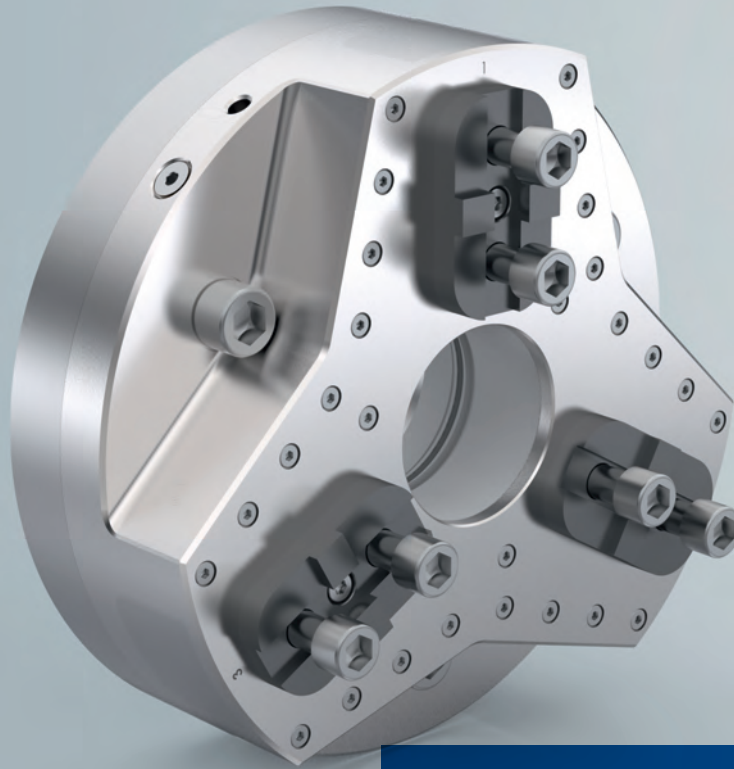


Sample  
workpiece

### The advantages

- Large borehole for machining large workpieces
- Optimal ratio between borehole and outer diameter
- Approx. 40% larger borehole than comparable chucks thanks to short multi-jaw guide





## Low-maintenance

3 QLC LM250



### Fields of application

- Medium- to high-volume production
- Dry machining and cast machining



**Sample  
workpiece**

### The advantages

- Zero-maintenance – completely sealed
- QLC principle – centrifugal force compensation
- Standardised jaw mounting KDIN
- High level of accuracy – minimal vertical deflection in heavy-duty cutting
- Finishing





## Heavy-duty cutting

3 QLC KT 250



### Fields of application

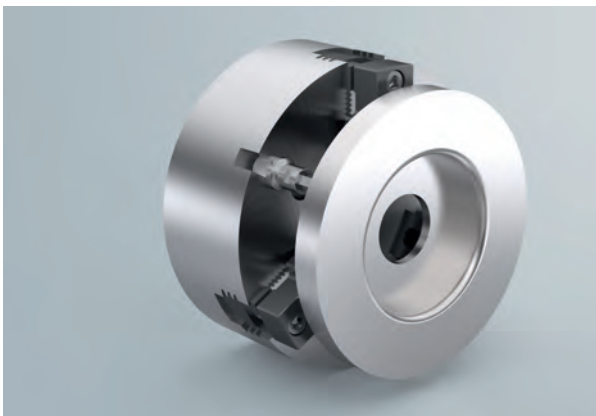
- Medium- to high-volume production
- Heavy-duty cutting



Sample  
workpiece

### The advantages

- Up to 15% higher clamping forces than comparable chucks thanks to optimised chuck mechanism



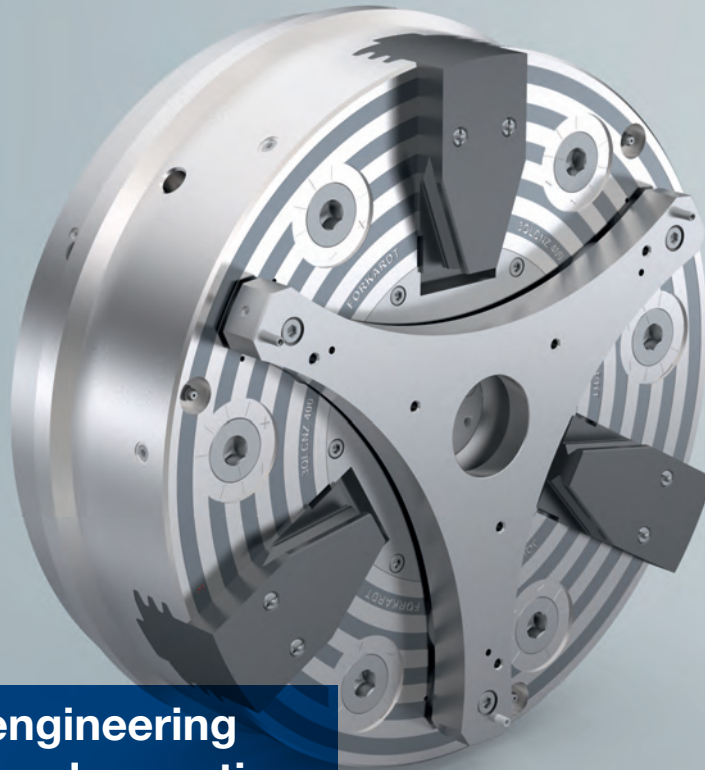
#### Fields of application

- Medium- to high-volume production



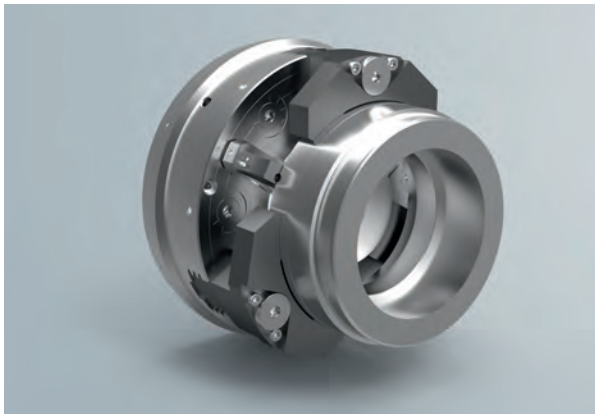
#### The advantages

- Increase in the usable working area
- Low mass
- Extension of the tried-and-tested QLC series
- Multi-profile jaw guide (patented)

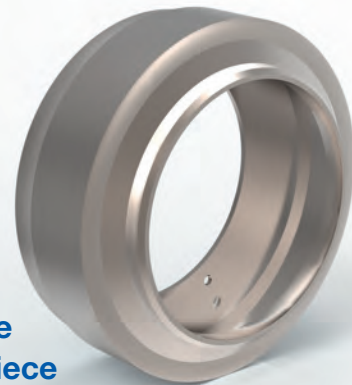


## Precision engineering for the second operation

3 QLCNZ 400 MIR60



**Sample  
workpiece**

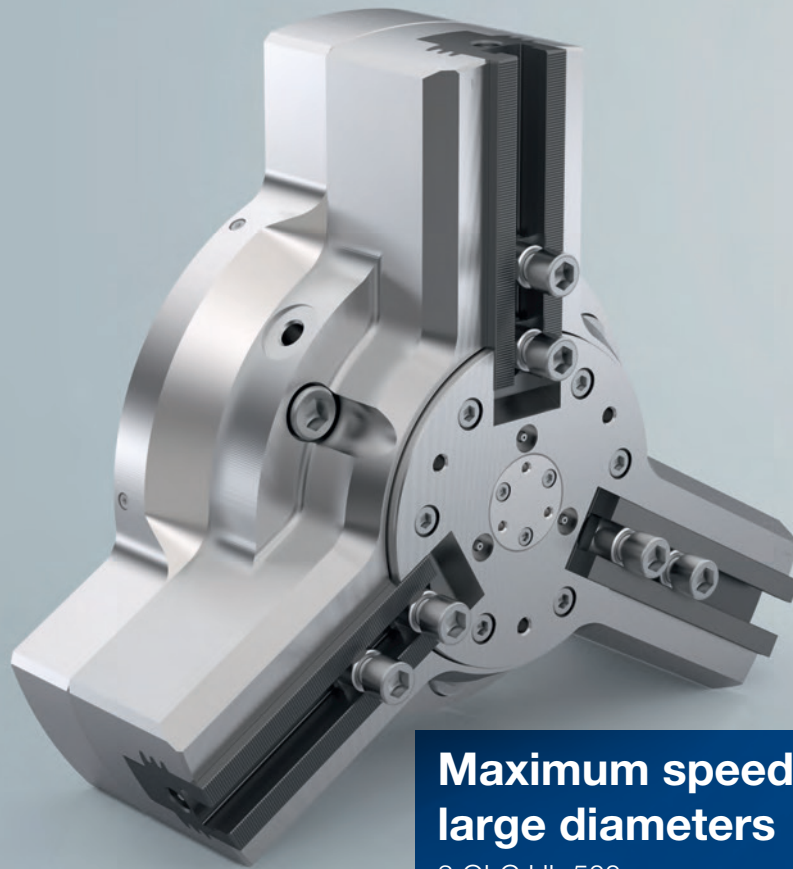


### Fields of application

- Medium- to high-volume production
- Workpieces with high-precision requirements
- Serial production with frequent retooling

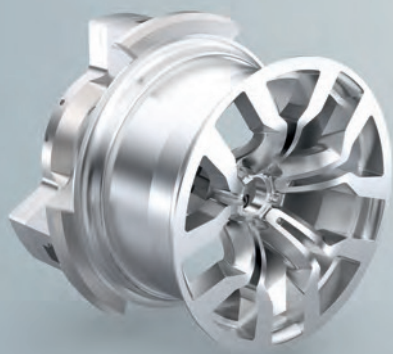
### The advantages

- Pull-back chuck
- High concentricity ( $<0.02$  mm)
- Axial run-out accuracy ( $<0.01$  mm)
- High repeat accuracy
- Higher speed thanks to centrifugal force compensation
- Air system control
- Quick-change jaw system MIR
- Quick-change jaws in approx. 5 sec.
- Low-maintenance thanks to circulation lubrication



## Maximum speed for large diameters

3 QLC UL 500



Sample  
workpiece

### Fields of application

- Medium- to high-volume production
- Series with short machining cycles

### The advantages

- Ultra-light
- Highest accelerations
- Highest speeds



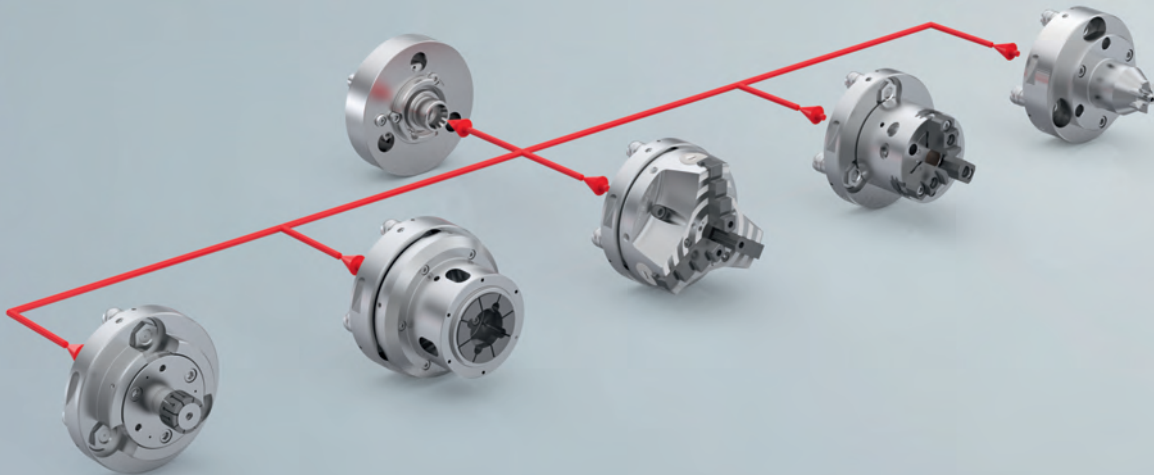


## Jaw mountings

QLC

- **Inch serration S12**
  - Common standard jaw mounting
- **Tongue and groove KDIN**
  - For high repeat accuracy when changing jaws
- **Quick-change jaw system MIR**
  - Quick-change jaw mounting for small batch sizes





### Kill set-up time

Quick-change chuck system ForChange

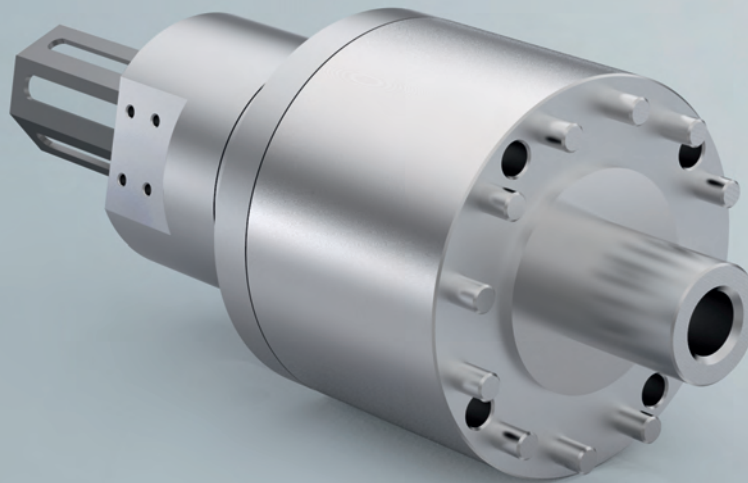


### Fields of application

- Small-series production
- Single-part production
- Frequent set-up

### The advantages

- Quick change of clamping device
- High changeover accuracy
- Easy to use
- Can be automated
- Modular design
- Can be retrofitted to existing machines
- Capacity of the machine increases considerably
- Set-up costs are no longer a relevant factor



### Hydraulic power pack

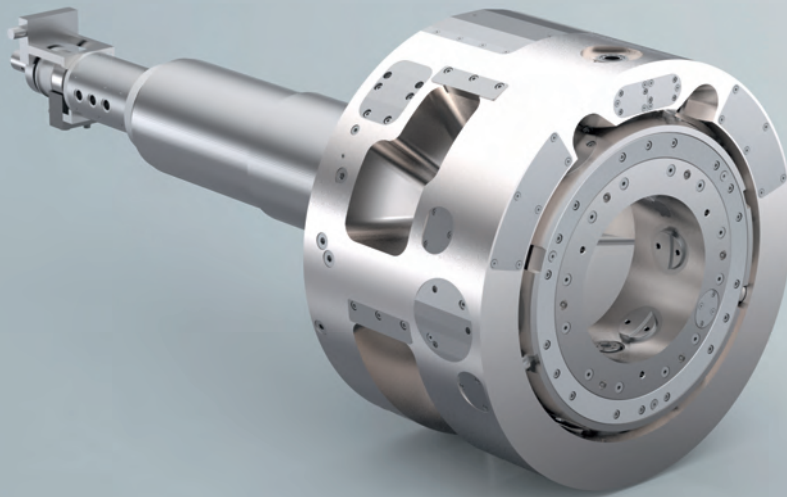
Clamping cylinder HWC

#### Fields of application

- Power clamping devices

#### The advantages

- Through-hole for media supply
- Integrated safety valves
- Flexible stroke monitoring
- Up to max. 80 bar operating pressure
- Up to max. 8000 rpm speed



## Single clamping – two axes

Indexing chuck ZS 710

### Fields of application

- Oil field
- Pipe socket machining

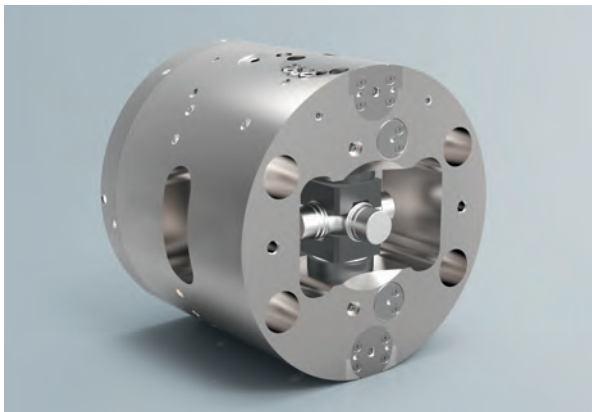
### The advantages

- Combination of centric and compensating clamping
- Compact design
- Modular design
- Maintenance-friendly design
- Innovative damping
- Long service life
- High precision
- Wireless monitoring of all chuck functions



### All-round machining

Indexing chuck HSR 250



### Fields of application

- Serial production
- Multi-process machining of a single component
- Beer tap, wedge gate valve body, high-pressure fittings
- Automotive and reactor industry

### The advantages

- Indexing chuck series with all the features of an economical clamping tool design

- Strong and accurate position locking
- 4 x 90°, or 8 x 45° or 3 x 120° swivel positions possible
- Machining accuracy up to 0.03 mm

### Optional

- Hydraulic centrifugal force compensation – highest speeds
- Pressure control for checking positional accuracy
- Centric clamping for automatic loading



### Fields of application

- Universal chuck for conventional and NC-controlled machines
- Working with jaw units with small batch sizes

### The advantages

- High accuracy
- Quick-change jaws
- Optimal service life
- Nitrided chuck body
- High clamping force
- Decades of successful use worldwide
- Ultra-simple handling
- Includes large borehole





## The universal chuck with quick-change jaws

Power chuck 3 FNC 250

### Fields of application

- Medium- and small-series production
- Frequent retooling
- Particularly suitable for integrated milling operations

### The advantages

- Quick-change jaw system
- Jaw changeover times are reduced to a few seconds
- Continued use of jaw sets from existing F+ chuck possible
- Weight-optimised
- No collision problems when milling
- High speed
- High concentricity and repeat accuracy together with extended service life
- Highest clamping forces thanks to chuck piston with highly loadable, patented trapezoidal wedge hook



## Responds to the workpiece

Power chuck ABL 250

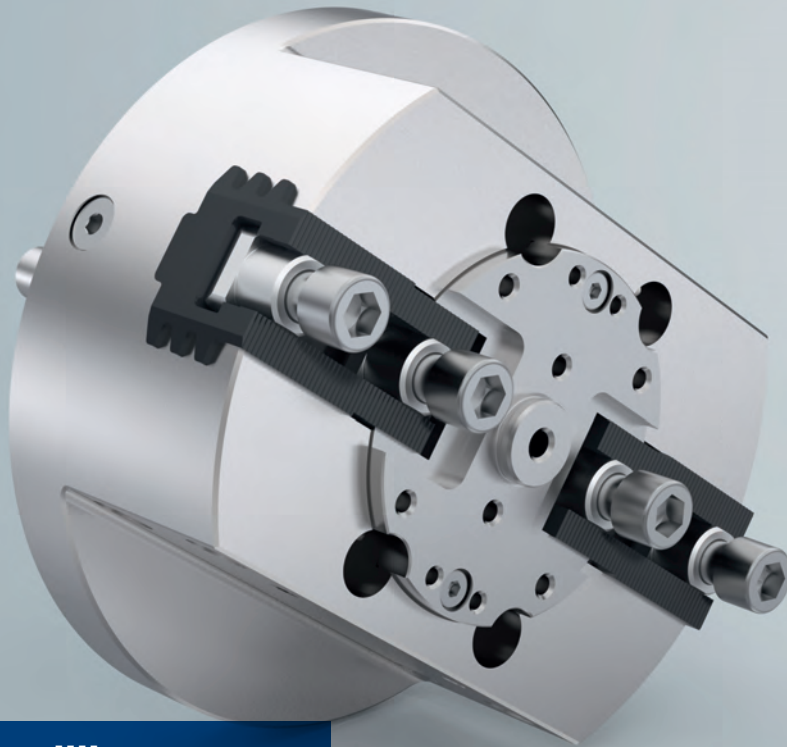


### Fields of application

- Serial production
- Special components
- Suitable for the OP10

### The advantages

- Higher speed possible thanks to a 40% weight reduction
- Chip contamination is prevented by the one-piece lever bearing
- Centric or compensating clamping (changeable)
- “Quick-Lok” design enables jaw changeover in less than a minute
- Low-maintenance thanks to sealed design
- Homing effect
- Ready-supplied UBL chucks can be retrofitted with this jaw changing system
- The composite body creates a damping effect, improves the vibration behaviour during turning operations
- Easier handling when mounting the chuck



## Flexible for milling

Power chuck 2 SWA 190

### Fields of application

- Milling on milling machines and lathes
- Turbine blades

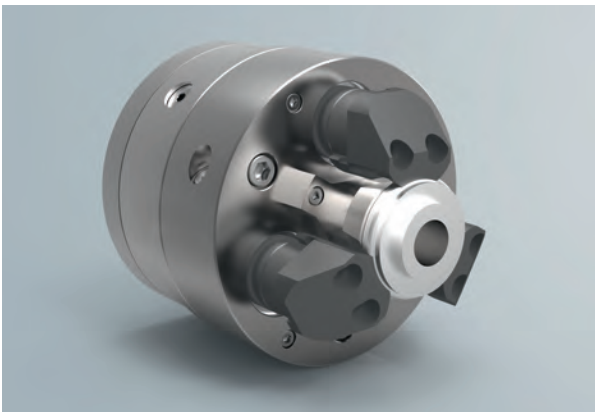
### The advantages

- Flexible use for a wide range of parts
- Centric or compensating clamping (changeable)
- Extremely smooth-running
- Extremely low clamping forces
- Large jaw stroke



## Low-maintenance

Power chuck 3 ALD 255



### Fields of application

- Automotive industry
- Shaft machining
- Serial production

### The advantages

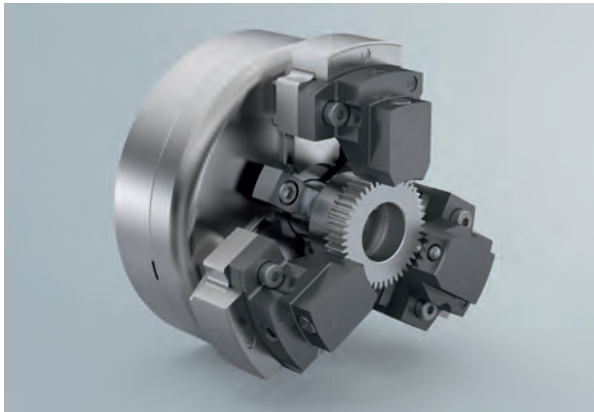
- Compensating clamping
- Low-maintenance thanks to sealed chuck body
- Parts are precisely located with a fixed or spring-loaded tip with fixed driving plates
- Lever chuck with defined pull-back effect





## Accuracy in Operation 20

Membrane chuck PLD



### Fields of application

- Gear wheel clamping of all kinds
- Straight and helical gears
- Hard turning
- Grinding operations

### The advantages

- For all tooth numbers
- Adaptable to all tooth widths
- Synchronising pins for automatic loading (optional)
- Centrifugal force compensation for high speeds
- Optimal accuracy
- Standard retraction effect
- Largely zero-maintenance
- Lightweight construction





## The comprehensive clamping system

Collet chuck RimLok



### Fields of application

- Ideal for gearboxes and gearbox housings
- Particularly suitable for workpieces sensitive to deformation

### The advantages

- For internal and external clamping
- High speed
- High clamping force
- Sealed design
- High accuracy



### Economical reaming

Jaw reaming rings Rotori

#### Fields of application

- Reaming clamping jaws

#### The advantages

- Internal and external clamping with single ring
- Infinitely variable clamping range for all sizes
- 1/10 mm precision feed of the turning diameter
- Low set-up costs thanks to RotoFix clamping bolt
- High cost savings on clamping jaws
- Optimal accessibility to the turning tool
- Fast and flexible handling
- Suitable for chuck sizes from 80 to 1200 mm
- Reaming of 2-, 3-, 4- and 6-jaw chucks





Unique.  
First class.  
Experienced.

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