FAHRION PRÄZISION

AND ALL RUNS SMOOTHLY – 111 YEARS – EXPERIENCE

CENTRO|P premium

CLAMPING SYSTEMS FROM FAHRION

HORN

COLLETS

GERC – A CLASS OF ITS OWN

With and without FAHRION | Protect – after four months of normal use

Rust on collets reduces the life of your tools and leads to significant losses in precision. That's why we have developed FAHRION | Protect. A ground-breaking technology that provides long term protection against corrosion.

- The nominal geometry between the collet and the taper seat in the chuck is maintained for long lasting and precision surface contact without corrosion-related irregularities
- Hold component tolerances even longer during manufacturing: the number of quality parts increases.
- You can keep production processes on a high level for longer, you save time which leads to reduced delivery time.
- A higher concentricity extends the service life of your tools. Thus, you save time and money by reducing set-up time.
- Collets have to be replaced less frequently or can be used longer for precision applications.

FAHRION Protect

FAHRION PRÄZISION ph HORN ph

This shows you the Performance and Characteristic of the FAHRION Collets

Blue Ring
Quality Feature for
2 µm Collets

Serial Number

Bore Diameter

Made in
Germany

Collet Size

The FAHRION Quality Mark for Tested Quality

Higher tool service life, lower tool costs and lower set-up times
= Lower production costs
= Better surface quality and tighter manufacturing tolerances
= Better quality

Advantages of FAHRION Collets
DIN ISO 15488 - GERC-B and GERC-HP (ER/ESX)

Precise
FAHRION Collets DIN ISO 15488-B (ER/ESX) set the standard of concentricity and repeatability, which is 5µm for the types GERC11-B up to GERC40-B and 2µm for the types GERC11-HP up to GERC40-HP.

Rigid
12 slots are sufficient to reach the required collapse to DIN ISO 15488. This is possible because of special steel produced for us and a particular harmonized heat treatment. Compared to 16 slot collets, our collets have fewer tendencies to distort.

Saving
All edges are not only deburred, but additionally rounded, which is a prerequisite to protect the inner cone of the collet chuck from marks. This process is important to guarantee a consistent repeatable high level of accuracy.

Due to its super-finished design, FAHRION|Protect achieves increased holding power and rigidity, higher load-bearing capacity, higher system accuracy and higher corrosion resistance in GERC-B and GERC-HP

Powerful
The defined increased surface roughness of the clamping bore, combined with the optimised grinding pattern, ensure significantly higher retaining forces compared to standard collets.

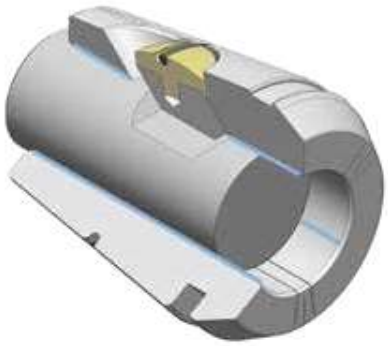
Not only are the slots deburred on all sides, but the collets also have an average roughness depth of the R_z surface area = 1.6 µm

THE WEDGE COLLET GERC-W / WD

Uncompromising Safety During Milling

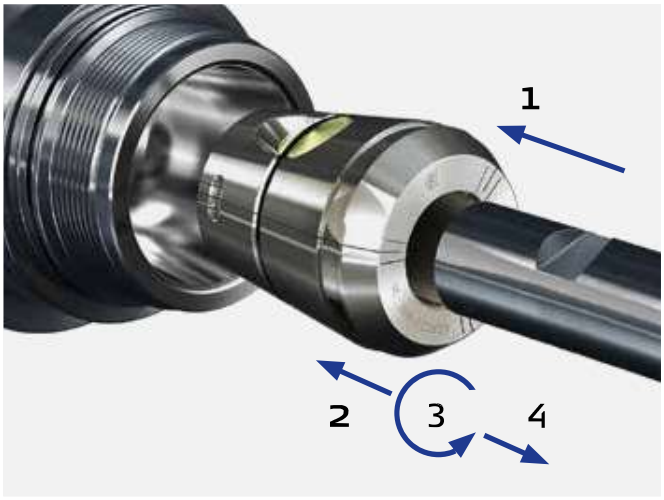
No more tool pull out or micro creeping - 100% guaranteed. The solution is as simple as it is ingenious. It is an integrated wedge that rests on the Weldon surface. The user can be certain that no costly damage from tool pull out will occur, even if the tool system is overloaded.

Higher Clamping Forces
When clamping, the wedge always lies against the slope of the Weldon surface and thus creates a positive lock without radially displacing the tool. The tool shank is clamped extensively on three lines, making it perfectly centered and allowing for larger clamping forces (with shank tolerances up to h9).



The three clamping lines on the tool (blue) center the tool shank and generate impressive clamping forces as well as optimum concentricity.

Easy Handling
For assembly, you only have to insert the tool (1) until the wedge locks into place.
For disassembly, the tool is briefly inserted further (2), turned (3) and pulled out (4).

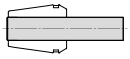
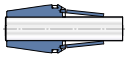
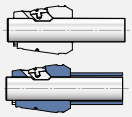


The pin pressure spring is locked in the receptor. The spring applies axial pressure on the tool to preload surface contact between the Weldon and locking wedge.

Optimal Damping
When using the **Wedge Collet GERC-W / WD** together with the **UPC Ultra Power Chuck**, very good damping properties are achieved. The additional damping reduces vibrations which protects the spindle bearings.

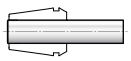
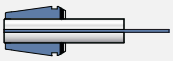
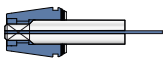
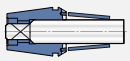
Higher Service Life
Better tool concentricity increases the service life of your tools.
Your tool budget will thank you.

ABSOLUTELY TOP OF THE RANGE

The Features of Collets DIN ISO 15488 GERC-HP, GERC-HPD, GERC-HPDD, GERC-W					
Shape/Use	GERC-**HP**	GERC-**HPD**	GERC-**HPDD**	GERC-**W**	GERC-**WD**
					
	Standard	Sealed	Sealed with Jet Holes	Pull-Out Protection	Sealed with Pull-Out Protection
					
Standard Collet Chuck	◪	◪	◪	□	□
Precision Collet Chuck CENTRO|P	■	■	■	◪	◪
Mini Precision Chuck MPC	■	■	■	□	□
Dynamic Power Chuck DPC	■	■	■	◪	◪
Ultra Power Chuck UPC	■	■	■	■	■
Full Performance Chucks FPC	■	■	■	■	■
Adjustable Finishing Chucks AFC	■	■	■	□	□
Concentricity, e.g. Ø 12.0 mm	2 µm	2 µm	2 µm	3 µm	3 µm
Repeatability	2 µm	2 µm	2 µm	3 µm	3 µm
Tool Shank Tolerance	h10	h8	h8	h8	h8
Through Tool Coolant	□	■	□	□	■

Use: ■ preferred ◪ limited □ unusable

FLEXIBLE AND PRECISE

The Features of Collets DIN ISO 15488 GERC-B, GERC-BD, GERC-GBD, GERC-GBDD				
Shape/Use	GERC-**B** 	GERC-**BD** 	GERC-**GBD** 	GERC-**GBDD** 
	Standard	Sealed	Sealed for Taps	Sealed with Jet Holes for Taps
				
Standard Collet Chuck	■	■	■	■
Precision Collet Chuck CENTRO|P	◪	◪	■	■
Mini Precision Chuck MPC	◪	◪	◪	◪
Dynamic Power Chuck DPC	◪	◪	■	■
Ultra Power Chuck UPC	◪	◪	■	■
Full Performance Chucks FPC	◪	◪	■	■
Adjustable Finishing Chucks AFC	□	□	□	□
Concentricity, e.g. Ø 12.0 mm	5 µm	5 µm	10 µm	10 µm
Repeatability	3 µm	3 µm	5 µm	5 µm
Tool Shank Tolerance	h10	h8	h8	h8
Through Tool Coolant	□	■	■	□

Use: ■ preferred ◪ limited □ unusable