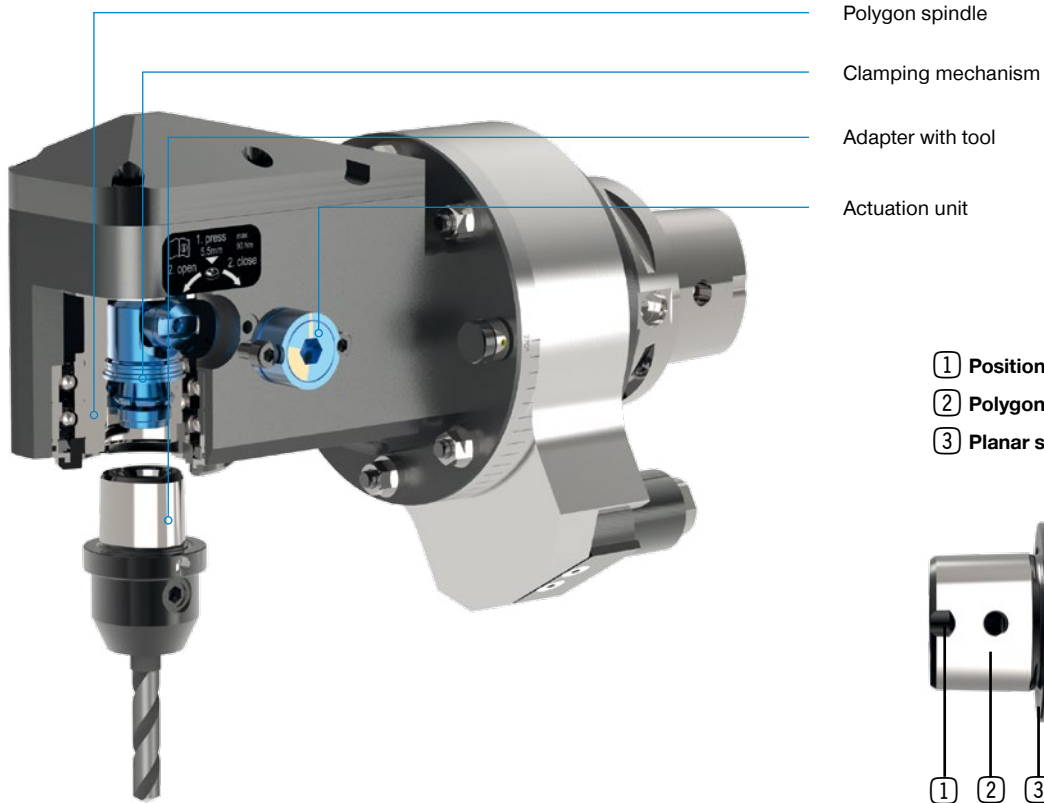


MODULAR QUICK CHANGE SYSTEM

BENZ CAPTO™

► SYSTEM DESIGN



► ABOUT BENZ CAPTO™

FIELD OF APPLICATIONS

Increase of efficiency and machining quality

The modular quick change system BENZ CAPTO™ guarantees an extremely compact design by being integrated into the spindle. Special clamping kinetics for clamping forces are noticeably below the required range of ISO/DIS 26623-2. BENZ CAPTO™ can be used for milling, drilling and turning, with up to 100 bar coolant pressure. The system is especially suited for heavy duty milling and machining.

SYSTEM OVERVIEW

► Technical data

Size	T [Nm]	Wrench size	Recommended VDI combination**
C3	320	SW 6	VDI 30
C4	580	SW 8	VDI 40
C5	1000	SW 10	VDI 50
C6	2000	SW 12	VDI 60

* transmittable torque of the polygon

** clamping system also for comparable BMT/CDI tools

▶ PRODUCT BENEFITS



All aces in one hand

Performance

- ▶ compact design/short implementation
- ▶ special clamping kinetics for clamping forces are noticeably below the required range of ISO/DIS 26623-2
- ▶ pressure of coolant up to 100 bar
- ▶ ideal for heavy milling

Precision

- ▶ stability and rigidity with high flexibility at the same time
- ▶ compact shape guarantees high cutting speeds and surface quality

Handling

- ▶ fast tool change with additional locking mechanism (ratcheted)
- ▶ optically visible clamping position 100°
- ▶ starting torque: 50 Nm (C4)

Safety

- ▶ from 75 degrees onwards the clamping process is already so secure that the tool can be used in production
- ▶ visual markings > correct clamping of the tool is easily seen
- ▶ additional safety function > prevents uncontrolled falling out of the tool holder



Video



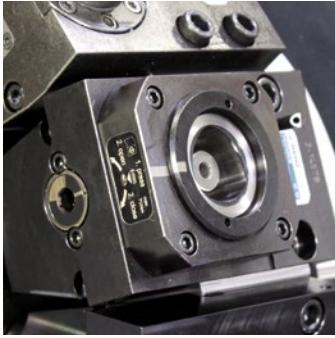
▶ BENZ CAPTO™ - in use

Scan the adjacent QR code with a smartphone and see a demonstration of BENZ CAPTO™ in action. Alternatively, you can visit our YouTube channel to view the video: www.youtube.com/BENZWerkzeugsysteme

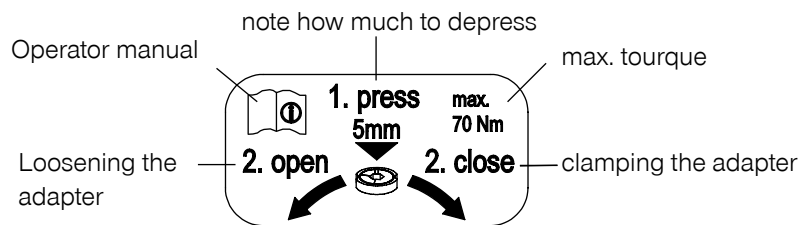
MODULAR QUICK CHANGE SYSTEM

BENZ CAPTO™

▶ TOOL CHANGE



▶ Step 1: Familiarize yourself with the symbols



▶ Step 2: Cleaning of tool holder with compressed air

Clean the tool insert. Please note: Only clean around the edges of the Polygon. Never blow air centrally into the clamping mechanism!



▶ Step 3: Inserting the adapter

Inserting the adapter into the tool holder (in release position). The adapter is held in the base by a locking mechanism.



The locking mechanism holds the tool in the base



▶ Step 4: Loosening and changing the adapter

Align the marks on the adapter and the tool insert. The adapter is held in the base by a locking mechanism.

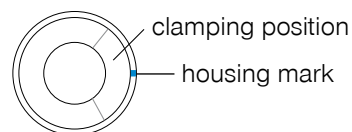
Note: this step is only necessary for Live Tools. Static BENZ CAPTO™ tools have a fixed polygon position.

▶ TOOL CHANGE



▶ Step 5: Clamping of the adapter

To do this press the mechanism and at the same time rotate by approx. 100 degree clockwise in the “close” direction. Optimal clamping force is achieved when applying the recommended torque. The tool is already clamped securely as soon as a 75 degree angle is achieved. Important: the mark on the housing has to be within the marked self-locking area.



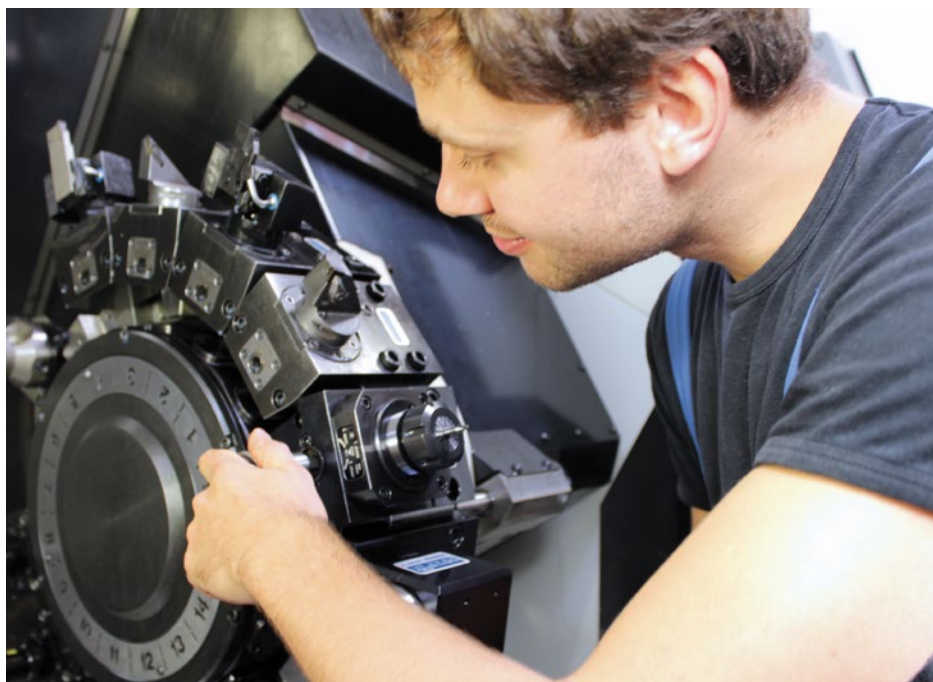
▶ Step 6: Loosening the adapter

After machining you can loosen the adapter by pressing the mechanism and at the same time rotating counterclockwise in the “open” direction. This means the mark on the housing and the mark on the tool insert have to be lined up again. The adapter will be held in the tool after loosening until you take it out.

Note for clamping and un-clamping: for static Benz CAPTO™ tools it is sufficient to simply rotate, no pressure needs to be applied.

▶ SAMPLE APPLICATION

QUICK CHANGE



Tool Change for a driven tool with Modular Quick Change System BENZ CAPTO™.

BENZ CAPTO™

TOOL ADAPTERS

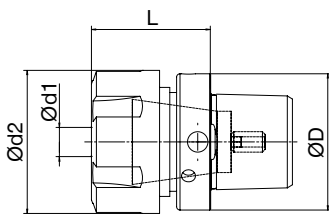


BENZ CAPTO™

TOOL ADAPTERS

Collet chuck 8° Type ER

- ▶ external clamping nut
- ▶ without gripper groove!



▶ Technical data

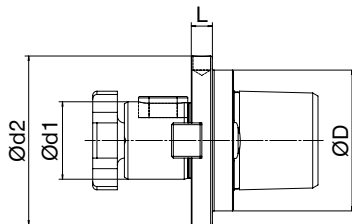
Order No.	Size	Type	D	d1	d2	L
550.130E330	C3	ER16	32	1-10	28	30
550.130E435	C3	ER20	32	2-13	34	35
550.130E544	C3	ER25	32	2-16	42	44
551.130E432	C4	ER20	40	2-13	34	32
551.130E535	C4	ER25	40	2-16	42	35
551.130E652	C4	ER32	40	2-20	50	52
552.130E534	C5	ER25	50	2-16	42	34
552.130E641	C5	ER32	50	2-20	50	41
552.130E758	C5	ER40	50	3-26	63	58
553.130E640	C6	ER32	63	2-20	50	40
553.130E746	C6	ER40	63	3-26	63	46

▶ ACCESSORIES

- ▶ see page 40ff.

Milling machine arbor

- ▶ without gripper groove!



▶ Technical data

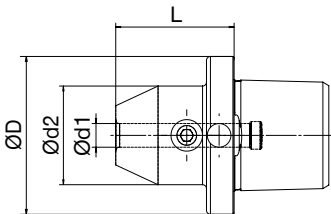
Order No.	Size	D	d1	d2	L
550.2311613	C3	32	16	34	13
550.2312217	C3	32	22	48	17
551.2312216	C4	40	22	48	16
551.2312719	C4	40	27	51	19
552.2312711	C5	50	27	55	11
552.2313222	C5	50	32	62	22
553.2312711	C6	63	27	63	11
553.2313216	C6	63	32	63	16

▶ ACCESSORIES

- ▶ see page 43

Weldon for parallel shanks DIN 1835 B

▶ without gripper groove!



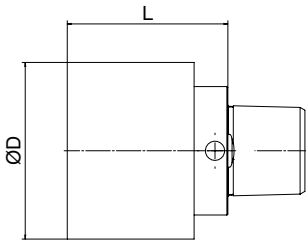
▶ Technical data

Order No.	Size	D	d1	d2	L
550.1400633	C3	32	6	25	33
550.1400833	C3	32	8	28	33
550.1401037	C3	32	10	35	37
550.1401242	C3	32	12	42	42
550.1401443	C3	32	14	44	43
550.1401651	C3	32	16	48	51
551.1400630	C4	40	6	25	30
551.1400830	C4	40	8	28	30
551.1401034	C4	40	10	35	34
551.1401239	C4	40	12	42	39
551.1401439	C4	40	14	44	39
551.1401643	C4	40	16	48	43
551.1401843	C4	40	18	50	43
551.1402045	C4	40	20	52	45
552.1400629	C5	50	6	25	29
552.1400829	C5	50	8	28	29
552.1401033	C5	50	10	35	33
552.1401238	C5	50	12	42	38
552.1401438	C5	50	14	44	38
552.1401641	C5	50	16	48	41
552.1401842	C5	50	18	50	42
552.1402044	C5	50	20	52	44
552.1402552	C5	50	25	65	52
553.1400628	C6	50	6	25	28
553.1400828	C6	50	8	28	28
553.1401032	C6	50	10	35	32
553.1401237	C6	50	12	42	37
553.1401437	C6	50	14	44	37
553.1401640	C6	50	16	48	40
553.1401841	C6	50	18	50	41
553.1402043	C6	50	20	52	43
553.1402552	C6	50	25	65	52

BENZ CAPTO™

TOOL ADAPTERS

Blank

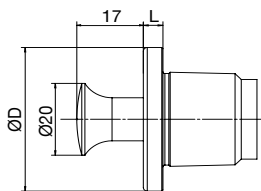


▶ Technical data

Order No.	Size	D	L
550.1024750	C3	47	50
551.1025763	C4	57	63
552.1027267	C5	72	67
553.1029267	C6	92	67

Closing plug (made out of steel)

▶ made of steel



▶ Technical data

Order No.	Size	D	L
550.581S	C3	32	5
551.581S	C4	40	5
552.581S	C5	50	6
553.581S	C6	63	7