

Operating instructions collet chuck

The clamping system conforms to the requirements set out in EN 847-3.

i Before using the product, read the enclosed safety instructions and these operating instructions carefully and thoroughly.

The following signal words are used in this instruction

DANGER „DANGER“ indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.

CAUTION „CAUTION“ indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

NOTICE „NOTICE“ refers to measures for the avoidance of dangers.

1. Basic-Information

1.1 Conventional Application

1.1.1 RPM

n max. The maximum RPM marked on the clamping system must not be exceeded.
If the maximum RPM of the tool is lower, the clamping system must not exceed the RPM rating for the tool.



1.1.2 Type of application

The clamping system may only be used on router machines and machining centres for machining wood, wood-based material or material with comparable cutting characteristics. The instructions of the machine manufacturer regarding the suitability of the clamping device have to be observed.

1.2 Safe handling

1.2.1 Application

NOTICE All European and National safety regulations shall be adhered to including the safety requirements as set out in EN 847-3.
The tool system only is allowed to be used as described in section „1.1 Conventional Application“.

1.2.2 Transport

CAUTION Transport only suitable packaging.
Danger of damaging in the system.
Be very careful with packing!
Danger of injuring.

1.2.3 Mounting of the clamping system

DANGER The clamping device has to be mounted, secured and started up as per the instructions of the machine manufacturer.
Check the machine set-up and direction of rotation!
Danger of loosening of the tool.

DANGER Observe the limits for the tool weight, -diameter and projection length recommended by the machine manufacturer.

1.2.4 Assembling of the clamping system

DANGER All clamping surfaces shall be free of pollution, grease, oil and water. Tighten the clamping nut before using.
Danger of loosening of the tool.

DANGER Damaged and worn parts (e.g. collets, tool bodies and cutting edges) immediately have to be exchanged.
After a tool-breakage the collets also have to be exchanged.
Danger of breaking and loosening of the tool.

CAUTION Observe the operating instructions of the shank tool when mounting the system (collet adaptor –collet-tool).
Danger of loosening of the tool.
Improper eccentricity or imbalance can result in damages on the system.
Consider the minimum clamping length of the tool shank and the eccentricity of the system.
Danger of the tool breakage.

NOTICE Tools with cracked bodies have to be taken out of service.
Repairing such tools is not allowed!
Improper stopping of the tool, e.g. by lateral pressing, is not allowed.
Do not use loose spacers or sleeves.

2. Specific part of the clamping device

2.1 Maintenance

NOTICE Clean the clamping system especially the tool holder regularly and before inserting the tool.
Regular cleaning increases the operational safety.

CAUTION Chemicals can irritate skin and eyes and damage the tool.
Protect hands and eyes while cleaning.
Only use appropriate chemicals

2.2 Repairs

Servicing and modification should be carried out by the manufacturer.
Only specialists are allowed to do repairs.
After servicing the part shall meet the requirements in the relevant European standard(s), i.e. EN 847-1, -2 und -3.

2.3 Chemicals / Cleaning agents

Only use appropriate chemicals.
Follow the instructions of the chemicals producer.

2.4 Spare parts

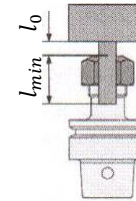
Information about spare parts can be taken from the sales documents.

2.5 Changing of the mountig parts

NOTICE Observe section „1.2 Safe handling“.
Assembling the tool and mounting in the machine.
Take the tool out of the machine to change inserts parts.
When assembling the body clean particular clamping surfaces and only then insert the parts.

2.5.1 Changing of the shank tool

CAUTION Tighten the clamping bolt at the taper before using.
Danger of loosening of the clamping device.



Shank diameter (Tolerance as per EN 847-1)	min. clamping length l_{min}
$10\text{mm} \leq d$	20mm
$10\text{mm} < d < 25\text{mm}$	$2 \times d$
$25\text{mm} \geq d$	$1,8 \times d$

Table1: Minimum clamping length

NOTICE The free shank length l_0 should be as short as possible.
This results in a higher rigidity and a smaller risk of breakage.
The clamping length specified by the manufacturer of the clamping system must be observed.

Thread	Spanner	Rec. Torque
M30x1,5 M33x1,5	40/42	100 Nm
M40x1,5	45/50	120 Nm
M48x2,0 M50x1,5	58/62	145 Nm

Table2: Tightening torques for common clamping nuts

2.5.1.1 Installing the shank tool

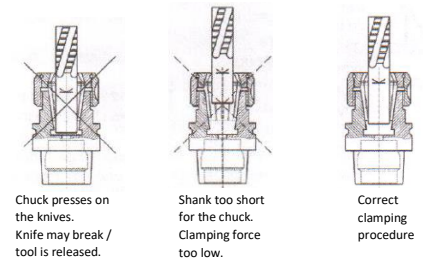
Fix the tool holder in the mounting device or counterbrace with a wrench.
Release the clamping nut with a gooseneck wrench.

NOTE Only use shank diameters which correspond to the nominal diameter of the chuck. Never clamp oversized shanks.

Push in the cylindrical part of the shank.

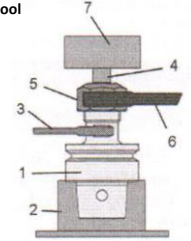
NOTE Observe the minimum clamping length (see Table 1). Do not clamp directly on the radius transition to the cutting element.

Tighten the clamping nut with the required tightening torque (see Table 2)



2.5.1.2 Removing the shank tool

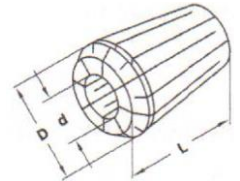
Fix the tool holder (1) in the mounting device (2) or counterbrace with a jaw wrench (3).
Hold the tool (7) on the shank (4).
Release the clamping nut (5) with a gooseneck wrench (6).
Remove the tool (7).



2.5.2 Changing the collets

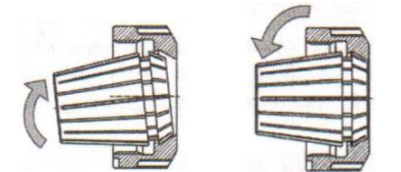
The collet chuck can clamp a range of shank diameters by changing the collet.

Only use double slotted collets with end-to-end chocking bores.
Only this type of collets enables optimal transfer of force in the entire clamping area.



EN standard	d [mm]	D [mm]	L [mm]
430 E	2 – 16	26	34
470 E	2 – 20	33	40
472 E	3 – 26	41	46
415 E	2 – 16	25,5	40
462 E	2 – 25	34,8	52

CAUTION Only use chucks which comply with the specifications of the clamping equipment manufacturer.
Danger of tool being released.



Apply the collet at an angle to the clamping nut and engage by applying pressure from above / from the side.

Release the collet from the clamping nut by applying pressure from the side.