VDI / BMT TOOL HOLDERS INSTRUCTIONS

Thank you for choosing our products.
For best results, please follow below instructions.

1. GENERALITIES

Each tool holder has passed a QC test and has a documented specification, attesting his geometric precision.
Our tool holders are equipped with high-quality sealed bearings that ensure a long service life. The grease that is used is Kluber or Isoflex.
Each tool holder is checked for temperature and vibration parameters on the test bench. This means that the tool holder is ready to start working in the production process!

PLEASE NOTE
Keep these instructions, with care, to have them whenever needed for consultation.
Be aware of any state law to avoid accidents for yourself and others by using live tool holders. Be careful when handling the tool holders to prevent it from falling, which could cause injury to yourself and others. Until the tool holder is attached to the turret, use rubber or plastic tool sleeves to avoid injuries caused by the tool cutting sharp edges.
If the tool holders are overloaded, there may be major damage in the operation of the product. In this brochure it is using symbolic representations. Some accessories shown are not included, as standard, with delivered tool holders.

2. INSTALLATION AND FUNCTIONING

2.1. Cleaning and care
For cleaning, use a soft cloth. Do not use compressed air to clean the tool holders.

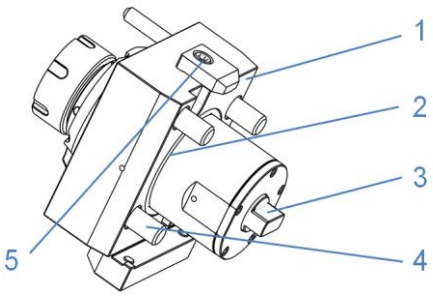
To achieve a long life of tool holders, please do not use strong chemical cleaners.
Protect the surfaces of the tool holders with oil or other anti-corrosion products during storage.

2.2. Transmission, bearings and lubrication
Bearings and gears are lubricated with high quality lubricants for the lifetime of tool holder. Any additional lubrication is not required under normal operating conditions.
Additional data such as torque, maximum speed, etc. can be taken from the product datasheet.

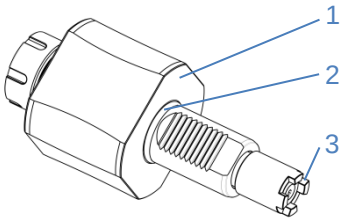
2.3. Fixing on the turret
In principle, in order to guarantee an optimal function of the tool holder, a clean surface of the turret interface and the couplings is required. Only this ensures the highest possible accuracy in the cutting process.

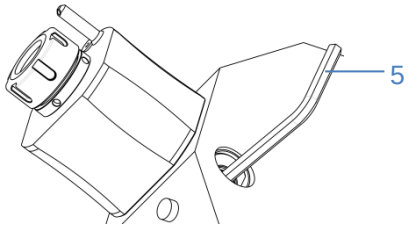
2.3.1. Mounting the tool holders on the turret
Please inspect the contact surface of the turret (1). It must be clean and without chips.
Please check that the ring O-ring (2) is not damaged.
Insert the cylindrical part of the tool holder into the turret. Please ensure that the drive shaft (3) engages with the turret drive.
Enter the tool holder inside turret until the interface contact is well done. Ensure the tool holder with firmly tightened.

Okuma BMT turret: Mount the toolholder on turret and firmly easy the bolts (4). The toolholder will be aligned to the frontal turret and firmly tighten the screw(5). Tighten the screws firmly (4).

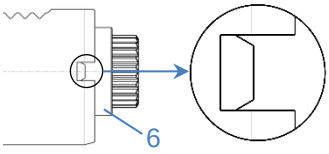


VDI turret: mount the holder on turret and tighten the rack screw with the hexagon key (5) firmly.





NOTE: The coupling of tool holder must be aligned with similar coupling from inside turret interface. If the tool holder cannot easily be inserted into the turret, then remove the tool holder from the turret surface. In this case, please use the machine's operating instructions.

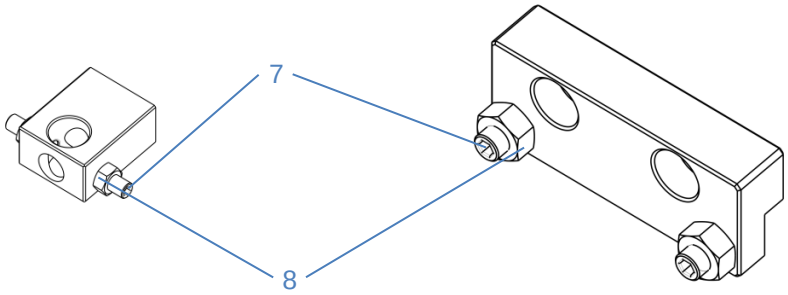


Particular case: for Live Tool Holders with coupling type DIN 5480, for making coupling, tool holder's shaft need to be in locked position, so no rotation. This position is realized when ring beak (6) is in position from this picture.

ATTENTION! When cutting tool is fixing in tool holder, the ring (6) will be moved from locked position, by axial pushing and turned, by hand, not to forcing ring beak.

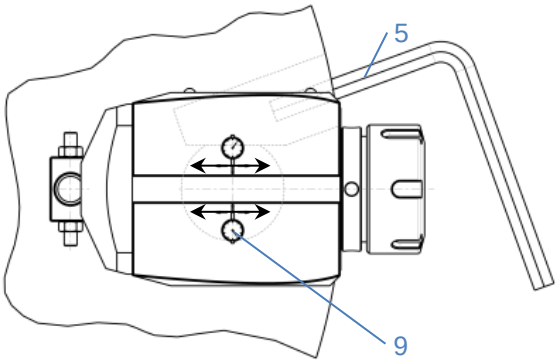
2.3.2. Aligning the VDI angular tool holder

The angular tool holders can be equipped for alignment with one of the following systems:



version A version B

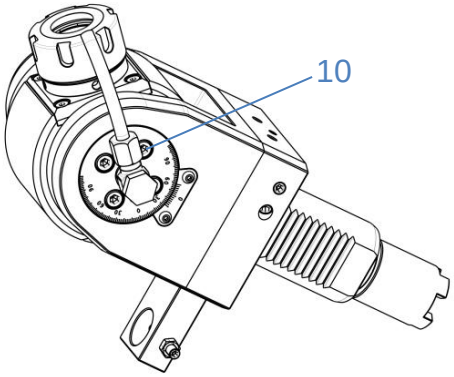
The system is mounted on the tool holder.



The tool holder will be set as follows: gently squeeze the tool holder on the turret through toothed rack in the recess by tightening a hex key (5) to allow the alignment. Align the tool holder with a dial comparator clock (9), by displacing it along the whole length of aligning area (surface), using for adjusting threaded pins (7). Once you have aligned the tool holder, you must tighten the threaded pins (7) and secure them with nuts (8), then firmly tighten the rack screw with the hexagon key (5).

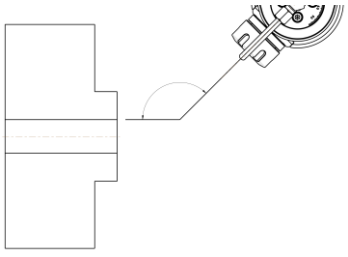
At the end of alignment operation check again position set-up.

2.4. Variable Angle Tool holder - Angle setting



The screws (10) will be loosen. Set the desired angle and firmly tighten the screws (10).

Check the set angle, with a Digital Angle Finder or a Protractor, measuring by comparison the angle between the cutting tool and axle of the spindle (chuck).



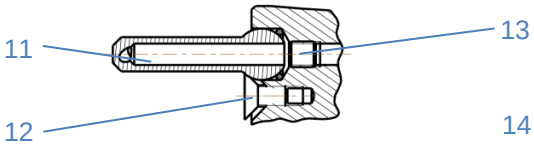
2.5. Cooling system of the Tool Holder

External cooling: Tool holders provides coolant through pipes. For external cooling you have to:

version A: - Remove the plug (13) using a 2.5mm hexagonal Allen key.

version B: - Open, by turning, the special valve (14) with a screwdriver.

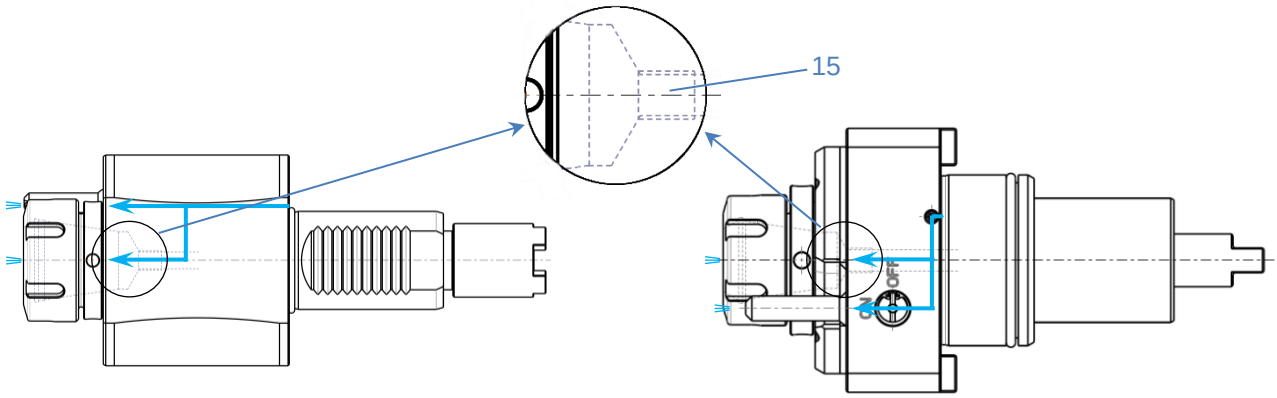
Adjust the direction of the exrnal cooling fluid with the spherical joint (11) and fasten it with setting screw (12).



version A

version B

Internal cooling: Tool holders provide coolant through the shaft, respectively by the cutting tool. For the internal cooling of the cutting tool, remove the plug (15) with a 4mm hexagon Allen key.

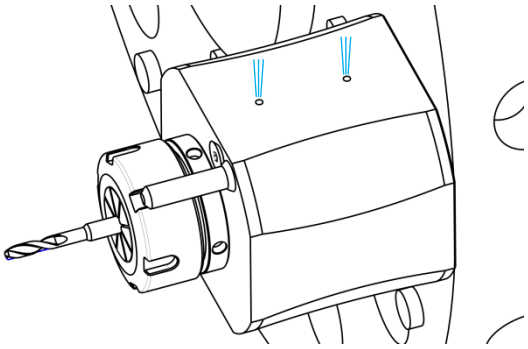


version A

version B

Set the cooling type: external, internal or external + internal.

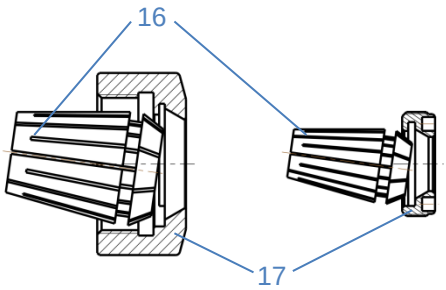
ATTENTION!
NEVER WORK WITHOUT COOLING LIQUIDS WHEN USING TOOL HOLDERS WITH INTERNAL COOLANT



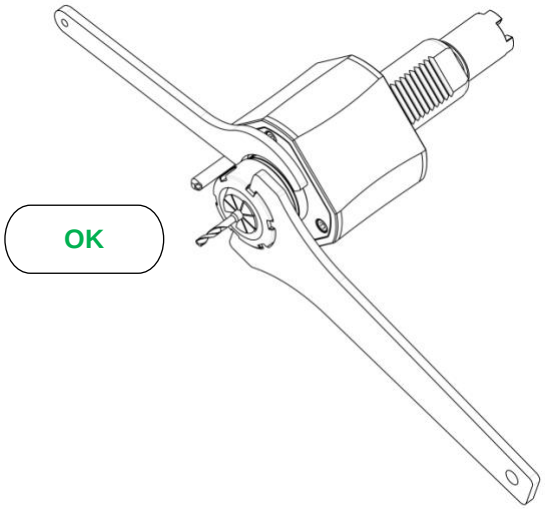
WARNING ! *TOOL HOLDERS WITH INTERNAL COOLANT*
If we have the situation in the picture or when coolant leaks occur during the use of the tool holder, the operation of the tool holder will be stop and please contact the manufacturer / seller.

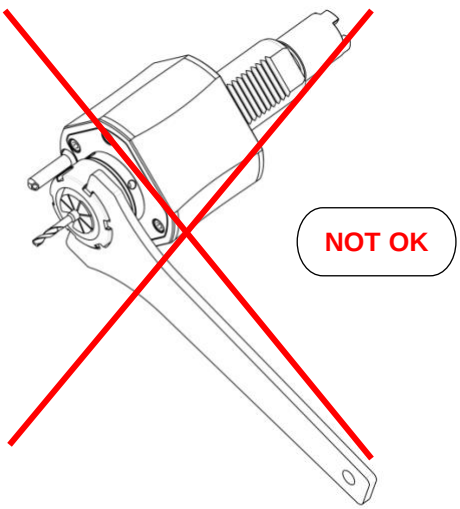
2.6. Clamping the tool

2.6.1. Fixing the cutting tool in collet

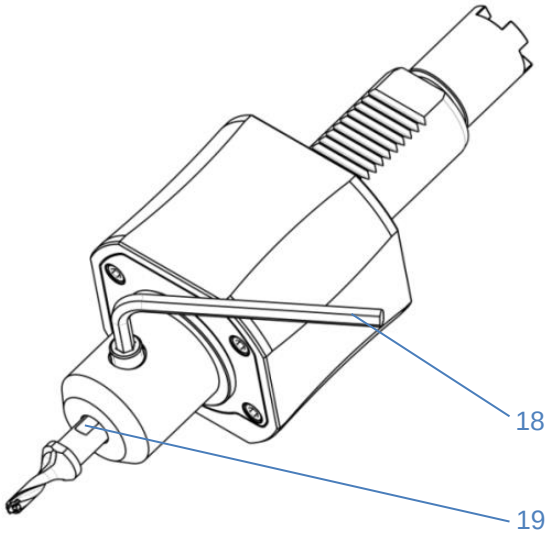


Insert the collet (16) into the ER clamping nut (17) until it enters inside locking way.
Firmly tighten the ER clamping nut using 2 (two) keys, as in bellow picture.





2.6.2. Fixing the cutting tool in Weldon output



Insert the cutting tool (18) (with the milled surface against the retaining pin) into the shaft hole and lock with the threaded pin using the hexagon key (19).

3. PROBLEMS IN OPERATION

If a malfunction may appear during operation, lathe operator must stop immediately the using of the tool holder and customer needs to send a Service Request Document, if a such fault (failure) has been detected.

If there are problems or malfunctions with the tool holder, please contact the manufacturer / seller to return product for inspection, along with the service document.

Service Document, is stated at last page of present Instructions.

3.1. Instructions for products returning:

In order to keep the shortest repair times, please:

- Notify in advance that the product will be returned and propose a delivery date so that the repair can be scheduled in the internal service program. Products received without a service document will have a lower priority.
- Provide product with a detailed description of the occurred problem, including as much information as possible.
- Without a service document, service department will not be able to repair the product on time.

3.2. Goods returned because of incorrect order, issued by the customer

In the event of a wrong order issued by the customer, the return of the product must be approved by the manufacturer / seller in advance. If approved, manufacturer will agree with the customer the replacement of tool holder. All transport costs will be bear by customer, in this case.

4. WARRANTY

a) Defects that occur within 12 months from delivery date will be covered by producer warranty.
b) The warranty does not cover damages or defects resulting from the negligence or improper use by the buyer personnel or if the products or their parts have been modified or repaired without the manufacturer's authorization.
c) Repairs during the warranty period must be performed by the manufacturer or by a company / person approved by the manufacturer.
d) The warranty is void if the product has previously been disassembled / repaired by unauthorized personnel.
e) If repair is considered in warranty condition, this includes replacing of components that are subject to wear due to their intrinsic characteristics. However, the normal wear of these components cannot be considered as the sole reason for confirming the warranty.
f) The seller or manufacturer will not be responsible for defects in materials or projects provided by the buyer.
g) In particular, the manufacturer will not be held responsible for defects caused during transport and storage, misuse of the product by the customer (collisions), use outside normal working conditions, failure to observe the operating instructions and maintenance rules prescribed by producer.
h) Repairs during the warranty period are made on the basis of a written complaint sent by the buyer, which must include a detailed description of the defect and which can be verified by the producer.

Repairs outside the warranty

For tool holders that are no longer covered by warranty, a standard toll charge of 30 EUR / tool holder, will be applied for disassemble and evaluation of the product state. If the Repair Offer is accepted by the customer and a Repair Order is received, this fee will not be paid by customer.

Contact information

Company	
Contact person	
Address	
Invoice address	
Telephone no.	
Fax no.	
Email	
Your reference	

Tool holder

Error description (multiple selection possible):						
a. Precision	b. Clearance	c. Collision	d. Stiffness	e. Leakiness (cooling water inleakage)	f. Noise	g. Temperature

Reason for return shipment:

1.REPAIR 2.PREVENTIVE MAINTENANCE 3.COMPLAINT

Nr. art.	Part. number	Serial number	Error description	Reason for return shipment
1.			a.☐ b.☐ c.☐ d.☐ e.☐ f.☐ g.☐ Further informations:	1. ☐ 2. ☐ 3. ☐
2.			a.☐ b.☐ c.☐ d.☐ e.☐ f.☐ g.☐ Further informations:	1. ☐ 2. ☐ 3. ☐

****Purchase Date:**

**Purchase Date : This is required for warranty coverage evaluation - please attach documentation to verify date of delivery.

Remarks

Please fill out this form from our e-mail, print it and attach it to the delivery. You will be notified when we receive your package/delivery. After checking the tool holder, we will send you the estimated cost .

Date		Name/Surname/Signature	