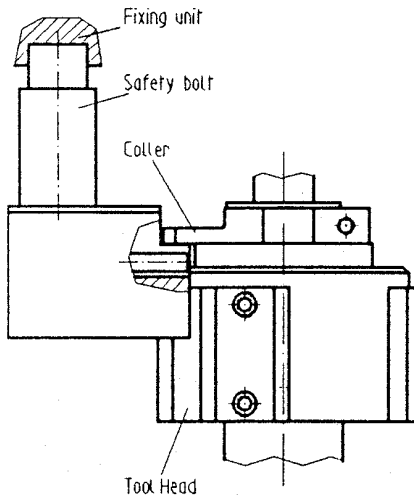


## 5. Anti-Rotation Device

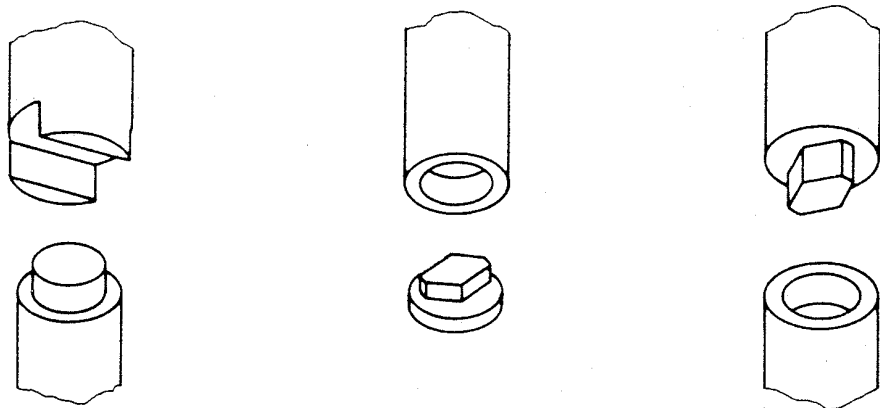


The anti-rotation device secures the tool head from twisting, i.e. the anti-rotation device takes over the torque resulting from the brake when changing the direction of rotation (similar as with tapping heads).

If the GH-Z tool is used on a CNC machine or whether the tool will be changed by hand we will provide you with the appropriate anti-rotation device in either case.

For a **CNC application** you require an anti-rotation device whose position with regard to the tool remains fixed during the tool change as well as when placed in the tool magazine.

If the **tool will be changed manually** a simple torque support is sufficient. Such a simple support can either be produced by the customer himself or be supplied by HEULE:

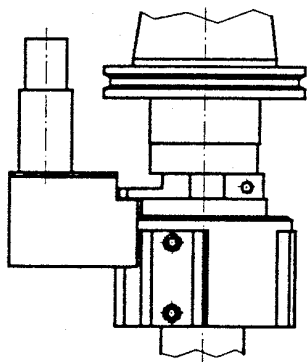


The safety bolt of the anti-rotation device has to be positioned to any recess (bore) or to a bolt, i.e. screw head of the spindle nose (spindle sleeve) of the machine. Positioning facilities for coolant adapter or multiple-spindle heads are suitable anchorage points.

HEULE will design the anti-rotation device according to the customer's data.

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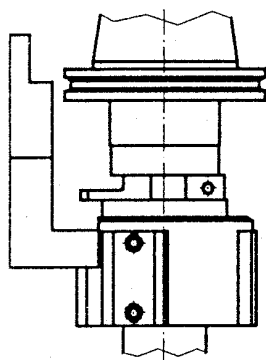
## 5.1. CNC Anti-Rotation Device



The anti-rotation device is designed for the **automatic tool change** and will be adjusted according to the machine tool.

The necessary data has to be made available to HEULE by the customer (see data sheet "anti-rotation device").

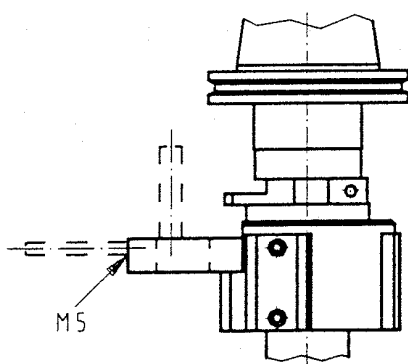
## 5.2. Fixed Support



The tool will be changed **manually** with a fix support on the machine. In this case the anti-rotation device will also be adjusted to the machine tool.

The necessary data has to be made available to HEULE by the customer (see data sheet "anti-rotation device").

## 5.3. Simple holding device



The tool will be changed **manually** with a fix support on the machine.

HEULE supplies a stop arm to which either a bar with an M5 thread can be screwed in on the face or a bolt with a slot (width 12mm) can be fastened.

With this solution there are no restrictions regarding the use of the tool, i.e. the customer will be able to use the tool universally on different machines.

## 5.4. The customer makes his own support

The support will be fastened to the tool head with two M5 screws.