New

Universal machining unit (BAE)
Machining spindle and positioning axis in one
Perfectly supported in hard- and software
for KOSY, Control unit MCS and ***nccad***

C-axis with tool changer ***BAE56v..***

> Attachment changer operated pneumatically
> Tool receiving socket SK10
>> different shaft diameters are no problem
> Chucks ER16 – 1 to 10 mm

> Revs, sense of rotation, angle of rotation to program indiv.
>> simultaneous axis movement e.g. C/Z for threads

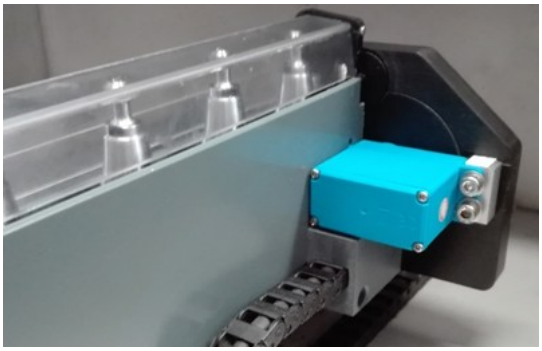
> Steppermotor or Servomotor
>> different ranges of power and speed

Details

Tool Magazine

When mounted on the right of the Y-table of a machine A4 five positions for tools are available.
In this construction the magazine is inside X/Y/Z-travel of the machine, in order to get the machine change the tool.
Other arrangements are possible.

Picture: Cover of the magazine is open. Position 1 in front, on the back beside position 5 the tool length measurer (WZL).



Cover of the Magazine

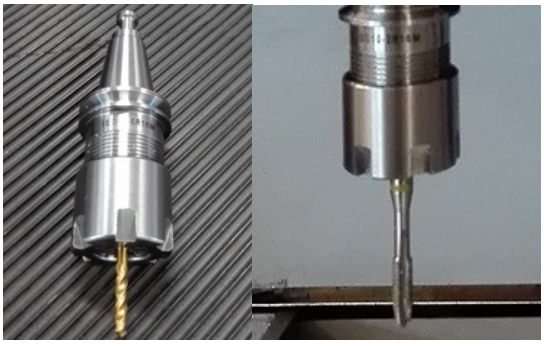
Out of transparent polycarbonate (breakproof).
It is moved by a waterproof and dustproof servomotor.
Gearbox and sensors are safely cased against dirt.
A dragchain leads the cables to the control unit on the back.

Picture: Cover is closed, the blue module is the servo.

Tool receiving socket

Its exact denomination is: ISO10 – ER16M.
It is out of 3 parts: Holder, chuck and clamping nut.

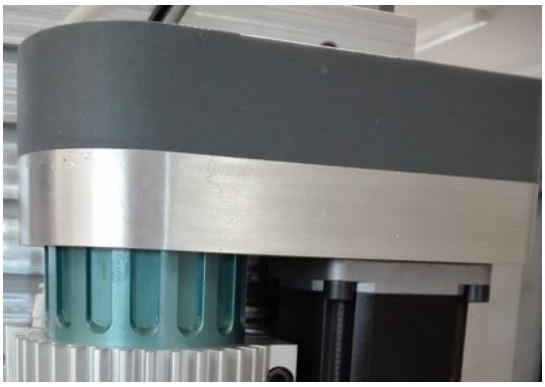
Picture: Tool receiving socket disassembled.



Tool receiving socket with tool

Advantage of this method: Tools with different shafts can be clamped in, you just need a suitable chuck.
For screw taps you need a chuck with length adjustment.

Picture: Left with NC-drill 3,3mm; right with screw tap M4.



Gearing

The connection between motor and attachment changer is realized by a tooth-belt gear with limited selectable transmission ratio.
An ecoder is fixed to the changer controlling the rotational movement and sensoring the 0°-position.

Picture: Closed gear cover. Here: with stepper motor.

Some important data

Type / Data	Power	Transmision ratio	Speed	Application
Step. motor	approx. 200 W	1:1 or 1:2 - 0.1125 o. 0.225 °/Step	approx. 1...1.500 or 2...3.000 rpm	Very fine positioning, low power
Servo motor	400 W or 750 W	1:2 or 1:4 – 0.225 o. 0.45 °/Step	approx. 100..9.000 or 100..18.000 rpm	Universal, Top product

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