

TECHNICAL SPECIFICATION

EMCOTURN E 65

with

SINUMERIK 828D

or

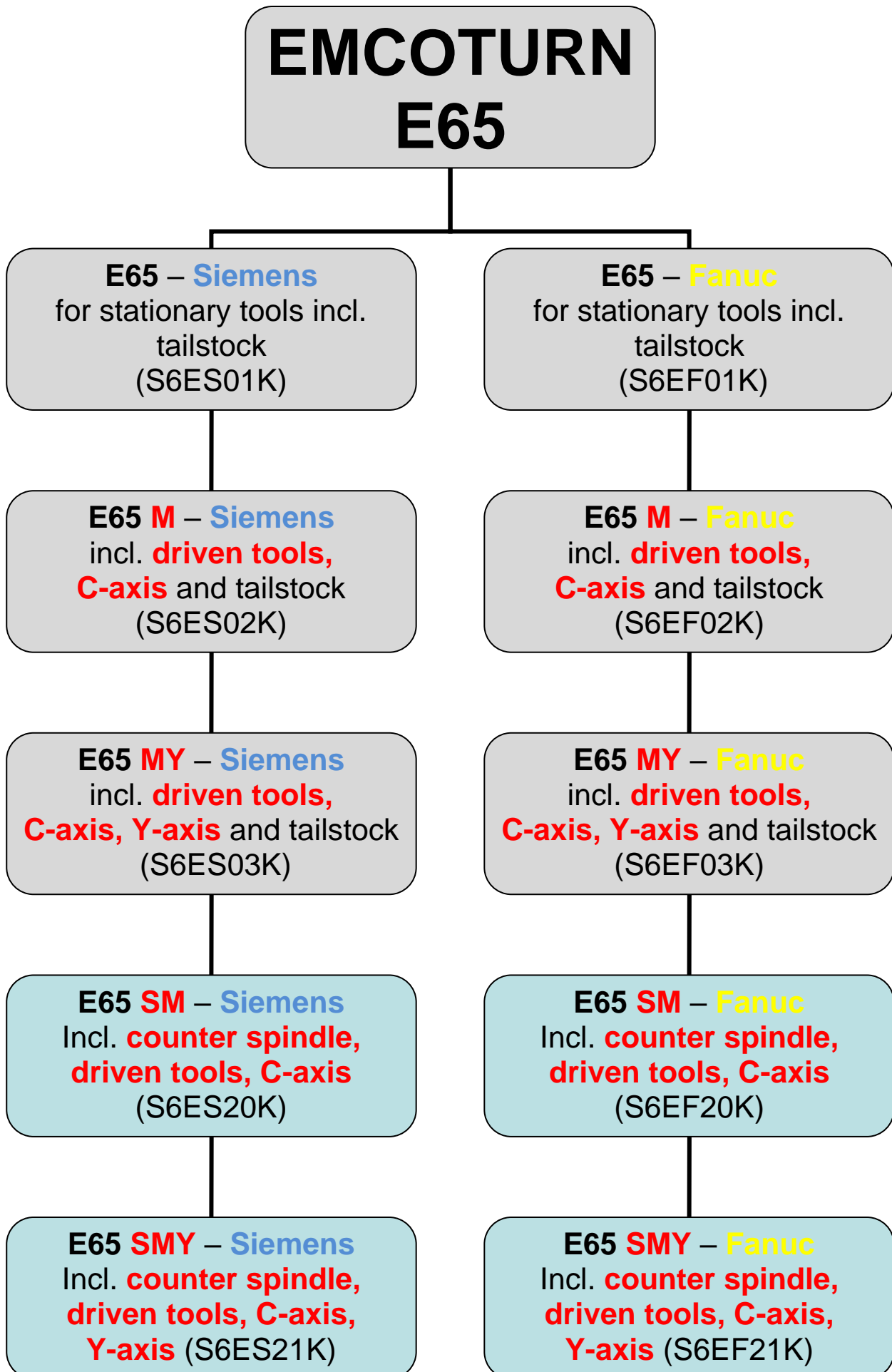
FANUC serie 0ⁱTF

CNC-TURNING CENTER
FOR BAR WORK OR CHUCK WORK

CE



Overview of the modular concept:



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Technical description for EMCOTURN 65

Machine bed:

The compact 40° slant bed unit is the core unit of the machine. Designed as an extremely stiff and compact welded steel construction it is the foundation for a robust and accurate lathe. Reinforcing steel plates internal guarantee additional rigidity at higher stressed zones. Steel instead of cast iron offers short warm-up periods and better rigidity. For extra dampening, the bed is filled with special dampening granulate. All linear axes are based on pre-loaded linear roller guide ways. The guide ways are mounted on precise machined surfaces to ensure the best guide characteristics. Covers mounted on each guide rail as well as stainless steel covers increase the reliability and the lifetime.

Main spindle:

The powerful main spindle motor with high torque allows economical machining of steel parts as well as high speed machining of aluminum parts. Large dimensioned high quality spindle bearing offers a wide speed range paired with a minimum of spindle run-out. The head stock is symmetrically designed and the cooling fin at the outside prevents thermal displacements.

Tailstock:

At the **EMCOTURN 65** version with tailstock the tailstock is mounted on the linear guide ways. With a stroke of 500mm the tailstock is flexible to use and the programming is done with simple M-functions. The live center is mounted directly into the tailstock body to gain rigidity and to reduce inaccuracies.

Counter spindle:

At the **EMCOTURN 65 S** with counter spindle the counter spindle is mounted on linear guide ways and travels in a range of 580mm. A coolant flooded part ejector tube is used to eject the finished part into the parts catcher. The stroke is monitored to guarantee a save process.

Tool turret:

12-station VDI30 (optional VDI 40) servo driven tool turret. The operator is able to control the indexing speed with the Override-switch at any time. Bi-directional indexing with non-lifting turret disc makes the process safe and reduces cycle time. Each station can be used for driven tools. With a coupling according to DIN 5480.

C-axis:

The C-axis is part of the standard features of the machine. It allows to position the spindle within a resolution of 0,001°. The direct mounted encoder, which is contactless and runs without belt, guarantees a precise C-axis needed for any kind of milling and drilling operation.

Y-axis:

The Y-axis is the highlight of the EMCOTURN 65. It is designed into the machine as a key element. Broad based and pre-loaded linear roller guide ways are carrying the 90° saddle. Short overhangs ensure top stability for turning, milling and drilling operation. Better surface finish and longer tool life are a result of this formation.

Feed drives:

Highly dynamical synchronous motors in all linear axes with pre-tensioned ball-screws ensure high axis force and good repeatability.

Measuring system:

Absolute measuring systems in all axes ensure top precision.

Positioning scatter Ps according to VDI3441 in X/Y/Z: 0,0035/0,0035/0,004mm

Clamping system:

Generally the machine is set-up with a through hole clamping cylinder. The bar capacity is $\varnothing 65\text{mm}$. A programmable clamping stroke monitoring system mounted at the actuator can be set easily during set-up mode. No proximity switches need to be set at difficult reachable areas.

Lubrication:

Fully automated central lubrication with >oil saver logic<. Depending of the amount of stroke the lubrication is activated. The unit has a floater as well as a pressure switch for safety reasons.

Coolant system:

The coolant system is a standard feature of the EMCOTURN 65. The line goes through the turret right to the tool nose. Additional coolant lines are mounted to keep the machine and the chucking system clean.

Hydraulic unit:

The compact hydraulic unit is built into the machine housing. The pump is cooled by the motor fan.

Machine covers:

The machine is completely closed. The machine door is monitored with safety switches to prevent the operator from injuries. Into the machine door there is a large safety glass for an optimum sight into the machine.

Finished part catcher (option):

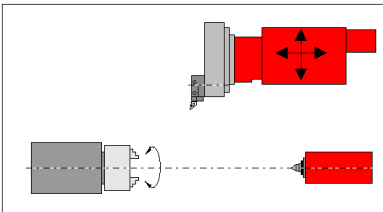
The part catcher is mounted on pneumatic activated guide rods to unload the finished part either from the main or from the counter spindle. Parts are gently transferred to the finished part box or to an optional finished part conveyor.

Max. part length: 175 mm; max. \varnothing 65 mm; max. weight: 4,5 kg

S6ES01K**EMCOTURN E65 - SIEMENS****2-AXES CNC-LATHE WITH TAILSTOCK**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control unit **SINUMERIK 828D** including **ShopTurn** conversational programming system.



SIEMENS

Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for stationary tools

Tailstock:

- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

Includes:

- Through-hole clamping cylinder incl. draw tube
- **CNC control Sinumerik 828D with HMI-Operate**
 - SHOPTURN conversational programming
 - USB-interface
 - Ethernet interface
 - 15" Multi-Touch color monitor
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6ES02K**EMCOTURN E65 M - SIEMENS****2-AXES CNC-LATHE WITH TAILSTOCK, DRIVEN TOOLS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

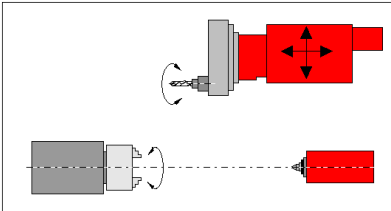
State-of-the-art control unit **SINUMERIK 828D** including **ShopTurn** conversational programming system.

**Main spindle:**

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

**Tailstock:**

- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

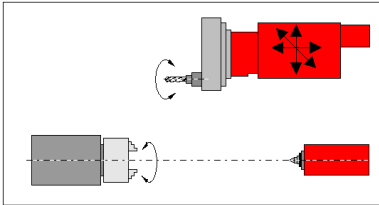
SIEMENS**Includes:**

- Through-hole clamping cylinder incl. draw tube
- C-axis for main spindle
- Mechanical spindle brake
- **CNC control Sinumerik 828D with HMI-Operate**
 - SHOPTURN conversational programming
 - USB-interface
 - Ethernet interface
 - 15" Multi-Touch color monitor
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6ES03K**EMCOTURN E65 MY- SIEMENS****3-AXES CNC-LATHE WITH TAILSTOCK, DRIVEN TOOLS, Y-AXIS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control unit **SINUMERIK 828D** including **ShopTurn** conversational programming system.


Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Tailstock:

- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

Y- axis:

- Travel range: +/-40mm

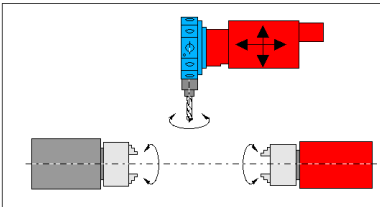
Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main spindle
- Mechanical spindle brake
- **CNC control Sinumerik 828D with HMI-Operate**
 - SHOPTURN conversational programming
 - USB-interface
 - Ethernet interface
 - 15" Multi-Touch color monitor
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6ES20K**EMCOTURN E65 SM - SIEMENS****2-AXES CNC-LATHE WITH COUNTER SPINDLE,
DRIVEN TOOLS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control unit **SINUMERIK 828D** including **ShopTurn** conversational programming system.

**SIEMENS****Main spindle:**

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Counter spindle:

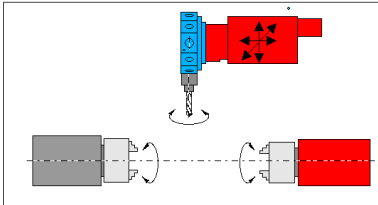
- Spindle nose A2-6 (DIN 55026)
- Max. drive power: 16,5 kW
- Max. torque: 125 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 radial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main and counter spindle
- Mechanical spindle brakes
- **CNC control Sinumerik 828D with HMI-Operate**
 - SHOPTURN conversational programming
 - USB-interface
 - Ethernet interface
 - 15" Multi-Touch color monitor
 - 3D graphical simulation
 - etc.
- Coolant system
 - 1 pump @ 3,5 bar for the turret
 - 1 pump @ 3,5 bar to keep the working area clean
- LED Machine lamp
- Air gun on spiral hose
- Parts ejector and coolant through the counter-spindle
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6ES21K**EMCOTURN E65 SMY-SIEMENS****3-AXES CNC-LATHE WITH COUNTER SPINDLE,
DRIVEN TOOLS, Y-AXIS AND
C-AXIS****SIEMENS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control unit **SINUMERIK 828D** including **ShopTurn** conversational programming system.

Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Counter spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. drive power: 16,5 kW
- Max. torque: 125 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 radial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Y- axis:

- Travel range: +/-40mm

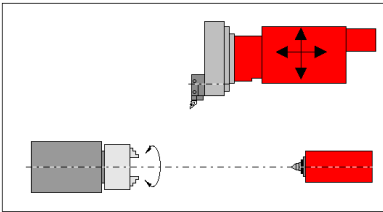
Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main and counter spindle
- Mechanical spindle brakes
- **CNC control Sinumerik 828D with HMI-Operate**
 - SHOPTURN conversational programming
 - USB-interface
 - Ethernet interface
 - 15" Multi-Touch color monitor
 - 3D graphical simulation
 - etc.
- Coolant system
 - 1 pump @ 3,5 bar for the turret
 - 1 pump @ 3,5 bar to keep the working area clean
- LED Machine lamp
- Air gun on spiral hose
- Parts ejector and coolant through the counter-spindle
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6EF01K**EMCOTURN E65 - FANUC****2-AXES CNC-LATHE WITH TAILSTOCK**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control **FANUC 0iTF** incl. **Manual Guide** conversational programming system.

**Main spindle:**

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for stationary tools

Tailstock:

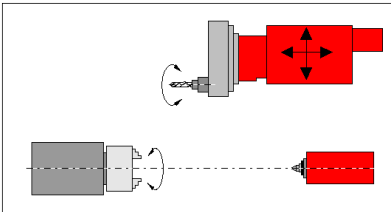
- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

Includes:

- Through-hole clamping cylinder incl. draw tube
- **CNC control FANUC 0iTF**
 - MANUAL GUIDE i conversational programming
 - USB-interface + RS232
 - Ethernet interface
 - TFT color display 15"
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6EF02K**EMCOTURN E65 M - FANUC****2-AXES CNC-LATHE WITH TAILSTOCK, DRIVEN TOOLS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways. State-of-the-art control **FANUC 0iTF** incl. **Manual Guide** conversational programming system.


Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Tailstock:

- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

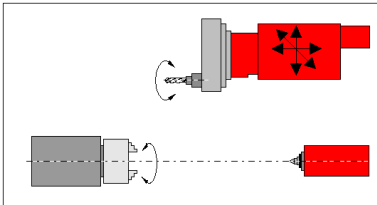
Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main spindle
- Mechanical spindle brake
- **CNC control FANUC 0iTF**
 - MANUAL GUIDE i conversational programming
 - USB-interface + RS232
 - Ethernet interface
 - TFT color display 15"
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6EF03K**EMCOTURN E65 MY - FANUC****3-AXES CNC-LATHE WITH TAILSTOCK, DRIVEN TOOLS, Y-AXIS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control **FANUC 0iTF** incl. **Manual Guide** conversational programming system.


Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 axial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Tailstock:

- Hydraulic forced, free programmable, rigid design without quill, max. force 8000 N for life-center MT 4

Y- axis:

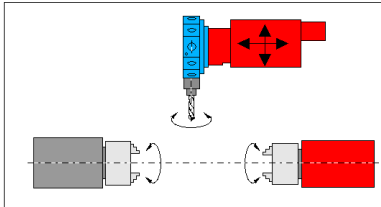
- Travel range: +/-40mm

Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main spindle
- Mechanical spindle brake
- **CNC control FANUC 0iTF**
 - MANUAL GUIDE i conversational programming
 - USB-interface + RS232
 - Ethernet interface
 - TFT color display 15"
 - 3D graphical simulation
 - etc.
- Coolant system incl. coolant pump (3,5bar)
- LED Machine lamp
- Air gun on spiral hose
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6EF20K**EMCOTURN E65 SM - FANUC****2-AXES CNC-LATHE WITH COUNTER SPINDLE,
DRIVEN TOOLS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways. State-of-the-art control **FANUC 0iTF** incl. **Manual Guide** conversational programming system.


Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Counter spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. drive power: 16,5 kW
- Max. torque: 125 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 radial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Includes:

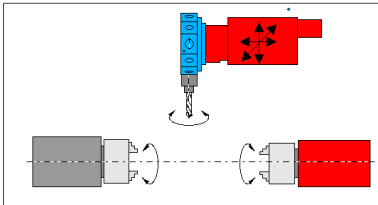
- Through-hole clamping cylinder incl. draw tube
- C-axis for main and counter spindle
- Mechanical spindle brakes
- **CNC control FANUC 0iTF**
 - MANUAL GUIDE i conversational programming
 - USB-interface + RS232
 - Ethernet interface
 - TFT color display 15"
 - 3D graphical simulation
 - etc.
- Coolant system
 - 1 pump @ 3,5 bar for the turret
 - 1 pump @ 3,5 bar to keep the working area clean
- LED Machine lamp
- Air gun on spiral hose
- Parts ejector and coolant through the counter-spindle
- Hydraulic unit
- Interface for chip conveyor
- Vibration-absorbing leveling pads
- Angular plates including heavy-duty wedge anchors
- Documentation / CE certificate

S6EF21K**EMCOTURN E65 SMY - FANUC****3-AXES CNC-LATHE WITH COUNTER SPINDLE, DRIVEN TOOLS, Y-AXIS AND C-AXIS**

High efficient universal lathe with rigid and precise pre-loaded linear roller-type guide ways.

State-of-the-art control **FANUC 0iTF** incl.

Manual Guide conversational programming system.


Main spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. bar capacity $\varnothing 65$ mm
- Max. drive power: 22 kW
- Max. torque: 305 Nm
- Spindle speed range: 0-5000 rpm

Counter spindle:

- Spindle nose A2-6 (DIN 55026)
- Max. drive power: 16,5 kW
- Max. torque: 125 Nm
- Spindle speed range: 0-5000 rpm

Tool turret:

- 12-station tool turret VDI30 radial with bi-directional indexing logic for driven tools
 - Max. drive power: 6,7 kW
 - Max. torque: 25 Nm
 - Max. speed range: 5000 rpm

Y-axis:

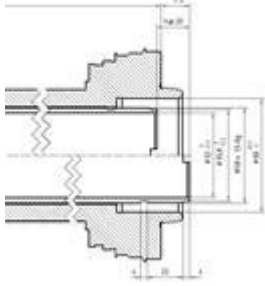
- Travel range: +/-40mm

Includes:

- Through-hole clamping cylinder incl. draw tube
- C-axis for main and counter spindle
- Mechanical spindle brakes
- **CNC control FANUC 0iTF**
 - MANUAL GUIDE i conversational programming
 - USB-interface + RS232
 - Ethernet interface
 - TFT color display 15"
 - 3D graphical simulation
 - etc.
- Coolant system
 - 1 pump @ 3,5 bar for the turret
 - 1 pump @ 3,5 bar to keep the working area clean
- LED Machine lamp
- Air gun on spiral hose
- Parts ejector and coolant through the counter-spindle
- Hydraulic unit
- Interface for chip conveyor
- Documentation / CE certificate

MAIN MACHINE OPTIONS

S6Y020



SURCHARGE E65 – SuperBigBore 95

Max. bar capacity 95mm instead of standard $\varnothing 65$ mm (main spindle).

Draw-tube connection: M102 x 2

Spindle nose (DIN 55026): A2-8

Max. spindle speed: 3500 rpm

Max. torque: 380 Nm

Max. power: 22 kW

Max. chuck size: $\varnothing 250$ (315) mm

Factory installed only!

010264

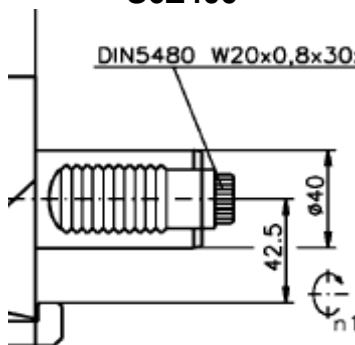


PRICE DEDUCTION / E65 WITHOUT TAILSTOCK

Price deduction for machine without tailstock. The tailstock The tailstock out of the basic machine is dropped and a cover is attached instead.

Factory installed only!

S6Z400

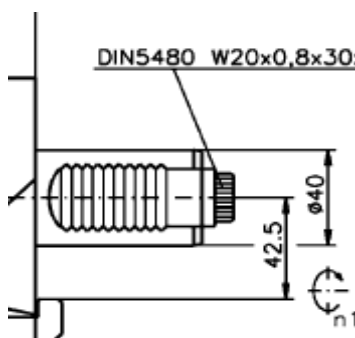


SURCHARGE VDI 40-AXIAL FOR E65

Tooling system VDI 40 replaces VDI 30 for **EMCOTURN E65 without driven tools and AXIAL-tool turret!**

Factory installed only!

S6Z410



SURCHARGE VDI 40-AXIAL FOR E65 M/MY

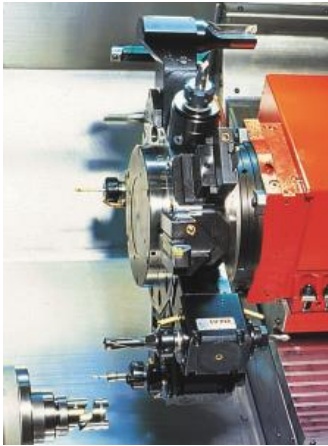
Tooling system VDI 40 replaces VDI 30 for **EMCOTURN E65M with driven tools and AXIAL-tool turret!**

Max. speed: 4500 rpm

Max. torque: 25 Nm

Max. power: 6,7 kW

Factory installed only!

S6Z430**SURCHARGE RADIAL-TOOL-TURRET
VDI30 / E65M / E65MY**

Radial-turret is replacing the standard axial-turret in the EMCOTURN E65 M/MY tailstock-version S6ES02 / S6ES03 und S6EF02 / S6EF03.

12-station tool turret **VDI30 radial** with bi-directional indexing logic for driven tools

- Max. drive power: 6,7 kW
- Max. torque: 25 Nm
- Max. speed range: 5000 rpm

Factory installed only!

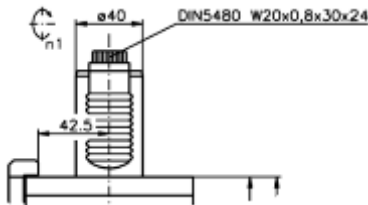
S6Z440**SURCHARGE RADIAL-TOOL-TURRET
VDI40 / E65M / E65MY**

Radial-turret is replacing the standard axial-turret in the EMCOTURN E65 M/MY tailstock-version S6ES02 / S6ES03 und S6EF02 / S6EF03.

12-station tool turret **VDI40 radial** with bi-directional indexing logic for driven tools

- Max. drive power: 6,7 kW
- Max. torque: 25 Nm
- Max. speed range: 4500 rpm

Factory installed only!

S6Z420**SURCHARGE VDI 40-RADIAL FOR E65 SM**

Tooling system VDI 40 replaces VDI 30 for **EMCOTURN E65M with driven tools and RADIAL-tool turret!**




Max. speed: 4500 rpm
Max. torque: 25 Nm
Max. power: 6,7 kW

Attention: Please refer to tool interference diagram!






Factory installed only!

CONTROL LANGUAGES:

Standard-Languages:

DE6400 	Control language / GERMAN Standard version includes two languages switchable from German to English. Additional languages available as per surcharge.
EN6400 	Control language / ENGLISH Standard version includes two languages switchable from German to English. Additional languages available as per surcharge.
TA6400 	Control language / ITALIAN Standard version includes two languages switchable from German to English. Additional languages available as per surcharge. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

Additional languages for extra costs:

FR6400 	Control language / FRENCH Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.
SP6400 	Control language / SPANISH Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.
SE6400 	Control language / SCHWEDISH Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.
CZ6400 	Control language / CZECH Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.
DK6400 	Control language / DANISH Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

NL6400**Control language / DUTCH**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

FI6400**Control language / FINNISH**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

HU6400**Control language / HUNGARIAN**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

PL6400**Control language / POLISH**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

PT6400**Control language / PORTUGUESE**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

RO6400**Control language / ROMANIAN**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

RU6400**Control language / RUSSIAN**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

TR6400**Control language / TURKISH**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

CN6400**Control language / CHINESE-SIMPLE**

Additional control language, switchable to English when needed. We reserve the right, that not all the displayed text is incorporated in the special language at the control.

CONTROL OPTIONS - SINUMERIK 828D

X3Z600



ELECTRONIC HANDWHEEL

Portable electronic hand-wheel for SIEMENS or FANUC controls. Offers a convenient manual operation of the machine also with open machine door.

Retrofit able through EMCO technician !

X3Z271



FULL PC KEYBOARD

for comfortable programming at the Sinumerik. American QWERTY key assignment, with SINUMERIK hotkey function keys.

X3Z435



MEMORY EXTENSION/SIEMENS 840D-sI

Programs can be stored on a Micro-USB-Stick with a memory capacity of **4 GB**.

Retrofit able through EMCO technician !

X3Z260

Messauftrag: 1		Messauftrag: 1		Messauftrag: 1	
Betrieb 1		Betrieb 2		Betrieb 3	
BRUCH	Grenzalarm	BRUCH	Grenzalarm	BRUCH	Grenzalarm
0.0	0.0	0.0	0.0	0.0	0.0+100%
150	80 120	150	80 120	150	80 120
0	0	0	0	0	0%
0	0	0	0	0	0%
0	0	0	0	0	0%
0	0	0	0	0	0%
0	0	0	0	0	0%
0	0	0	0	0	0%

Überwachung eingeschaltet 0 Alarmreaktion eingeschaltet 0

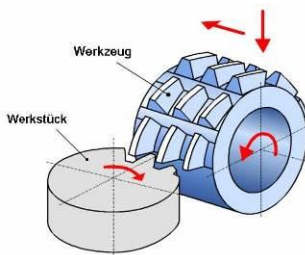
Grundstellung Grenzen sichern Parameter ändern Überw. ein/aus Alarmreakt. ein/aus

EMCO TOOL LOAD MONITORING 828D

This system is used to check the tool load during the machining. If the current load exceeds the set values for tool breakage, tool wear or tool missing, the machine will shut-off immediately.

Retrofit able through EMCO technician !

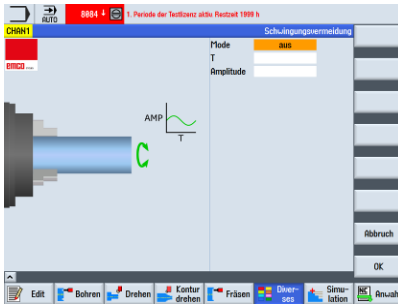
X3Z670



GEAR HOBBING – 828D/840D-SL

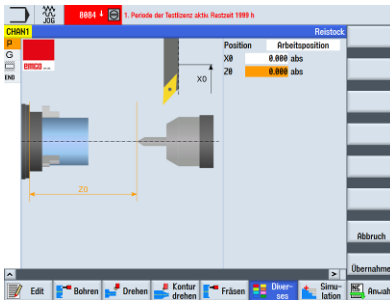
Siemens software option „electronic gear shaft“ used for gear hobbing (gear machining). Enables an oriented synchronization of the leading spindle to the following spindle due to definition of the respective coupling factors. The achievable gear quality depends on the drive-train of the machine (main spindle drive system and milling spindle drive chain).

Factory installed only!

X3Z720**ALTERNATE SPINDLE SPEED / 828D / 840D-sI**

When machining workpieces, vibrations can occur which can be reduced by permanent speed changes. With the simple input of 3 parameters in an input mask thus increased process reliability can be achieved.

Retrofitable through EMCO technician!

X3Z750**TAILSTOCK-FUNCTION FOR COUNTER SPINDLE / 828D / 840D-sI**

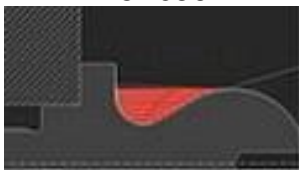
This cycle allows the use of the counter spindle with mounted live-center to support the workpiece. So shaft parts can also be supported and machined in machines without a tailstock but with the help of the counter spindle being used. The max. feed force is limited to 50% of the max. axis force.

Retrofitable through EMCO technician!

X3Z690**SHOPTURN EXTENSION PACKAGE**

Consisting of:

- Rest material removing cycle
- Monitoring function for simulation



Retrofit able through EMCO technician !

X3Z465**SISTER TOOL MANAGEMENT 828D**

Platz	Typ	Werkzeugname	ST	D	Länge K	Länge Z	Radius	PK	PK	PK
1	ROCKINGH_100 D	1	1	50.000	20.000	0.000	0.000	0.0	0.0	0.0
2	ROCKINGH_100 D	1	2	50.000	20.000	0.000	0.000	0.0	0.0	0.0
3	ROCKINGH_100 D	1	3	50.000	20.000	0.000	0.000	0.0	0.0	0.0
4	DRILL_32	1	1	8.000	100.000	32.000	100.0	0.0	0.0	0.0
5	FINISCHING_125 D	1	1	120.000	122.000	0.000	0.000	0.0	0.0	0.0
6	ROCKINGH_100 D	1	1	50.000	20.000	0.000	0.000	0.0	0.0	0.0
7	PLUNGE_CUTTER_32 D	1	1	20.000	44.000	0.000	2.000	0.0	0.0	0.0
8	PLUNGE_CUTTER_21	1	1	15.000	35.000	0.000	3.000	0.0	0.0	0.0
9	FINISCHING_125 I	1	1	12.000	122.000	0.000	0.000	0.0	0.0	0.0
10	THROATDRILL_1.5	1	1	100.000	42.000	0.000	0.000	0.0	0.0	0.0
11	CUTTER_5	1	1	8.000	74.000	0.000	3.000	0.0	0.0	0.0
12	DRILL_5	1	1	8.000	100.000	5.000	110.0	0.0	0.0	0.0
13	BOTTOM_TOOL_0	1	1	80.000	20.000	2.000	0.000	0.0	0.0	0.0
14	ROCKINGH_CP D	1	1	50.000	20.000	0.000	0.000	0.0	0.0	0.0
15	FINISCHING_CP D	1	1	50.000	20.000	0.000	0.000	0.0	0.0	0.0
16	DRILL_32 CP	1	1	8.000	100.000	32.000	100.0	0.0	0.0	0.0
17	ROCKINGH_CP I	1	1	50.000	20.000	0.000	0.000	0.0	0.0	0.0

The option is used to define replacement sister tools. The tool life is monitored based on the machining time or the number of machined components.

Retrofit able through EMCO technician !

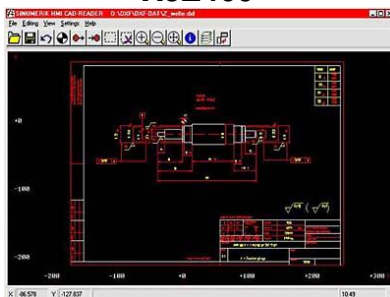
X3Z460**CAD-READER FOR SINUMERIK**

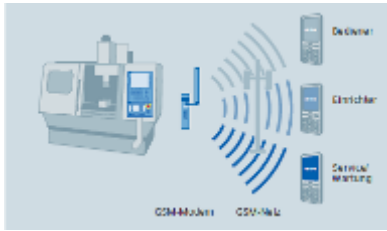
Functions by the CAD Reader:

- Import DXF files
- Hide graphics layers
- Automatic contour trace
- Optional workpiece zero per contour/drill point
- Several contours/drill points can be selected simultaneously
- Create and convert contours or drill patterns for ShopMill, ShopTurn, SINUMERIK Operate
- Display existing contours/drill points in geometry processor/cycles support.

Available for HMI OPERATE 4.7 and higher!

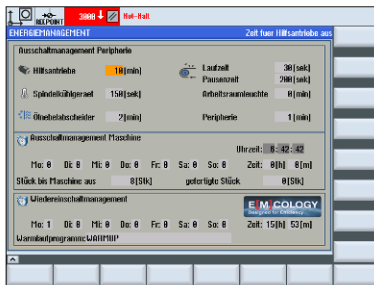
Retrofit able through EMCO technician!



X3Z450**EASY MESSAGE FOR SINUMERIK 828D**

Easy Message allows you to get process information (e.g. tool wear) out of the CNC control to your mobile phone via SMS. Just insert a SIM-card of your choice, set a user profile, select the information you want to get to your mobile phone and keep up to date. (SIM card not included)

Retrofitable through EMCO technician!

X3Z395**ENERGY CONTROL FOR 828D**

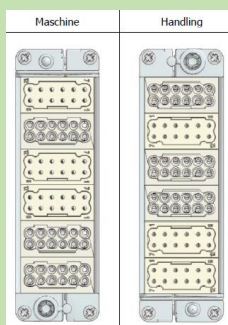
A simple to use energy control page enables the operator to switch-off auxiliary drives or the complete machine to stand-by mode after the production has stopped. The additional >Control-Energy< function makes it possible to analyze the electric energy consumption of each servo or of the hole machine.

Factory installed only!

X1Z310**FREE ROGRAMMABLE USER M-FUNCTION SINUMERIK 828D**

8 freely programmable PLC outputs can be controlled using M-functions. Switching behavior (timer, feedback signal via 8 PLC inputs, etc.) can be configured using the operator mask. The hardware version is electrically isolated on the plug on the outside of the electrical cabinet. Also available in duplicate if required → 16 freely programmable PLC I/O's.

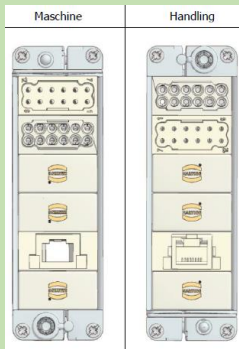
Factory installed only!

X1Z200**EMCO STANDARD ROBOTER-INTERFACE 840D-sI/828D**

Interface to connect a robot to the machine. Execution via HARTING connector (Han-Modular).

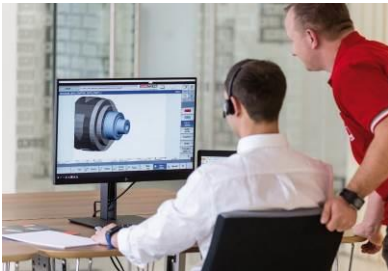
Signal exchange potential-free via 16 I/O's. Safety signals 2-channel / potential-free. Mating connector included in delivery.

Factory installed only!

X1Z210**EMCO PROFI-NET
ROBOTER-INTERFACE 840D-sI/828D**

Interface to connect a robot to the machine.
Execution via HARTING connector
(Han-Modular).
Signal exchange via Profinet (16 byte I/O).
Safety signals 2-channel / potential-free.
Mating connector included in delivery.

Factory installed only!

X3Z011**EMCO REMOTE SUPPORT**

Installation Hardware ex factory to use the EMCO Remote Support for **machines without EMCONNECT**.

- Direct access to the control by the EMCO customer service
- Quick and easy support in case of problems
- Remote diagnostics and maintenance of the machine
- Reduction of downtimes and service visits to a minimum

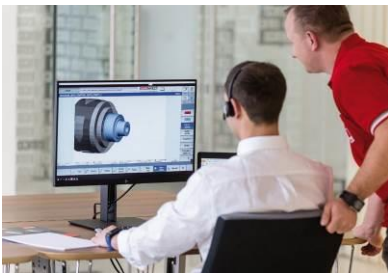
EMCO Remote Support contains

- Usage of Remote Support for 12 months
- Remote Support up to 4 hours per year

Prerequisites:

- Machine without EMCONNECT
- EMCONNECT Digital Services package or alternatively network connection of the machine for Remote Support via the internet (details see user manual EMCO Remote Support)

Factory installed only!

X3Z016**EMCO REMOTE SUPPORT Renewal**

Usage of EMCO Remote Support for further 12 months

- Direct access to the control by the EMCO customer service
- Quick and easy support in case of problems
- Remote diagnostics and maintenance of the machine
- Reduction of downtimes and service visits to a minimum

EMCO Remote Support Renewal contains

- Service charges for mobile network connection
- 4 hours Remote Support (we reserve the right to charge for any additional expenses)

Prerequisites (Maschinen ohne EMCONNECT)

- EMCO Remote Support (X3Z010/X3Z011) installed
- EMCONNECT Digital Services package or alternatively network connection of the machine for Remote Support via the internet (details see user manual EMCONNECT or EMCO Remote Support)

- For a multi-year extension the option can be ordered multiple times.

X3Z295**Digital Services for Sinumerik 828D**

Online services for condition monitoring and optimized machine operation

- Machine state at a glance anytime, anywhere
- E-Mail notification for alarms and exceeding of limits
- Remote diagnosis and maintenance to reduce maintenance visits
- Extended diagnosis for targeted, proactive maintenance and reduction of unplanned downtimes
- Hardware for diagnosis and secure connection independent of the company network
- Running costs during warranty period included

Availability: EU, UK, CH, NO, FL, IS
(other countries on request)

Factory installed only!

X3Z297**Digital Services renewal**

With Digital Services, a wide range of online services are available for condition monitoring, optimized machine operation and the reduction of unplanned downtimes based on machine data:

- **Remote Support** for remote diagnostics and maintenance
- **Machine State and Evaluations** at a glance online
- **E-Mail-Notification** for defined events
- **Maintenance Manager** for targeted, proactive maintenance and information about upcoming tasks
- **Extended Diagnosis Capabilities** for quick help
- **Hard- and Software** for diagnosis and secure connection independent of the company network
- **Continuous advancements** of the online services

EMCONNECT Digital Services Renewal includes

- Use of online services and remote support for a further 12 months
- 4 hours of remote support per year
- Running costs online platform and mobile connection

Prerequisite: EMCONNECT incl. Digital Services or X3Z285/X3Z290/X3Z295 depending on machine- and control type installed.

For a multi-year extension the option can be ordered multiple times.

X3Z280**OPC UA / SIEMENS - INTERFACE for connection to MDE / PDA systems**

Standard with the following information:

- Machine on - AUX ON
- Automatic mode
- Production mode - program active
- Program is running / override between 95 and 105%
- Quantity impulse (M30)
- Programmable Pulse (M300)
- Load / bar change
- Alarm state

Factory installed only!

S6Z26S**GLASS SCALE IN X-AXIS-828D/840DsI**

Absolute, direct measuring system (HEIDENHAIN) for the X-axis including sealing air.

Factory installed only!

S6Z27S**GLASS SCALE IN Y-AXIS-828D/840DsI**

Absolute, direct measuring system (HEIDENHAIN) for the Y-axis including sealing air.

Factory installed only!

S6Z28S**GLASS SCALE IN Z-AXIS-828D/840DsI**

Absolute, direct measuring system (HEIDENHAIN) for the Z-axis including sealing air.

Factory installed only!

CONTROL OPTIONS – FANUC 0i-TF

X3Z600



ELECTRONIC HANDWHEEL

Portable electronic hand-wheel for SIEMENS or FANUC controls. Offers a convenient manual operation of the machine also with open machine door.

Retrofit able through EMCO technician!

X3Z095



MEMORY/PROGRAMM STORAGE EXTENSION – FANUC 0i

The memory for part programs will be increased from 512 KB to 2 MB and the program storage will be increased from 400 to 1000 part programs.

Retrofit able through EMCO technician!

X3Z335



MEMORY EXTENSION – FANUC 0i/31i

Programs can be stored on a Compact Flash card with a memory of **2 GB**.

X3Z150

aktuell	Maximum	Maximum	Bereichsweit	Maximum	Frucht	Wersch
aktuell1	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
letztet	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
gelernt	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
aktuell1	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
letztet	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
gelernt	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
aktuell1	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
letztet	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
gelernt	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
aktuell1	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
letztet	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00
gelernt	2228.00	2228.00	2228.00	2228.00	2228.00	2228.00

EMCO TOOL LOAD MONITORING-FANUC 31i/0iTf

This system is used to check the tool load during the machining. If the current load exceeds the set values for tool breakage, tool wear or tool missing, the machine will shut-off immediately.

Retrofit able through EMCO technician!

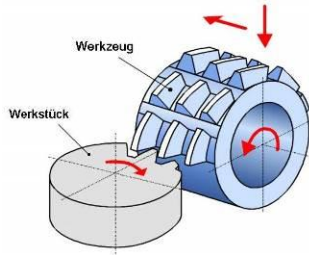
X3Z380

Ausschaltmanagement Peripherie		Laufzeit	
Hilfsantriebe	18 [min]	Passanzzeit	30 [sek]
Spindelabspanner	150 [sek]	Arbeitsraumleuchte	0 [min]
Überschaltzeit	7 [min]	Peripherie	1 [min]
Überzeit: 08:32:32			
M: 0	DE 0	M: 0	DE 0
Stück Nr Maschine aus	0 [Stk]	unterteile Stück	0 [Stk]
Werkzeuginstanzmanagement		EMCOLOGY	
M: 1	DE 0	M: 0	DE 0
Werkzeugprogramm	0 [Stk]	Zeit:	15 [min]

ENERGY CONTROL FOR FANUC 31i/0iTf

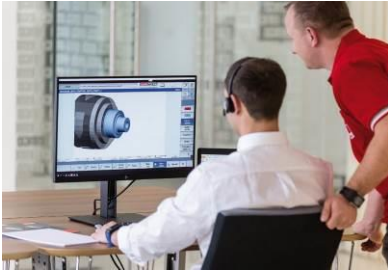
A simple to use energy control page enables the operator to switch-off auxiliary drives or the complete machine to stand-by mode after the production has stopped. The additional >Control-Energy< function makes it possible to analyze the electric energy consumption of each servo or of the hole machine.

Retrofit able through EMCO technician!

X3Z085**GEAR HOBBING – FANUC 31i/0iTF**

Fanuc software option „electronic gear shaft“ used for gear hobbing (gear machining). Enables an oriented synchronization of the leading spindle to the following spindle due to definition of the respective coupling factors. The achievable gear quality depends on the drive-train of the machine (main spindle drive system and milling spindle drive chain).

Factory installed only!

X3Z011**EMCO REMOTE SUPPORT**

Installation Hardware ex factory to use the EMCO Remote Support for **machines without EMCONNECT**.

- Direct access to the control by the EMCO customer service
- Quick and easy support in case of problems
- Remote diagnostics and maintenance of the machine
- Reduction of downtimes and service visits to a minimum

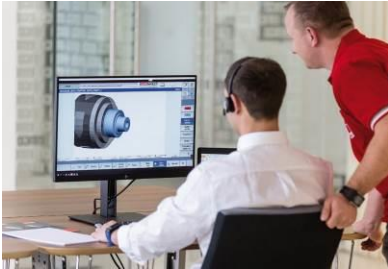
EMCO Remote Support contains

- Usage of Remote Support for 12 months
- Remote Support up to 4 hours per year

Prerequisites:

- Machine without EMCONNECT
- EMCONNECT Digital Services package or alternatively network connection of the machine for Remote Support via the internet (details see user manual EMCO Remote Support)

Factory installed only!

X3Z016**EMCO REMOTE SUPPORT Renewal**

Usage of EMCO Remote Support for further 12 months

- Direct access to the control by the EMCO customer service
- Quick and easy support in case of problems
- Remote diagnostics and maintenance of the machine
- Reduction of downtimes and service visits to a minimum

EMCO Remote Support Renewal contains

- Service charges for mobile network connection
- 4 hours Remote Support (we reserve the right to charge for any additional expenses)

Prerequisites (Maschinen ohne EMCONNECT)

- EMCO Remote Support (X3Z010/X3Z011) installed
- EMCONNECT Digital Services package or alternatively network connection of the machine for Remote Support via the internet (details see user manual EMCONNECT or EMCO Remote Support)

For a multi-year extension the option can be ordered multiple times.

S6Z26F**GLASS SCALE IN X-AXIS-FANUC**

Absolute, direct measuring system (HEIDENHAIN) for the X-axis including sealing air.

Factory installed only !!

S6Z27F**GLASS SCALE IN Y-AXIS-FANUC**

Absolute, direct measuring system (HEIDENHAIN) for the Y-axis including sealing air.

Factory installed only !!

S6Z28F**GLASS SCALE IN Z-AXIS-FANUC**

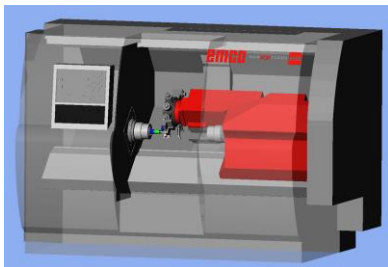
Absolute, direct measuring system (HEIDENHAIN) for the Z-axis including sealing air.

Factory installed only !!

MACHINE INSTALLATION KIT

ATTENTION: The machine installation kit is already included to the basic machine. This includes the levelling pads, brackets and anchor bolts.



3D-MACHINE DATA


S6E003D**3D-MACHINE DATA / E65**

3D data model of the machine including working space in STP format.

The 3D model may include various stages of expansion of the machine that need to be configured. EMCO assumes no liability for damage caused by incorrect configuration. A data model adapted to the respective machine variant can be offered if required. The delivery of the 3D data model is done on USB-STICK. Copyright EMCO!

ESPRIT PROGRAMMING SYSTEM:

<p>224560</p>	<p>EMCO-ESPRIT PACKAGE / E-SERIES / TURNING</p>	
 <p>Basic license which includes the following ESPRIT modules: 2D / 3D Geometry Modeler, Parasolid solid Modeler, NURBS Surface Modeler, Adaptive Feature Detection, Tool and Speed and Feed KnowledgeBase, Universal Post Processing, Solid Simulation and Verification, Visual Basic for Applications and ESPRIT API; ESPRIT reads data from the following native formats: ACIS, DXF, IGES, Inventor (*.ipt, *.iam), Parasolid (X_T, X_B), Solid Edge (*.par, *.psm, *.Asm), SolidWorks (*.sldprt, *.sldasm), VDA, STEP, STL; Feature handover of Inventor, Solid Edge and SolidWorks</p>	<p>RRP LIST PRICE: 9.200,- EURO ATTENTION: SPECIAL PRICE ACCORDING TO OFFER ONLY IN CONNECTION WITH NEW MACHINE PURCHASE!</p> <p>The most powerful CAD/CAM programming software for turning, milling and drilling. In only a few steps you can create the CNC-program from a CAD drawing. A 3D dynamic solid simulation shows the work piece, tools and also the chuck. The machining process is shown in real-time and collisions are detected to provide a proven process to the machine.</p> <p><u>The package supports programming of:</u></p> <ul style="list-style-type: none"> • 1 spindle • 1 tool turret • C-axis • Driven tools <p><u>The package includes:</u></p> <ul style="list-style-type: none"> • ESPRIT Basis License, • ESPRIT SolidTurn Traditional, • ESPRIT SolidMillTurn Traditional, • EMCO standard postprocessor for Siemens or Fanuc <p><u>Customer data for licensing:</u> <u>Company:</u> _____ <u>Address:</u> _____ <u>Tel.:</u> _____ <u>Fax.:</u> _____ <u>Contact person:</u> _____ <u>E-Mail:</u> _____ <u>Customer P.O.-No.:</u> _____</p> <p>ESPRIT Software-Maintenance contract not included.</p>	
<p>224500</p>	<p>EMCO-ESPRIT PACKAGE / E+MT-SERIE (M/MY)</p>	
 <p>Basic license which includes the following ESPRIT modules: 2D / 3D Geometry Modeler, Parasolid solid Modeler, NURBS Surface Modeler, Adaptive Feature Detection, Tool and Speed and Feed KnowledgeBase, Universal Post Processing, Solid Simulation and Verification, Visual Basic for Applications and ESPRIT API; ESPRIT reads data from the following native formats: ACIS, DXF, IGES, Inventor (*.ipt, *.iam), Parasolid (X_T, X_B), Solid Edge (*.par, *.psm, *.Asm), SolidWorks (*.sldprt, *.sldasm), VDA, STEP, STL; Feature handover of Inventor, Solid Edge and SolidWorks</p>	<p>RRP LIST PRICE: 12.100,- EURO ATTENTION: SPECIAL PRICE ACCORDING TO OFFER ONLY IN CONNECTION WITH NEW MACHINE PURCHASE!</p> <p>The most powerful CAD/CAM programming software for turning, milling and drilling. In only a few steps you can create the CNC-program from a CAD drawing. A 3D simulation of the work piece, tools, clamping devices and even the machine room helps to avoid collisions in advance and to reduce set-up times.</p> <p><u>The package supports programming of:</u></p> <ul style="list-style-type: none"> • 1 spindle • 1 tool turret • 1 steady-rest (not synchronized) • C-axis • Y-axis • Driven tools <p><u>The package includes:</u></p> <ul style="list-style-type: none"> • ESPRIT Basis License, • ESPRIT SolidTurn Traditional, • ESPRIT SolidMillTurn Advanced, • EMCO standard postprocessor for Siemens or Fanuc • EMCO standard machine-model simulation • Incl. ToolShapes <p><u>Customer data for licensing:</u> <u>Company:</u> _____ <u>Address:</u> _____ <u>Tel.:</u> _____ <u>Fax.:</u> _____ <u>Contact Person:</u> _____ <u>E-Mail:</u> _____ <u>Customer P.O.-No.:</u> _____</p> <p>ESPRIT Software-Maintenance contract not included.</p>	

224570	EMCO-ESPRIT PACKAGE / E+MT-SERIE WITH SUB SPINDLE (S/SM/SMY)	
 <p>Basic license which includes the following ESPRIT modules: 2D / 3D Geometry Modeler, Parasolid solid Modeler, NURBS Surface Modeler, Adaptive Feature Detection, Tool and Speed and Feed KnowledgeBase, Universal Post Processing, Solid Simulation and Verification, Visual Basic for Applications and ESPRIT API; ESPRIT reads data from the following native formats: ACIS, DXF, IGES, Inventor (* .ipt, * .iam), Parasolid (X_T, X_B), Solid Edge (* .par, * .psm, * .Asm), SolidWorks () * .sldprt, * .sldasm), VDA, STEP, STL; Feature handover of Inventor, Solid Edge and SolidWorks</p>	<p>RRP LIST PRICE: 15.300,- EURO ATTENTION: SPECIAL PRICE ACCORDING TO OFFER ONLY IN CONNECTION WITH NEW MACHINE PURCHASE!</p> <p>The most powerful CAD/CAM programming software for turning, milling and drilling. In only a few steps you can create the CNC-program from a CAD drawing. 3D dynamic solid simulation shows the work piece, chucks, tools and the working area of the machine. It eliminates the need for expensive dry runs on the NC machine and prevents machine crashes.</p> <p>The package supports programming of:</p> <ul style="list-style-type: none"> • 2 spindle • 1 tool turret • 1 steady-rest (not synchronized) • C-axis • Y-axis • Driven tools <p>The package includes:</p> <ul style="list-style-type: none"> • ESPRIT Basis License, • ESPRIT SolidTurn Traditional, • ESPRIT SolidTurn Multi Spindle • ESPRIT SolidMillTurn Advanced, • EMCO standard postprocessor for Siemens or Fanuc • EMCO standard machine-model simulation • Incl. ToolShapes <p>Customer data for licensing: Company: _____ Address: _____ Tel.: _____ Fax.: _____ Contact Person: _____ E-Mail: _____ Customer P.O.-No.: _____</p> <p>ESPRIT Software-Maintenance contract not included.</p>	

010570	ESPRIT BASIC TRAINING AT EMCO (3 DAYS)	
	<p>3 days of basic training for the ESPRIT software product. Max. Number of participants: 3 people Implementation: By PIMPEL at EMCO in Hallein, or at PIMPEL in Austria or Germany (Other countries on request) (Experience shows that 1-channel machines with up to 2 spindles + E-series are sufficient for 3 days)</p>	
010575	ESPRIT BASIC ON-SITE TRAINING (3 DAYS)	
	<p>3 days of basic training for the ESPRIT software product. Max. Number of participants: 3 people Implementation: By PIMPEL at the customer's site within Austria and Germany (Other countries on request) (Experience shows that 1-channel machines with up to 2 spindles + E-series are sufficient for 3 days)</p>	

ACCESSORIES FOR BAR MACHINING:

S6Y725



PARTS CATCHER EMCOTURN E65

Standard parts catcher system to unload the components from the main or counter spindle into a standard part box or to the conveyor belt (optional).

Max. finished part length: 175 mm

Max. finished part diameter: 65 (95) mm

Max. finished part weight: 4,5 kg

Factory installed only !!

X1Z140



EMCO BAR LOADER INTERFACE FOR SECOND-PARTY BAR LOADERS

Bar loader interface to connect **non** EMCO bar loader systems. The programming is done via M-functions.

The signal exchange from Machine to bar loader goes through 24-pin HARDING-plug. The bar loader manufacturer must adopt the wiring and signals according to EMCO's standard pinning!

NEW: Safety signals are carried out with two channels!

Factory installed only !!

R9Z035



MACHINE STATUS LAMP / LED

The machine status lamp is divided in 3 color ranges:

Red ... Alarm

Green ... Automatic mode

White ... Material handling

Retrofit able through EMCO technician !

R6Z270



PLASTIC INSERT PUSHING SIZE 65

to be machined by the customer according to bar diameter. ($\varnothing 66,4-0,1 \times 74,5+0,1$ - 13 pieces required)

R6Z280



SPINDLE REDUCTION - PLASTIC INSERT PUSHING SIZE 95

to be machined by the customer according to bar diameter. ($\varnothing 95,4-0,1 \times 115+0,2$ / 10 pieces required)

S6Z305



FINISHED PART CONVEYOR E65

Finished part conveyor belt to protect the parts from crashing into each other inclusive coolant recirculation and chip tray. It replaces the standard finished part box and is controlled via M-function.

Effective surface for storage: 340 x 750mm

Factory installed only !!

EMCO SHORT BAR LOADER:

6AL1A000K	EMCO SL1200 SHORT BAR LOADER
	<p>Short bar loading magazine for automatic loading of short bar stock with a diameter from 8 to 95 mm and a length up to 1200mm. The loading magazine is very compact and space-saving and also very simple to be used.</p>
	<p>NEW COLOURS</p>
	<p>TECHNICAL DATA:</p>
	<p>Bar length: 150 – 1200 mm</p>
	<p>BAR LENGTH LIMITED ACCORDING TO SPINDLE LENGTH!!! (EMCOTURN E65 ->> 1100 mm)</p>
	<p>Bar diameter: 8 – 95 mm</p>
	<p>Max. feed rate: 60 m/min</p>
	<p>Time for bar feed: approx. 3 sec</p>
	<p>Time for bar change: approx. 15 sec</p>
	<p>Bar storage surface: 560 x 1210 mm</p>
	<p>Storage capacity: 10 bars with \varnothing 55 mm or 70 bars with \varnothing 8 mm</p>
	<p>Bar in-feed side: Backside</p>
	<p>Power supply: 24 Volt DC (Interface)</p>
	<p>Air main supply: 6 bar</p>
	<p>Length: 1700 mm</p>
	<p>Width: 1250 mm</p>
	<p>Pusher rod/spindle height: 1090-1380 mm</p>
	<p>Weight: approx. 500 kg</p>
	<p>Safety features: according to CE</p>
	<p>Includes:</p>
	<ul style="list-style-type: none"> • Push rod \varnothing 15 mm • Push rod \varnothing 8 mm • Fastening material • Slide system to move the loader longitudinal (approx. 400 mm) • Documentation
	<p>Advantages:</p>
	<ul style="list-style-type: none"> • Small foot print • Simple to operate • Simple and quick set-up change • Possibility to load billets • Easy adjustment of the diameter • High-Speed function • EMCO Design
	<p>Loading of hexagon and square bar stock not possible!!</p>
	<p>Factory installed only !!</p>
X1Z130	INTERFACE FOR EMCO SL1200
	<p>To connect the short bar loader SL1200 from EMCO.</p>
	<p>Factory installed only!</p>
6AL1Z010K	DRAWERS FOR SL1200
	<p>In the two drawers, which are integrated in the bar loader frame, reduction bushings, hand tools or other utensils can be stored. The maximum load per drawer is 20 kg.</p>
	<p>Retrofit able through EMCO technician!</p>

6AZVZ341875	STANDARD PACKING SL1200 For easy pick-up with the forklift. Consisting of: pallet, rolamit-cover
6AZVP547220	CLIMATE PACKING SL1200 for transportation over-sea. Consisting of: pallet, dehumidifier, aluminium-cover and miscellaneous
6AZVP302145	WOODENBOX SL1200 Additional protection for critical transportation
6ADE 1200	SL1200 Instruction Manual / GERMAN
6AEN 1200	SL1200 Instruction Manual / ENGLISH
6ATA 1200	SL1200 Instruction Manual / ITALIAN
6AFR 1200	SL1200 Instruction Manual / FRENCH
6ASP 1200	SL1200 Instruction Manual / SPANISH
6ASE 1200	SL1200 Instruction Manual / SCHWEDISH
6ACZ 1200	SL1200 Instruction Manual / CZECH
6ADK 1200	SL1200 Instruction Manual / DANISH
6ANL 1200	SL1200 Instruction Manual / DUTCH
6AFI 1200	SL1200 Instruction Manual / FINNISH
6AHU 1200	SL1200 Instruction Manual / HUNGARIAN
6APL 1200	SL1200 Instruction Manual / POLISH
6APT 1200	SL1200 Instruction Manual / PORTUGUESE
6ARU 1200	SL1200 Instruction Manual / RUSSIAN
6ATR 1200	SL1200 Instruction Manual / TURKISH
6ACN 1200	SL1200 Instruction Manual / CHINESE-SIMPLE

IRCO SHORT BAR LOADER:

434IRC7012SET

IRCO ILS-MUK-7012-IV SHORT BAR LOADER

INCL. EMCO STANDARD INTERFACE



Universal Short Bar Loader for quick loading of short bar stock material.

INCL. EMCO BAR LOADER STANGENLADER INTERFACE

Characteristics:

- Glass concealment with optimal insight
- Transverse shift 300 mm towards front
- Controlled drives with two-stage feed system
- Motorized adjustment of material guide, material separation and centering device incl. push rod $\varnothing 12$ mm
- PLC control, integrated terminal with touch screen and LED status display
- Remote control wired
- No compressed air connection required!
- Color: Frame: RAL 7035 light gray



TECNICAL DATA:

Bar length: 300 – 1200 mm

MAX. BAR LENGTH LIMITED ACCORDING TO SPINDLE LENGTH!!!

(EMCOTURN E65 with spindle extension ->> 1200 mm)

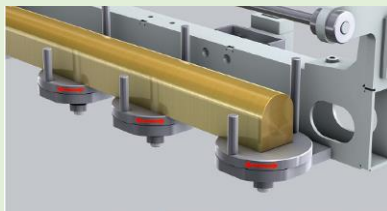
Bar diameter: 6 – 76 mm

Material storage area: 660 x 1250 mm / at front side

Material storage capacity: 10 bars with $\varnothing 60$ mm

max. payload 350 kg

max. 40 kg/bar



LED-Lichtband signalisiert den Betriebszustand



Automatik-
betrieb

Nachlade-
zyklus

Störung

When loading:

Rectangle material: from 6 mm

(enveloping circle max. 76 mm)

Hexagon material: A/F 5 to 65 mm

Round material: $\varnothing < 15$ mm

only with chain tray (option)

Travel depth of push rod: 1515 mm

Power supply: 24 Volt DC (Interface)

Length: 1856 mm

Width: 1241 mm

Push rod-/spindle height: 1082 - 1338 mm

Weight: approx. 700 kg

Safety device: according CE

The basic equipment includes:

- Preparation for EMCO interface
- Remote control / wired
- Installation hardware
- Documentation German (English)



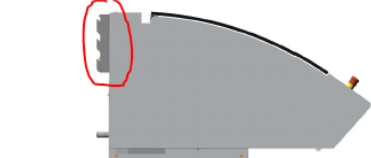
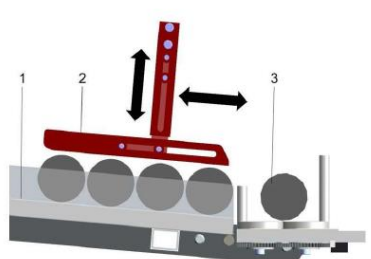


Advantages:

- Fast and easy change over
- LED-light band showing the operating status
- Optimized loading opening, monitored by light curtain
- Possibility to load profiled bar stock (chain feeding system optional)
- Minimum energy consumption / no air consumption
- Gentle material separation and material feed

Can be retrofitted by EMCO specialist!



Options for IRCO ILS-MUK7012:

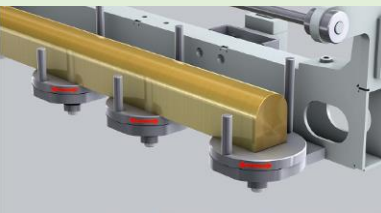
<p>434IRC701210IV</p> 	<p>PUSH ROD \varnothing10 / ILS-MUK-7012-IV Including guide bush, to be used for material smaller \varnothing18 mm (IRCO: 300MUK701210IV)</p>
<p>434IRC701208IV</p> 	<p>PUSH ROD \varnothing8 / ILS-MUK-7012-IV Including guide bush, to be used for material smaller \varnothing12 mm Sensitive component -> no Warranty Feed force must be reduced to max. 5%!! (300MUK0701208IV)</p>
<p>434IRC7012PHIV</p> 	<p>STORAGE HOLDER FOR PUSH RODS Suitable for ILS-MUK7012-IV and 7016-IV (IRCO: 300MUK70-P)</p>
<p>434IRC7012NHIV</p> 	<p>DOWN-HOLDER GALVANIZED 2 PIECES The down-holders are needed for material with \varnothing6 – 15 mm. (IRCO: 300MUK-IV-N)</p>
<p>434IRC7012KZIV</p> 	<p>MATERIAL STORAGE WITH CHAIN FEEDING SYSTEM TO BE USED FOR PROFILED MATERIAL The chain feeding system is needed for profiled material, which is not rolling down the chute. Rectangular profile: edge length bigger than 6 mm / enveloping circle max. 76 mm Hexagon profile: width across flats 6 to 65 mm Round bar stock \varnothing<15mm (IRCO: 300MUK-70-IV-K)</p>
<p>434IRCRA9003</p>	<p>SPECIAL PAINTING RAL9003 SIGNAL WHITE IRCO bar loader in special EMCO painting RAL9003 Signal-white instead of standard painting RAL7035 light grey</p>
<p>434IRCMAT12IV</p> 	<p>STORAGE SYSTEM 1200 EXTERNAL FOR ILS-MUK-IV SHORT BAR LOADER Movable material support including chain feed and electrical connection to ILS-MUK-IV. Additional loading area: 1100 x 1250 mm For material diameter: \varnothing16 – 72 / 104 mm Max. material load: 770 kg Paint finish: RAL7035 light grey (IRCO: 300MUK-IV-BVM12)</p>

R9Z465**SPINDLE EXTENSION
E65/MT65/HT65 Size 65**

With the spindle extension, short bars up to 1200 mm can be loaded and processed through the spindle. Contains 3 pieces of reducing sleeves. Precise support or coordination of the reducing sleeves is a prerequisite for trouble-free use! Max. Spindle speed: 4000 rpm
Automatic feeding of bar material up to $\varnothing 65$ mm by ILS-MUK7012!

ATTENTION: The spindle extension is absolutely necessary for the E65 with IRCO ILS-MUK, because the loader cannot be placed completely next to the machine!

Factory installed only !!

434IRC10012SET**IRCO ILS-MUK-10012 SHORT BAR LOADER****INCL. EMCO STANDARD INTERFACE**

LED-Lichtband signalisiert den Betriebszustand



Automatik-
betrieb

Nachlade-
zyklus

Störung



Universal Short Bar Loader for quick loading of short bar stock material.

INCL. EMCO BAR LOADER STANGENLADER INTERFACE

Characteristics:

- Glass concealment with optimal insight
- Transverse shift 350 mm towards front
- Controlled drives with two-stage feed system
- Motorized adjustment of material guide, material separation and centering device incl. push rod \varnothing 18 mm
- PLC control, integrated terminal with touch screen and LED status display
- Remote control wired
- No compressed air connection required!
- Color: Frame: RAL 7035 light gray

TECNICAL DATA:

Bar length: 300 – 1200 mm

MAX. BAR LENGTH LIMITED ACCORDING TO SPINDLE LENGTH!!!

(EMCOTURN E65 with spindle extension ->> 1200 mm)

Bar diameter: 10 – 104 mm (from \varnothing 6 mm optional)

Material storage area: 800 x 1250 mm / at front side

Material storage capacity: 12 bars with \varnothing 65 mm

max. payload 560 kg

max. 98 kg/bar

When loading:

Rectangle material: from 6 mm
(enveloping circle max. 102 mm)

6-point material: SW 5 to 85 mm

Round material: \varnothing <15mm

only with chain tray (option)

Travel depth of push rod: 1530 mm

Power supply: 24 Volt DC (Interface)

Length: 1856 mm

Width: 1389 mm

Push rod-/spindle height: 1082-1338 mm

Weight: approx. 800 kg

Safety device: according CE

The basic equipment includes:



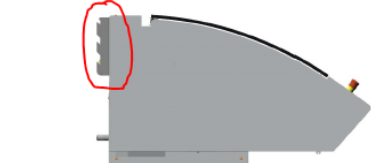
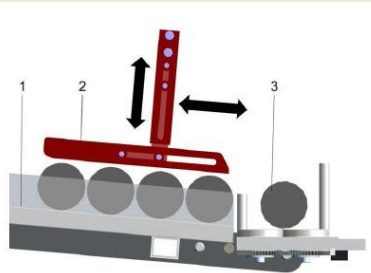
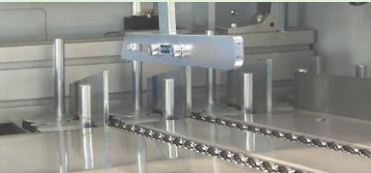

- Preparation for EMCO interface
- Remote control / wired
- Installation hardware
- Documentation German (English)

Advantages:

- Fast and easy change over
- LED-light band showing the operating status
- Optimized loading opening, monitored by light curtain
- Possibility to load profiled bar stock (chain feeding system optional)
- Minimum energy consumption / no air consumption
- Gentle material separation and material feed

Can be retrofitted by EMCO specialist!

Options for IRCO ILS-MUK10012:

<p>434IRC1001210IV</p> 	<p>PUSH ROD \varnothing10 / ILS-MUK-10012-IV Including guide bush, to be used for material smaller \varnothing18 mm (IRCO: 300MUK1001210IV)</p>
<p>434IRC1001227IV</p> 	<p>PUSH ROD \varnothing27 / ILS-MUK-10012-IV Including guide bush, to be used for material smaller \varnothing70 mm (IRCO: 300MUK1001227IV)</p>
<p>434IRC10012PHIV</p> 	<p>STORAGE HOLDER FOR PUSH RODS Suitable for ILS-MUK 10012-IV and 10016-IV (IRCO: 300MUK100-P)</p>
<p>434IRC10012NHIV</p> 	<p>DOWN-HOLDER GALVANIZED 2 PIECES The down-holders are needed for material with \varnothing6 – 15 mm. (IRCO: 300MUK-IV-N)</p>
<p>434IRC10012KZIV</p> 	<p>MATERIAL STORAGE WITH CHAIN FEEDING SYSTEM TO BE USED FOR PROFILED MATERIAL The chain feeding system is needed for profiled material, which is not rolling down the chute. Rectangular profile: edge length bigger than 6 mm / enveloping circle max. 100 mm Hexagon profile: width across flats 6 to 85 mm Round bar stock \varnothing<15 mm (IRCO: 300MUK100-IV-K)</p>
<p>434IRCRAL9003</p>	<p>SPECIAL PAINTING RAL9003 SIGNAL WHITE IRCO bar loader in special EMCO painting RAL9003 Signal-white instead of standard painting RAL7035 light grey</p>
<p>434IRCMAT12IV</p> 	<p>STORAGE SYSTEM 1200 EXTERNAL FOR ILS-MUK-IV SHORT BAR LOADER Movable material support including chain feed and electrical connection to ILS-MUK-IV. Additional loading area: 1100 x 1250 mm For material diameter: \varnothing16 – 72 / 104 mm Max. material load: 770 kg Paint finish: RAL7035 light grey (IRCO: 300MUK-IV-BVM12)</p>

R9Z495

**SPINDLE EXTENSION
E65/MT65/HT65 SuperBigBore 95**

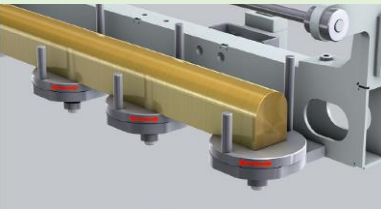
With the spindle extension, short bars up to 1200 mm can be loaded and processed through the spindle. Contains 2 pieces of reducing sleeves. Precise support or coordination of the reducing sleeves is a prerequisite for trouble-free use! Max. Spindle speed: 2800 rpm
Automatic feeding of bar material up to $\varnothing 95$ mm by ILS-MUK10012!

ATTENTION: The spindle extension is absolutely necessary for the E65 with IRCO ILS-MUK, because the loader cannot be placed completely next to the machine!

Factory installed only !!

IRCO SHORT BAR LOADER UP TO 1500 MM:

434IRC10016SET

IRCO ILS-MUK-10016-IV SHORT BAR LOADER **INCL. EMCO STANDARD INTERFACE**


LED-Lichtband signalisiert den Betriebszustand



Automatik-
betrieb

Nachlade-
zyklus

Störung



Universal Short Bar Loader for quick loading of short bar stock material.

INCL. EMCO BAR LOADER STANGENLADER INTERFACE

Characteristics:

- Glass concealment with optimal insight
- Transverse shift 350 mm towards front
- Controlled drives with two-stage feed system
- Motorized adjustment of material guide, material separation and centering device incl. push rod $\varnothing 18$ mm
- PLC control, integrated terminal with touch screen and LED status display
- Remote control wired
- No compressed air connection required!
- Color: Frame: RAL 7035 light gray

TECNICAL DATA:

Bar length: 300 – 1600 mm

MAX. BAR LENGTH LIMITED ACCORDING TO SPINDLE LENGTH! (EMCOTURN E65 SuperBigBore incl. spindle extension -> 1500 mm)

Bar diameter: 10 – 104 mm (from $\varnothing 6$ mm optional)

Material storage area: 800 x 1650 mm / at front side

Material storage capacity: 12 bars with $\varnothing 65$ mm

max. payload 770 kg

max. 110 kg/bar

When loading:

Rectangle material: from 6 mm
(enveloping circle max. 102 mm)

6-point material: SW 5 to 85 mm

Round material: $\varnothing < 15$ mm

only with chain tray (option)

Travel depth of push rod: 1870 mm

Power supply: 24 Volt DC (Interface)

Length: 2256 mm

Width: 1389 mm

Push rod-/spindle height: 1082-1338 mm

Weight: approx. 900 kg

Safety device: according CE

The basic equipment includes:


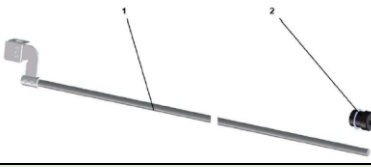
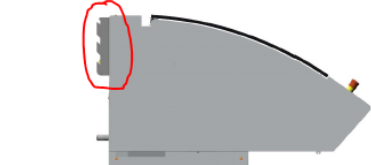
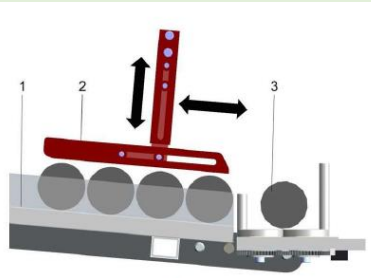
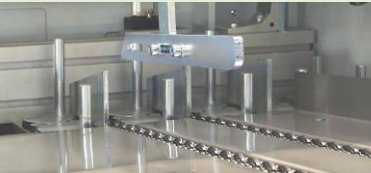

- Preparation for EMCO interface
- Remote control / wired
- Installation hardware
- Documentation German (English)

Advantages:

- Fast and easy change over
- LED-light band showing the operating status
- Optimized loading opening, monitored by light curtain
- Possibility to load profiled bar stock (chain feeding system optional)
- Minimum energy consumption / no air consumption
- Gentle material separation and material feed

Can be retrofitted by EMCO specialist!

Options for IRCO ILS-MUK10016:

<p>434IRC1001610IV</p> 	<p>PUSH ROD \varnothing10 / ILS-MUK-10016-IV Including guide bush, to be used for material smaller \varnothing18 mm (IRCO: 300MUK1001610IV)</p>
<p>434IRC1001627IV</p> 	<p>PUSH ROD \varnothing27 / ILS-MUK-10016-IV Including guide bush, to be used for material larger \varnothing70 mm (300MUK01001627IV)</p>
<p>434IRC10012PHIV</p> 	<p>STORAGE HOLDER FOR PUSH RODS Suitable for ILS-MUK 10012-IV and 10016-IV (IRCO: 300MUK100-P)</p>
<p>434IRC10012NHIV</p> 	<p>DOWN-HOLDER GALVANIZED 2 PIECES The down-holders are needed for material with \varnothing6 – 15 mm. (IRCO: 300MUK-IV-N)</p>
<p>434IRC10012KZIV</p> 	<p>MATERIAL STORAGE WITH CHAIN FEEDING SYSTEM TO BE USED FOR PROFILED MATERIAL The chain feeding system is needed for profiled material which is not rolling down the chute. Rectangular profile: edge length bigger than 6 mm / enveloping circle max. 100 mm Hexagon profile: width across flats 6 to 85 mm Round bar stock \varnothing<15mm (IRCO: 300MUK100-IV-K)</p>
<p>434IRCRAL9003</p>	<p>SPECIAL PAINTING RAL9003 SIGNAL WHITE IRCO bar loader in special EMCO painting RAL9003 Signal-white instead of standard painting RAL7035 light grey</p>
<p>434IRCMAT16IV</p> 	<p>STORAGE SYSTEM 1600 EXTERNAL FOR ILS-MUK-IV SHORT BAR LOADER Movable material support including chain feed and electrical connection to ILS-MUK-IV. Additional loading area: 1100 x 1650 mm For material diameter: \varnothing16 – 72 / 104 mm Max. material load: 770 kg Paint finish: RAL7035 light grey (IRCO: 300MUK-IV-BVM16)</p>

R9Z495

**SPINDLE EXTENSION
E65/MT65/HT65 SuperBigBore 95**

With the spindle extension, short bars up to 1200 mm can be loaded and processed through the spindle. Contains 2 pieces of reducing sleeves. Precise support or coordination of the reducing sleeves is a prerequisite for trouble-free use! Max. Spindle speed: 2800 rpm
Automatic feeding of bar material up to $\varnothing 95$ mm by ILS-MUK10012!

ATTENTION: The spindle extension is absolutely necessary for the E65 with IRCO ILS-MUK, because the loader cannot be placed completely next to the machine!

Factory installed only !!

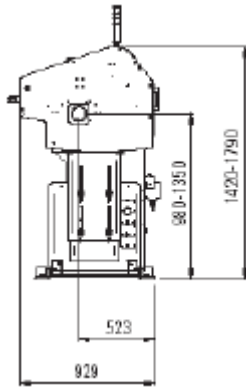
TOP AUTOMAZIONI 3-METER BAR LOADER:

434TOP1065SETSL

**X-FILES BAR LOADER 10-65/3200
SINGLE LEVEL**

INCL. EMCO BAR LOADER INTERFACE

Single channel bar loader for automated loading of bar stock.
Diameter range $\varnothing 10 - 65\text{mm}$
Bar length up to 3,2 m



Economic facts:

- Including EMCO bar loader interface
- Compact and stable construction
- Longitudinal shifting device for maintenance work on the machine
- No spindle reduction required
- Easy and quick changeover
- Perfect bar support
- Remnant pull-back to the rear up to $\varnothing 60\text{mm}$
> 60 mm forward
- SERVO controlled feed
- Colors: Base: RAL7038 agate grey
Cover: RAL7021 black grey

Required bar quality:

- Max. deviation regarding straightness: 0,5 mm/m
- Bar ends must be free of burrs and may not be bent!

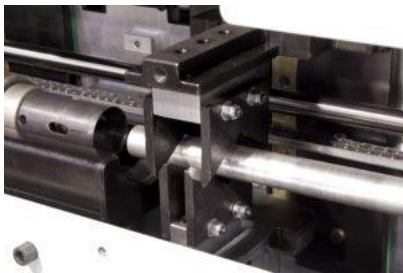
TECHNICAL DATA:

Bar length:	1200 – 3200 mm
Bar diameter:	10 – 65mm
Travelling speed:	0 - 30m/min
Storage capacity:	approx. 350mm (at front)
Power supply:	24 Volt DC (Interface)
Air pressure:	min. 7 bar
Air supply rate:	ca. 45 l/min
Oil filling / Viscosity:	80 Liter / ISO VG 100
Length:	4490mm
Width:	1090mm
Total height:	1360-1730mm
Weight:	ca. 2200kg
Safety devices:	according to CE

Includes:

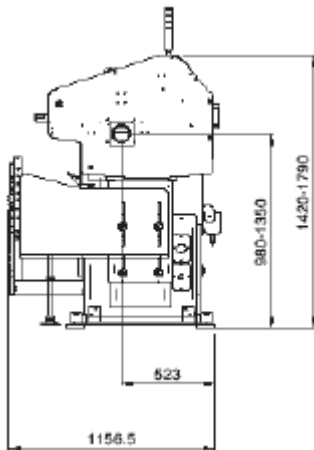
- Fastening material
- Slide system to move the loader longitudinal (approx. 800mm)
- Conical centering sleeve 65
- Clamping sleeve blank 65 (Polymer)
- 2x adaptor ($\varnothing 14/\varnothing 20\text{mm}$)
- Documentation

Retrofitable through EMCO technician!



434TOP1065SETML**X-FILES BAR LOADER 10-65/3200
MULTI-LEVEL****INCL. EMCO BAR LOADER INTERFACE**

Single channel bar loader for automated loading of bar stock.
Diameter range $\varnothing 10 - 65\text{mm}$
Bar length up to 3,2 m

**Economic facts:**

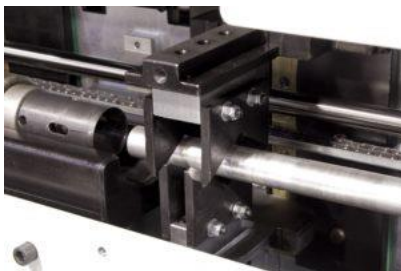
- Including EMCO bar loader interface
- Compact and stable construction
- Longitudinal shifting device for maintenance work on the machine
- Multi-level material storage with lifter
- No spindle reduction required
- Easy and quick changeover
- Perfect bar support
- Remnant pull-back to the rear up to $\varnothing 60\text{mm}$
> 60 mm forward
- SERVO controlled feed
- Colors: Base: RAL7038 agate grey
Cover: RAL7021 black grey

Required bar quality:

- Max. deviation regarding straightness: 0,5 mm/m
- Bar ends must be free of burrs and may not be bent!

**TECHNICAL DATA:**

Bar length:	1600 – 3200 mm
Bar diameter:	10 – 65mm
Travelling speed:	0 - 30m/min
MULTI LEVEL LIFTER	
Storage capacity:	approx. 1200mm (at front)
Power supply:	24 Volt DC (Interface)
Air pressure:	min. 7 bar
Air supply rate:	ca. 45 l/min
Oil filling / Viscosity:	80 Liter / ISO VG 100
Length:	4490mm
Width:	1275mm
Total height:	1360-1730mm
Weight:	ca. 2500kg
Safety devices:	according to CE

**Includes:**

- Fastening material
- Slide system to move the loader longitudinal (approx. 800mm)
- Conical centering sleeve 65
- Clamping sleeve blank 65 (Polymer)
- 2x adaptor ($\varnothing 14/\varnothing 20\text{mm}$)
- Documentation

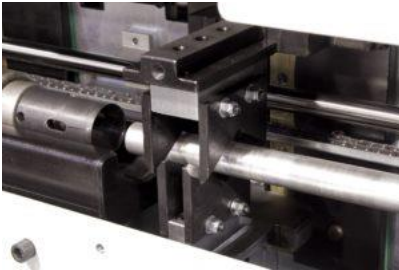
Retrofitable through EMCO technician!

434TOP1065SETSLL**X-FILES BAR LOADER 10-65/3200
SINGLE LEVEL LIFTER 700****INCL. EMCO BAR LOADER INTERFACE**

Single channel bar loader for automated loading of bar stock.

Diameter range $\varnothing 10 - 65\text{mm}$

Bar length up to 3,2 m

**Economic facts:**

- Including EMCO bar loader interface
- Compact and stable construction
- Longitudinal shifting device for maintenance work on the machine
- Extended material storage with lifter
- No spindle reduction required
- Easy and quick changeover
- Perfect bar support
- Remnant pull-back to the rear up to $\varnothing 60\text{mm}$
> 60 mm forward
- SERVO controlled feed
- Colors: Base: RAL7038 agate grey
Cover: RAL7021 black grey

Required bar quality:

- Max. deviation regarding straightness: 0,5 mm/m
- Bar ends must be free of burrs and may not be bent!

TECHNICAL DATA:

Bar length:	1600 – 3200 mm
Bar diameter:	10 – 65mm
Travelling speed:	0 - 30m/min
SINGLE LEVEL LIFTER	
Storage capacity:	approx. 700mm (at front)
Power supply:	24 Volt DC (Interface)
Air pressure:	min. 7 bar
Air supply rate:	ca. 45 l/min
Oil filling / Viscosity:	80 Liter / ISO VG 100
Length:	4490mm
Width:	1275mm
Total height:	1360-1730mm
Weight:	ca. 2500kg
Safety devices:	according to CE

Includes:

- Fastening material
- Slide system to move the loader longitudinal (approx. 800mm)
- Conical centering sleeve 65
- Clamping sleeve blank 65 (Polymer)
- 2x adaptor ($\varnothing 14/\varnothing 20\text{mm}$)
- Documentation

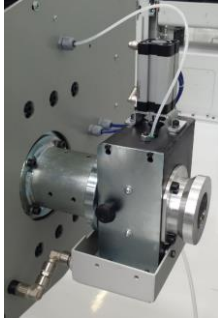
Retrofitable through EMCO technician!

434570

**SEAWORTHY PACKING
TOP AUTOMAZIONI / X-FILES**

The loader is packed with aluminium bandage, for transportation over-seas.

434580

**ADDITIONAL STEADY-BLOCK FOR TOP
AUTOMAZIONI**

If also small diameter bar stock is loaded (FUSION < \varnothing 15 mm / X-FILES < \varnothing 20 mm), an additional steady-block should be used. This supports and centers the material in the transition area between loader and machine.

Factory installed only!

4460xx

**CLAMPING SLEEVE (STEEL)
TOP AUTOMAZIONI**

The clamping sleeves are made of hardened steel and need to be ordered according to the bar stock diameter.

Clamping range: Nominal diameter +/-0,25 mm

4460xx – Clamping sleeve (steel) \varnothing xx mm

Example: \varnothing 6 mm → 446006
 \varnothing 32 mm → 446032

434590

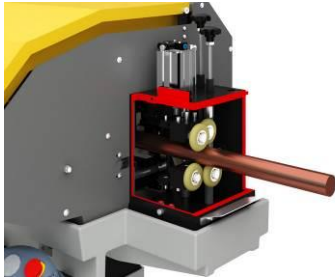
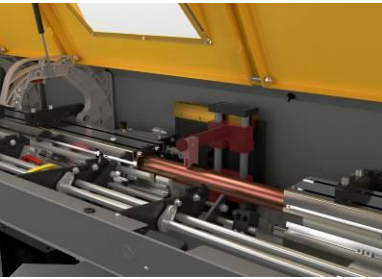
**CLAMPING SLEEVE BLANK (POLYMER) – 65
TOP AUTOMAZIONI**

Needs to be machined according to the used bar stock diameter. Outside diameter 63mm. Absorbs vibration in a good way!

Tip: first into a freezer, than machining!

FMB 3-METER BAR LOADER:

434FMB565SET

**FMB TURBO 5-65/3200 INCL. EMCO BAR
LOADER INTERFACE**


Single channel bar loading magazine for automated loading of bar stock with a diameter range of 5 to 65 mm and a length of up to 3,2 Meter.

INCL. EMCO BAR LOADER INTERFACE

Characteristics:

- Compact and stable construction
- Bar stock storage 240 mm
- Precise servo-electric feed drive
- Central setting for separating device
- Adjustable roller guide, convertible to guide jaws for square and hexagonal cross sections
- gripper device
- Remaining piece removal either to the rear or to the front
- Control of the first insertion for exact positioning of the material bar in the clamping system of the lathe (interval insertion for profile material)
- Ergonomic and easy operation via mobile 8.4" touch control panel with ERGOlogic operating concept
- Longitudinal slide system: 400 mm
- Colors: Base: RAL7035 light grey
Cover: RAL7016 Anthracite grey

Required bar stock quality:

- Max. allowable deviation from straightness: 0,5mm/m
- Bar end must be free of burrs and must be straight!

TECHNICAL DATA:

Bar stock length:	500 – 3200 mm
Bar stock diameter:	5 – 65 mm
Feed rate:	0 - 1000 mm/sec
Material storage length:	approx. 240 mm from front
Max. Remnant length/ø:	530 mm / 63 mm
Bar loading time:	23 sec
Air supply:	6 bar
Oil filling / Viscosity:	80 liter / ISO VG 150
Length:	4416 mm
Width:	867 mm
Spindle height:	790 – 1470 mm
Weight:	approx. 1800 kg
Safety devices:	according to CE

The basic equipment includes:

- Preparation for EMCO interface / cable approx. 2 m long
- Installation material
- Steady rest with rollers
- Cone sleeve ø65 mm
- Transportation unit
- Documentation DE/EN

Retrofitable through EMCO technician!

434FMB56525**REDUCTION SET D25 FOR TURBO 5-44
AND 5-50 AND 5-65/3200**

Reduction set consisting of guide channel inserts,
pusher rod and guide tube.

434FMB56542**REDUCTION SET D42 FOR
TURBO 5-65/3200**

Reduction set consisting of guide channel inserts,
pusher rod and guide tube.

On Request / TSS**CLAMPING SLEEVES**

The respective clamping sleeve are made of
hardened steel and must be ordered according
to the rod diameter.

434FMB875SET

**FMB TURBO 8-75/3200 INCL. EMCO BAR
LOADER INTERFACE**

Single channel bar loading magazine for automated loading of bar stock with a diameter range of 8 to 75 mm and a length of up to 3,2 Meter.

INCL. EMCO BAR LOADER INTERFACE**Characteristics:**

- Compact and stable construction
- Bar stock on the side 265 mm
- Precise servo-electric feed drive
- Central setting for separating device
- Guide bezel as roller bezel, convertible to guide jaws for square and hexagonal cross sections
- Movable gripper device
- Remaining piece removal either to the rear or to the front
- Control of the first insertion for exact positioning of the material bar in the clamping system of the lathe (interval insertion for profile material)
- Ergonomic and easy operation via mobile 8.4" touch control panel with ERGOlogic operating concept
- Longitudinal slide system: 400 mm
- Colors: Base: RAL7035 light grey
Cover: RAL7016 Anthracite grey

Required bar stock quality:

- Max. allowable deviation from straightness: 0,5mm/m
- Bar end must be free of burrs and must be straight!

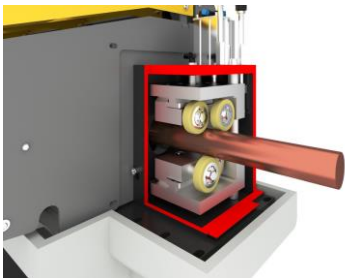
TECHNICAL DATA:

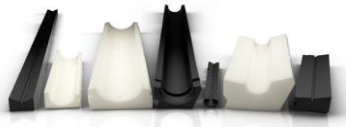
Bar stock length:	500 – 3200 mm
Bar stock diameter:	8 – 75 mm
Feed rate:	0 - 1000 mm/sec
Material storage length:	approx. 265 mm from front
Max. Remnant length/ø:	530 mm / 73 mm
Bar loading time:	30 sec
Air supply:	6 bar
Oil filling / Viscosity:	80 liter / ISO VG 150
Length:	4698 mm
Width:	915 mm
Spindle height:	870 – 1400 mm
Weight:	approx. 2800 kg
Safety devices:	according to CE

The basic equipment includes:

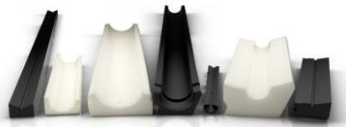
- Preparation for EMCO interface / cable approx. 2 m long
- Installation material
- Steady rest with rollers
- Cone sleeve ø75 mm
- Transportation unit
- Documentation DE/EN

Retrofitable through EMCO technician!



434FMB87525**REDUCTION SET D25 FOR
TURBO 8-75/3200**

Reduction set consisting of guide channel inserts, pusher rod and guide tube.

434FMB87550**REDUCTION SET D50 FOR
TURBO 8-75/3200**

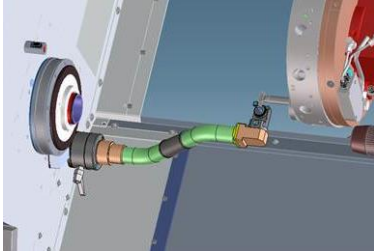
Reduction set consisting of guide channel inserts, pusher rod and guide tube.

On Request / TSS**CLAMPING SLEEVES**

The respective clamping sleeve are made of hardened steel and must be ordered according to the rod diameter.

MACHINE ACCESSORIES:

S6Z510



TOOL PRESETTER – E65/AXIAL (TAILSTOCK)

To measure the tool length inside the machine. The tool measuring arm is manually mounted in the machine and can be used to set tool length on several turrets. After use the arm can be stored in a storage location inside the machine housing.

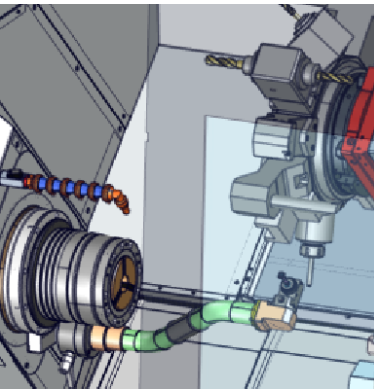
Advantage:

- Quick change over
- Precise tool setting
- Cost effective

Adjustment gauge VDI30 or VDI40 to be ordered separately!!

Factory installed only !!

S6Z520



TOOL PRESETTER – E65/RADIAL (COUNTER SPINDLE)

To measure the tool length inside the machine. The tool measuring arm is manually mounted in the machine and can be used to set tool length on several turrets. After use the arm can be stored in a storage location inside the machine housing.

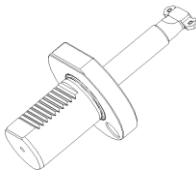
Advantage:

- Quick change over
- Precise tool setting
- Cost effective

Adjustment gauge VDI30 or VDI40 to be ordered separately!!

Factory installed only !!

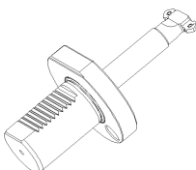
S6Z110



ADJUSTMENT GAUGE VDI 30

Gauge to adjust the tool presetter in the machine.

R8Z110



ADJUSTMENT GAUGE VDI 40

Gauge to adjust the tool presetter in the machine.

X3Z661**RADIO CONTROLLED MEASURING PROBE**

RENISHAW probe for measuring the Workpieces in the work area.

Contains:

- RLP40QE probe
- RMI-QE radio receiver module
- Measuring cycles
- Cylindrical mounting shaft $\varnothing 25$ mm and VDI25
- Straight stylus insert $\varnothing 3/18,5$ mm
- Straight stylus insert $\varnothing 5/50$ mm

Attention: please include the corresponding tool holder for shank $\varnothing 25$ mm in the offer.

Retrofit able through EMCO technician!

Attention: Please include the appropriate tool holder in the offer depending on the alignment of the measuring probe!

Radial alignment:

VDI30 axial turret → Special adaptor needed

VDI40 axial turret → Special adaptor needed

VDI30 radial turret → R3Z430SP Tool holder $\varnothing 25$ mm

VDI40 radial turret → 442070SP Tool holder $\varnothing 25$ mm

Axial alignment:

VDI30 axial turret → R3Z430SP Tool holder $\varnothing 25$ mm

VDI40 axial turret → 442070SP Tool holder $\varnothing 25$ mm

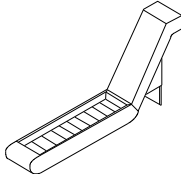
VDI30 radial turret → R4Z550W+442660W Holder + sleeve $\varnothing 25$

VDI40 radial turret → 442310 + 442330 holder + sleeve $\varnothing 25$

S4Z140**COOLANT PISTOL / MULTIFLOW**

For cleaning the clamping devices, covers and the entire work area. The option includes a cleaning gun with flow and jet adjustment, a solenoid valve, a magnetic shield and a spiral hose. (Compressed air must not be used for cleaning!)

Retrofit able through EMCO technician !

438121**CHIP CONVEYOR 1200MM – E65**

Chain feeding system, dump-height 1200mm, suitable for:

- Long steel shavings
- Snarl chips
- Wool chips
- Dry- and wet machining
- With wiper

Don't use with **gantry machines !**

ZVP303900**WOODEN BOX F. CHIP CONVEYOR**

Wooden box for chip conveyor (438120/438170) as additional protection for critical transportation.

573313**CHIP TIP CART- 400 LITER**

Chip tipcart for emptying at ground level or with a fork truck. Safety chain at the backside. Welded sheet metal with reinforcement frame – watertight.

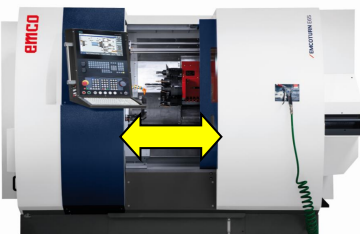
1 steerable roller and 2 fixed rollers made of rubber $\varnothing 250\text{mm}$.

Incl. perforated steel plate and drain hole

Color: RAL 9004 / black

Filling volume approx. 400 Liter

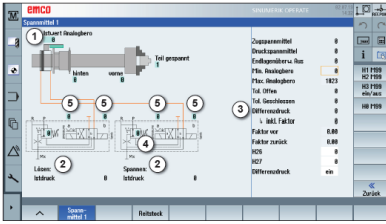
(H x W x D = 1090 x 900 x 1330mm)

S6Z780**FULL AUTOMATED MACHINE DOOR E65**

Automated machine door for manual loaded machines. The door is moved with an electrical servo motor. To control the door the operator can simply push a key or can use M-codes in the program.

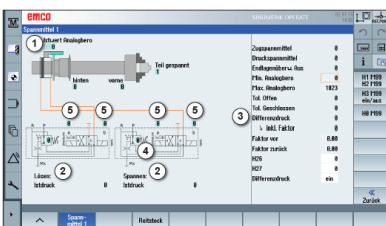
In case of collision the door stops immediately due to a safety switch strip.

Factory installed only !!

S6Z530**PROGRAMMABLE DIFFERENTIAL PRESSURE CLAMPING SYSTEM - MAIN SPINDLE / E65**

- Sensitive regulation of the clamping pressure
 - Back pressure principle
 - Programmable via M functions
 - Display on the machine control
 - Adjustment range 10-50 bar
 - The clamping pressure on the work piece depends on the clamping cylinder and clamping device
 - Min. differential pressure range approx. 5 bar (depending on the clamping device)
- Note: Instructions in the user manual!

Only available ex works!

S6Z535**PROGRAMMABLE DIFFERENTIAL PRESSURE CLAMPING SYSTEM-COUNTER SPINDLE/E65**

- Sensitive regulation of the clamping pressure
 - Back pressure principle
 - Programmable via M functions
 - Display on the machine control
 - Adjustment range 10-50 bar
 - The clamping pressure on the work piece depends on the clamping cylinder and clamping device
 - Min. differential pressure range approx. 5 bar (depending on the clamping device)
- Note: Instructions in the user manual!

Only available ex works!

S6Z340**ROTOCLEAR FOR E65**

Rotating window glued to the inside of the safety glass. The rotating disc throws off coolant and chips. Leaving a clear view of the setup and the machining process.
Version: ROTOCLEAR S3

With sealing air connection: Air consumption: approx. 1,2 cubic meter/h at 0,2 mbar static pressure.

Retrofit able through EMCO technician!

S6Z020**OIL MIST SEPARATOR LOSMA / E65**

Mechanical oil mist separator LOSMA ICARUS M1 for cleaning the air in the machine room, which is enriched with oily fine dust mist through the use of cooling lubricants. A manometer shows the degree of contamination of the filters used.
Post filter HEPA / filter class H13
Max. air volume: 1040 m³/h (50 Hz only!)
Noise level: 69.9 dba

Retrofit able through EMCO technician!

S6Z071**PREPARATION FOR WORKSPACE EXTRACTION**

Mechanical and electrical preparation for work area extraction.

Mechanical connection $\varnothing 160$ mm

Electrical connection: 10-pin plug
(On with Aux-On/Off with Aux-Off)

(Programmable with option: energy management)

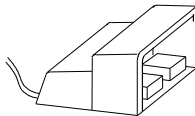
Retrofit able through EMCO technician!

S6Z150**AIR CONDITIONING SYSTEM**

used for electrical cabinet especially if the machine is located in dusty, oily and hot areas.

No air exchange between outside and inside

Retrofit able through EMCO technician !

R3Z580**FOOT PEDAL**

to actuate main spindle chuck or tailstock

Retrofit able through EMCO technician !

S6Z080**14 BAR HIGH PRESSURE COOLANT PUMP 50Hz**

An additional high pressure coolant pump with up to 14 bar is used to provide the coolant through the tool turret. An extra interface and software is included (50Hz).

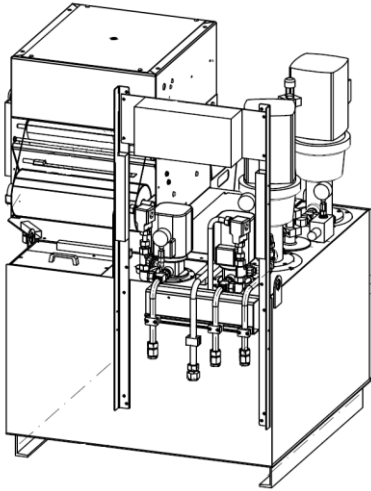
Factory installed only !!

S6Z090**14 BAR HIGH PRESSURE COOLANT PUMP 60Hz (USA)**

An additional high pressure coolant pump with up to 14 bar is used to provide the coolant through the tool turret. An extra interface and software is included (60Hz).

Factory installed only !!

S6Y320



**SURCHARGE FOR PAPER BAND
FILTRATION UNIT FOR EMCOTURN E65 /
BMF-BÜRENER**

- Coolant tank capacity 600 Liter
- Floor space LxWxH:1100x1100x800mm
- Filter capacity: 150 l/min for water soluble
- Average output purity: approx. 60- 40 µm
- 1x screw spindle pump MTS20-40
Delivery pressure: 25 bar
Flow rate approx. 24 l/min
Power: 3 kW
- 2x immersion pumps (flushing) SPK2-23/15
Delivery pressure: 4,3 bar
Flow rate approx. 35 l/min
Power: 0,75 kW
- 1 roll of filter paper
- Lifting pump MTA 90-180 A-W-A-B/50Hz
- Electrical a. mechanical adoption
- PLC adaption / painting: Graphite grey
RAL7024

**The chip conveyor must be offered
separately. The standard coolant pumps
of the basic machine are no longer there!**

Factory installed only!

ZVP547251

**CLIMATE PACKING PAPER BAND
FILTER UNIT**

for transportation over-sea.
Consisting of: pallet, dehumidifier,
aluminium-cover and miscellaneous

ZVP302200

**WOODENBOX PAPER BAND FILTER
UNIT**

Additional protection for critical
transportation

ALIGNMENT TOOLS:

R2Z660

TEST MANDREL VDI 30 AXIAL

To check alignment of tool turret and reference point of the machine.



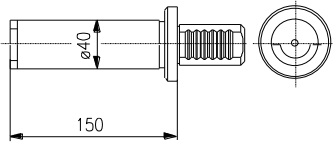
442230

TEST MANDREL VDI 40 AXIAL

Test mandrel VDI40 axial to check turret alignment and reference point.

Diameter: 40mm

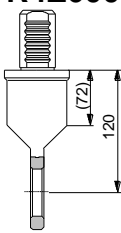
Length: 150mm



R4Z600

TEST MANDREL VDI 30 RADIAL

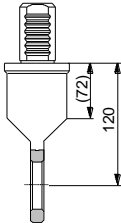
Test mandrel VDI 30 radial to check turret alignment and reference point of the machine.



442400

TEST MANDREL VDI 40 RADIAL

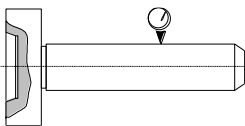
Test mandrel VDI 40 radial to check turret alignment and reference point of the machine.



R6Z680

TEST MANDREL – MAIN SPINDLE A2-6

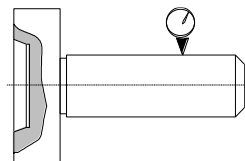
Test mandrel (long) for main spindle A2-6 according to DIN 55026.

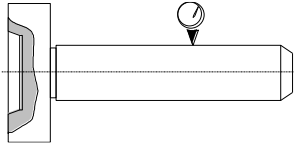


R6Z630

TEST MANDREL - COUNTER SPINDLE A2-6

Test mandrel (short) for counter spindle A2-6 according to DIN 55026.



R8Z670**TEST MANDREL FOR SPINDLE A2-8"**

Test mandrel for spindle nose A2-8"
According to DIN 55026.
Diameter: 50mm
Measuring length: 320mm

R7Z630**TEST FLANGE A2-6**

To check the alignment of the X and Y axes
in relation to the spindle alignment.

R8Z630**TEST FLANGE A2-8**

To check the alignment of the X and Y axes
in relation to the spindle alignment.

010120**LASER MEASUREMENT AND PITCH
ERROR COMPENSATION**

Measurement of the positioning tolerance to
ISO 230 and VDI/DGQ 3441 made for all linear
axis of the machine over the whole stroke
including documentation for all measured axis.
ATTENTION: This values can only be
guaranteed under EMCO standardized
environmental conditions.

ONLY IN THE FACTORY

Factory installed only !!

CLAMPING DEVICE F. SPINDLE SIZE 65 (A2-6)

586502



POWER COLLET CHUCK 185E / A2-6

SMW- dead length collet chuck, complete with bayonet lock, for short taper A2-6 (DIN 55026), incl. mounting screws and draw tube adaptor, collets not included, Type KSZ-MB 60-A06 ($n_{max.}$:5000 rpm), clamping range: \varnothing 4-65 mm

Collets refer to [>spec_collets_en.doc<](#)

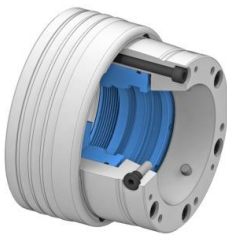
586512



REDUCTION SET 185E → 173E / SMW

Consisting of pressure sleeve and bayonet flange to reduce from collet size 185E to 173E, to be used with collet chuck 586 502, clamping range: \varnothing 2-42

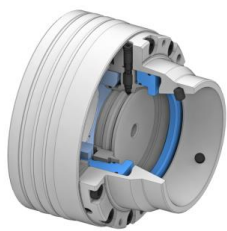
440750



SPANNTOP-NOVA-MODULAR COLLET CHUCK (A2-6)

HAINBUCH collet chuck (pull-back style) size BZI 65 for spindle nose size A2-6, max. bar capacity \varnothing 65mm, **no internal part-stop possible;** collet changer 440 725 necessary. ($n_{max.}$: 6000 rpm), incl. draw adapter

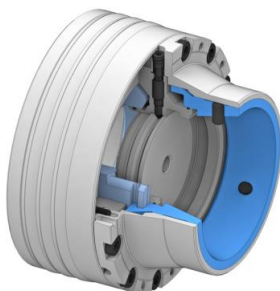
440761



SPANNTOP-MINI-COMBI COLLET CHUCK (A2-6)

HAINBUCH collet chuck (pull-back style) size BZI 65 for spindle nose size A2-6, max. bar capacity \varnothing 65mm, **incl. internal part-stop,** collet changer 440 725 necessary. ($n_{max.}$: 6000 rpm), incl. draw adapter

440771



SPANNTOP-MINI-COMBI AXFIX COLET CHUCK (A2-6)

HAINBUCH collet chuck (dead-length style) size BZI 65 for spindle nose size A2-6, max. bar capacity \varnothing 65mm, **incl. internal part-stop,** collet changer 440 725 necessary. ($n_{max.}$: 6000 rpm), incl. draw adapter
Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

010615

**COLLET SK 65 BZI - ROUND**

HAINBUCH Collet SK 65 BZI for round bar stock, total clamping range \varnothing 4-65mm; 0,5mm steps, To clamp on raw or finished surfaces with serrated or smooth clamping surface.

Please define the clamping diameter and whether the clamping surface should be serrated or smooth !

010620

**COLLET SK 65 BZI - HEXAGON**

HAINBUCH Collet SK 65 BZI for hexagon bar stock, total clamping range 7-56mm in 1mm steps,

Please define the hexagon size to be clamped on.

010625

**COLLET SK 65 BZI - SQUARE**

HAINBUCH Collet SK 65 BZI for square bar stock, total clamping range 8-40mm in 1mm steps,

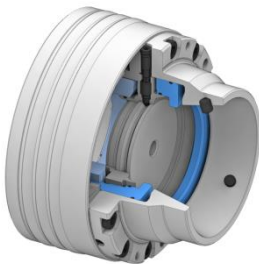
Please define the square size to be clamped on.

440725

**MANUAL COLLET CHANGER BZI 65**

To change HAINBUCH collets BZI 65 (Hainbuch: MQ 65)

440761HTP

**TOPlus mini 65 AXZUG (A2-6)**

HAINBUCH TOPlus mini AXZUG collet chuck for SE-TOP65 collets (Pull-back style)

Max. clamping diameter: \varnothing 65 mm

Spindle nose size: A2-6

Including internal part-stop

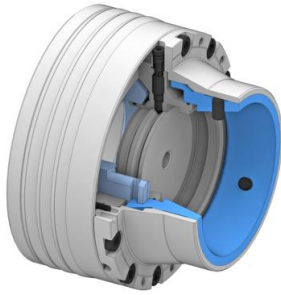
n_{max} : 6000 rpm

Including draw adapter M72 x 1,5

Collet changer 440725HTP necessary

Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

440771HTP

**TOPlus mini 65 AXFIX (A2-6)**

HAINBUCH TOPlus mini AXFIX collet chuck for SE-TOP65 collets (Dead-length style)

Max. clamping diameter: $\varnothing 65$ mm

Spindle nose size: A2-6

Including internal part-stop

n_{max} : 6000 rpm

Including draw adapter M72 x 1,5

Collet changer 440725HTP necessary

Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

010615HTP

**COLLET SE TOP65 - ROUND**

HAINBUCH Collet SE TOP65 for round bar stock, total clamping range $\varnothing 3-65$ mm; 0,5mm steps,

To clamp on raw or finished surfaces with serrated or smooth clamping surface.

Please define the clamping diameter and whether the clamping surface should be serrated or smooth!

440725HTP

**MANUAL COLLET CHANGER SE TOP65 (MQTOP65)**

To change HAINBUCH collets

TOPlus SE TOP65 (Hainbuch: MQTOP65)

438060

**3 JAW CHUCK KFD-HS 175/3 – A2-6**

RÖHM power-chuck KFD-HS $\varnothing 175/3$

hydraulic operated, for **high spindle speed** and with large through-hole ($\varnothing 56$), **incl. 1 set**

hardened reversible jaws on the chuck ground with a serration of 1/16" x 90°, to

mount on spindle nose size A2-6

(n_{max} . 5000rpm)

574675**SET OF 3 HARD JAWS**

Set of reversible hard jaws for 438060 with a serration of 1/16"x 90°

R3Y230**SET OF 3 SOFT JAWS**

Set of soft jaws for 438060 with a serration of 1/16"x 90°

571200**3 JAW CHUCK KFD-HS 200/3 – A2-6**

RÖHM power-chuck KFD-HS $\varnothing 200/3$ hydraulic operated, for **high spindle speed** and with large through-hole ($\varnothing 66$), **incl. 1 set hardened reversible jaws on the chuck ground with a serration of 1/16"x 90°**, to mount on spindle nose size A2-6 ($n_{max. 6500rpm}$)

571220**SET OF 3 HARD JAWS**

Set of reversible hard jaws for 571200 with a serration of 1/16"x 90°

R3Y410**SET OF 3 SOFT JAWS**

Set of soft jaws for 571200 with a serration of 1/16"x 90°

571230R**3 JAW CHUCK KDF-HE 210/3 – A2-6**

RÖHM power-chuck KDF-HE $\varnothing 210/66$ hydraulic operated with large through-hole ($\varnothing 66$), **incl. 1 set soft jaws with a serration of 1/16"x 90°** and draw tube adaptor, for spindle nose size A2-6 ($n_{max. 5000 rpm}$) smallest clamping diameter: 19mm

586460R**SET OF 3 HARD JAWS / KFD-HE 210/3**

Set of reversible hard jaws for 571230R (RÖHM) with a serration of 1/16"x 90° (118522)
Hole distance: 19mm

586450R**SET OF 3 SOFT JAWS / KFD-HE 210/3**

Set of soft jaws for 571230R (RÖHM) with a serration of 1/16"x 90° (133153)
Material: 16 Mn Cr 5
Dimensions: LxBxH 75x36,5x53
Hole distance: 19mm

586160**3 JAW CHUCK KFD-HS 250/3 – A2-6**

RÖHM power-chuck KFD-HS ø250/3 hydraulic operated, for **high spindle speed** and with large through-hole (ø66), **incl. 1 set hardened reversible jaws on the chuck ground with a serration of 1/16"x 90°**, to mount on spindle nose size A2-6 (**n_{max.}5000rpm**)

586460R**SET OF 3 HARD JAWS**

Set of reversible hard jaws for 586160/571300 with a serration of 1/16"x 90°

586165**SET OF 3 SOFT JAWS**

Set of soft jaws for 586160 with a serration of 1/16"x 90°

571250R**3 JAW CHUCK KFD-HE 254/3 – A2-6**

RÖHM power-chuck KFD-HE ø254/3 hydraulic operated with through-hole (ø66), **incl. 1 set soft jaws with a serration of 1/16"x 90°** and draw tube adaptor, for spindle nose size A2-6 (**n_{max.} 4200 rpm**) smallest clamping diameter: 25mm

586430R**SET OF 3 HARD JAWS / KFD-HE 254/3**

Set of reversible hard jaws for 571 250R (RÖHM) with a serration of 1/16"x 90° (046414)
Hole distance: 25mm

586420R**SET OF 3 SOFT JAWS / KFD-HE 254/3**

Set of soft jaws for 571250R (RÖHM) with a serration of 1/16"x 90° (133154)
Material: 16Mn Cr5
Dimensions: LxBxH 95x45x54,5
Hole distance: 25mm

586640**3- JAW-CHUCK BB-D 210/3 A2-6**

SMW-AUTOBLOK® power chuck with through hole type BB-D 210-66-A06 (hydraulically operated).
Through hole \varnothing 66mm, **Incl. 1 set of soft jaws with a serration of 1/16"x 90°.**
To mount on spindle nose A2-6 / M72x1,5 (DIN55026)
(n_{max.}: 5000 rpm)

SMW Id-No: 45008839

586641**SET OF 3 SOFT JAWS**

Set of soft jaws WBSA-D210 with a serration of 1/16"x 90° for power chuck SMW BB-D 210.
Hole spacing: 25 mm
Groove width: 17 mm
SMW Id-No: 12072130

586642**SET OF 3 HARD JAWS**

Set of hard reversible jaws MHB-D210 for power chuck SMW BB-D 210.
Hole spacing: 25 mm
Groove width: 17 mm

SMW Id-No: 12082036

586650**3- JAW-CHUCK BH-D 250/3 A2-6**

SMW-AUTOBLOK® power chuck with through hole type BH-D 250-66-A06 (hydraulically operated).

Through hole $\varnothing 66\text{mm}$, **Incl. 1 set of soft jaws with a serration of $1/16'' \times 90^\circ$.**

To mount on spindle nose A2-6 / M72x1,5 (DIN55026)

(n_{max.}: 4000 rpm)

SMW Id-No: 45008862

586651**SET OF 3 SOFT JAWS**

Set of soft jaws WBSA-D250 with a serration of $1/16'' \times 90^\circ$ for power chuck SMW BH-D 250.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12072500

586652**SET OF 3 HARD JAWS**

Set of hard reversible jaws MHB-D251 for power chuck SMW BH-D 250 and BH-D 315.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12083036

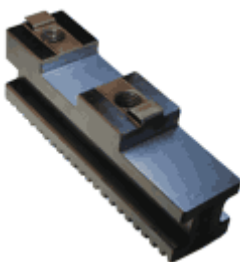
571260**3-JAW-CHUCK KNCS-N 225/3 A2-6**

SMW-AUTOBLOK® power chuck with quick change jaw system type KNCS-N-225-66-3-A06 (hydraulically operated).

Through hole diameter 66mm,

Incl. 1 set of hardened mono block-step jaws ground when mounted on chuck, to mount on spindle nose A2-6 (DIN55026)

(n_{max.}:5500 rpm)

571265**SET OF 3 HARDENED BASE JAWS**

Set of 3 hardened base jaws type GBK 200 for power chuck with quick change jaw system Type KNCS-N-225-66-3-A06 (571260)

571270

SET OF 3 SOFT TOP JAWS

Set of 3 soft top jaws type WAK 200-10 for power chuck with quick change jaw system Type KNCS-N-225-66-3-A06 (571260)

571330

**3-JAW-CHUCK KNCS-NB 225/3 / A2-6
WITH WIDE MASTER JAWS**

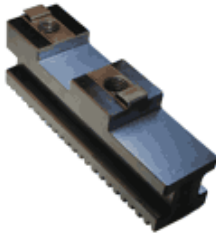
SMW-AUTOBLOK® power chuck with quick change jaw system KNCS-NB-225-66-A06 (hydraulically operated).

Through hole diameter 66 mm.

Incl. 1 set of hardened base jaws GBKB 210 and hardened, reversible top jaws GUA 200, to mount on spindle nose A2-6 / M72x1,5 (DIN55026) with rotating thread ring incl. mounting key (**n_{max.}: 5000 rpm**)

SMW Id-No: 162554

571311

SET OF 3 HARD BASE JAWS

Set of hard base jaws type GBKB 210 for power chuck with quick change jaws SMW type KNCS-NB-210 and KNCS-NB-225

SMW Id-No: 138494

571270

SET OF 3 SOFT TOP JAWS

Set of soft top jaws type WAK 200-10 for power chuck with quick change jaws SMW type KNCS-N-210 and KNCS-NB-210/225

SMW Id-No: 012492

571280

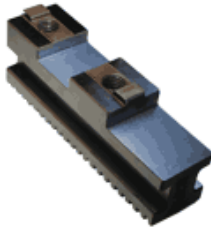
3-JAW-CHUCK KNCS-N 260/3 A2-6

SMW-AUTOBLOK® power chuck with quick change jaw system KNCS-N-260-78-A06-GST (hydraulically operated).

Through hole diameter 78 mm.

Incl. 1 set of hardened mono block-step jaws ground when mounted on chuck, to mount on spindle nose A2-6 / M72x1,5 (DIN55026) (**n_{max.}: 4700 rpm**)

SMW Id-Nr: 279770

571281**SET OF 3 HARDENED BASE JAWS**

Set of 3 hardened base jaws type GBK 250 for power chuck with quick change jaw system type KNCS-N-260

SMW Id-Nr: 012441

586550**SET OF 3 SOFT TOP JAWS**

Set of 3 soft top jaws type WAK 250-10 for power chuck with quick change jaw system type KNCS-N-260/325 und KNCS-NB-260/325

SMW Id-Nr: 012493

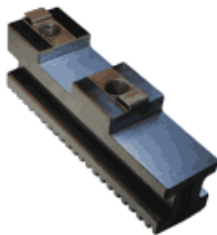
571340**3-JAW-CHUCK KNCS-NB 260/3 / A2-6
WITH WIDE MASTER JAWS**

SMW-AUTOBLOK® power chuck with quick change jaw system KNCS-NB-260-78-A06 (hydraulically operated).

Through hole diameter 78 mm.

Incl. 1 set of hardened base jaws GBKB 260 and hardened, reversible top jaws GUA 250, to mount on spindle nose A2-6 / M72x1,5 (DIN55026) with rotating thread ring incl. mounting key ($n_{max.}$: 4000 rpm)

SMW Id-No: 162553

571341**SET OF 3 HARD BASE JAWS**

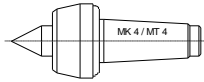
Set of hard base jaws type GBKB 260 for power chuck with quick change jaws SMW type KNCS-NB-260

SMW Id-No: 039624

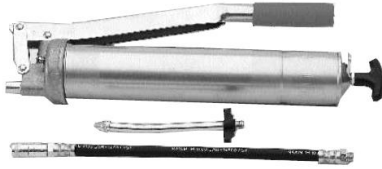
586550**SET OF 3 SOFT TOP JAWS**

Set of 3 soft top jaws type WAK 250-10 for power chuck with quick change jaw system type KNCS-N-260/325 und KNCS-NB-260/325

SMW Id-No: 012493

573310**LIFE CENTRE MT4**

High-speed triple bearing live center for tailstock .

574630**GREASE GUN SMW INCL. 2 ADAPTORS**

Grease gun including:

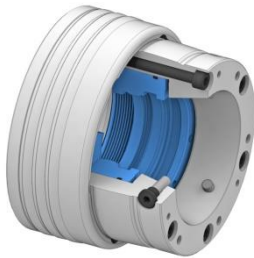
- Nosepiece for cone headed grease nipple
- Nosepiece for funnel grease nipple
- 500 g cartridge of special grease K05

Suitable for RÖHM and SMW power chucks.

CLAMPING DEVICE FOR E65 **SUPER BIGBORE 95** (A2-8)

440780

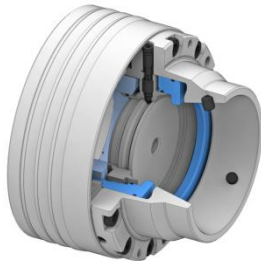
SPANNTOP-NOVA-MODULAR COLLET CHUCK (A2-8)



HAINBUCH collet chuck (pull-back style) size BZI 100 for spindle nose size A2-8, max. bar capacity $\varnothing 100$ mm, **no internal part-stop possible**; collet changer 440 790 necessary (n_{\max} : 5000 rpm), incl. draw adapter

440841

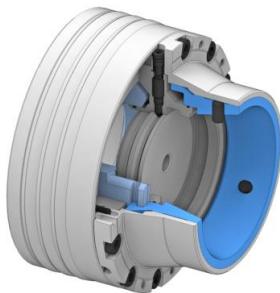
SPANNTOP-MINI-COMBI COLLET CHUCK (A2-8)



HAINBUCH collet chuck (pull-back style) size BZI 100 for spindle nose size A2-8, max. bar capacity $\varnothing 100$ mm, **incl. internal part-stop**, collet changer 440 790 necessary. (n_{\max} : 5000 rpm), incl. draw adapter

440846

SPANNTOP-MINI-COMBI AXFIX COLLET CHUCK (A2-8)



HAINBUCH collet chuck (dead-length style) size BZI 100 for spindle nose size A2-8, max. bar capacity $\varnothing 100$ mm, **incl. internal part-stop**, collet changer 440 790 necessary. (n_{\max} : 5000 rpm), incl. draw adapter
Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

010645

COLLET SK 100 BZI - ROUND



HAINBUCH Collet SK 100 BZI for round bar stock, total clamping range $\varnothing 42-100$ mm; 1mm steps, To clamp on raw or finished surfaces with serrated or smooth clamping surface.

Please define the clamping diameter and whether the clamping surface should be serrated or smooth !

010650

COLLET SK 100 BZI - HEXAGON

HAINBUCH Collet SK 100 BZI for hexagon bar stock, total clamping range 50-86mm in 1mm steps,

Please define the hexagon size to be clamped on.

010655

COLLET SK 100 BZI - SQUARE

HAINBUCH Collet SK 100 BZI for square bar stock, total clamping range □ 50-70mm in 1mm steps,

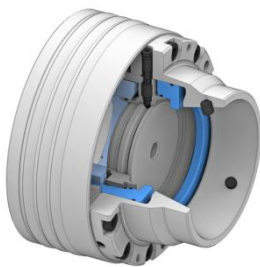
Please define the square size to be clamped on.

440790

COLLET CHANGER PNEUMATICAL

To change HAINBUCH collets SK100
(Hainbuch: PPG 100)

440841HTP

TOPlus mini 100 AXZUG (A2-8)

HAINBUCH TOPlus mini AXZUG collet chuck for SE-TOP100 collets

(Pull-back style)

Max. clamping diameter: \varnothing 100 mm

Spindle nose size: A2-8

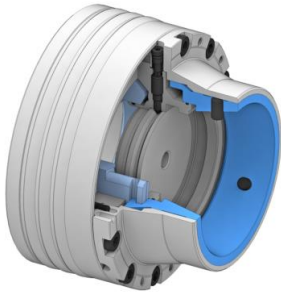
Including internal part-stop

n_{max} : 5000 rpm

Including draw adapter M102 x 2

Collet changer 440790HTP necessary

Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

440846HTP**TOPlus mini 100 AXFIX (A2-8)**

HAINBUCH TOPlus mini AXFIX collet chuck for SE-TOP100 collets (Dead-length style)

Max. clamping diameter: $\varnothing 100$ mm

Spindle nose size: A2-8

Including internal part-stop

n_{max} : 5000 rpm

Including draw adapter M102 x 2

Collet changer 440790HTP necessary

Advantage: No axial collet stroke and therefore no unfavorable tension between both spindles during take over!

010645HTP**COLLET SE TOP100 - ROUND**

HAINBUCH Collet SE TOP100 for round bar stock, total clamping range $\varnothing 15-100$ mm; 1 mm steps,

To clamp on raw or finished surfaces with serrated or smooth clamping surface.

Please define the clamping diameter and whether the clamping surface should be serrated or smooth!

440790HTP**COLLET CHANGER PNEUMATICAL**

To change HAINBUCH collets

TOPlus SE TOP100 (Hainbuch: PPTOP65)

571310R**3-JAW CHUCK KFD-HS 250/3 - A2-8**

RÖHM power-chuck KFD-HS $\varnothing 250/3$

hydraulic operated, for **high spindle speed** and with large through-hole ($\varnothing 86$), **incl. 1 set hardened reversible jaws on the chuck ground with a serration of $1/16'' \times 90^\circ$** , to

mount on spindle nose size A2-8 with thread size M102x2, (n_{max} .**5000rpm**)

586460R**SET OF 3 HARD JAWS**

Set of reversible hard jaws for 586160/571300 with a serration of $1/16'' \times 90^\circ$

586165**SET OF 3 SOFT JAWS**

Set of soft jaws for 586160 with a serration of 1/16" x 90°

586410**3-JAW-CHUCK BHD 250/3 A2-8 SBB**

SMW-AUTOBLOK® power chuck with through hole type BH-D 250-66-A08 (hydraulically operated).
Through hole $\varnothing 66$ mm.

Incl. 1 set of soft jaws with a serration of 1/16" x 90°

To mount on spindle nose A2-8 / M102x2 (DIN55026)

(n_{max.}: 4000 rpm)

SMW Id-No: 173689

586651**SET OF 3 SOFT JAWS**

Set of soft jaws WBSA-D250 with a serration of 1/16" x 90° for power chuck SMW BH-D 250.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12072500

586652**SET OF 3 HARD JAWS**

Set of hard reversible jaws MHB-D251 for power chuck SMW BH-D 250 and BH-D 315.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12083036

586400**3-JAW-CHUCK BHD 315/3 A2-8 SBB**

SMW-AUTOBLOK® power chuck with through hole type BH-D 315-95-A08 (hydraulically operated).
Through hole $\varnothing 95$ mm.

Incl. 1 set of soft jaws with a serration of 1/16" x 90°

To mount on spindle nose A2-8 / M102x2 (DIN55026)

(n_{max.}: 3200 rpm)

SMW Id-No: 173690

586401**SET OF 3 SOFT JAWS**

Set of soft jaws WBSA-D315 with a serration of 1/16"x 90° for power chuck SMW BH-D 315.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12073000

586652**SET OF 3 HARD JAWS**

Set of hard reversible jaws MHB-D251 for power chuck SMW BH-D 250 and BH-D 315.

Hole spacing: 30 mm

Groove width: 21 mm

SMW Id-No: 12083036

571360**3-JAW-CHUCK KNCS-NB 325/3 / A2-8 SBB****WITH WIDE MASTER JAWS**

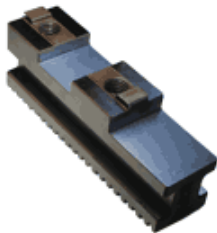
SMW-AUTOBLOK® power chuck with quick change jaw system KNCS-NB-325-104-A08 (hydraulically operated).

Through hole diameter 104 mm.

Incl. 1 set of hardened base jaws GBKB 315 and hardened, reversible top jaws

GUA 250, to mount on spindle nose A2-8 / M102x2 (DIN55026) with rotating thread ring incl. mounting key (**n_{max.}: 3300 rpm**)

SMW Id-No: 162551

571361**SET OF 3 HARD BASE JAWS**

Set of hard base jaws type GBKB 315 for power chuck with quick change jaws SMW type KNCS-NB-325

SMW Id-No: 039626

586550**SET OF 3 SOFT TOP JAWS**

Set of 3 soft top jaws type WAK 250-10 for power chuck with quick change jaw system type KNCS-N-260/325 und KNCS-NB-260/325

SMW Id-No: 012493

586680**3-JAW-CHUCK HFKS 255/3 – A2-8****SPINDLES SIZE 95**

SMW-AUTOBLOK® Precision + weight-optimized power chuck with large through-hole, centrifugal compensation, optimized lubrication system, wedge hook mechanism, Flats on the chuck body for best accessibility, type HFKS-2G-255-72-3-A08 (hydraulically operated). Thru-hole $\varnothing 72\text{mm}$, incl. 1 set of soft jaws with a serration of $1/16'' \times 90^\circ$, to mount on spindle nose A2-8 (DIN55026) / draw tube adapter M102x2 / ($n_{\text{max.}}$: 4500 rpm)

SMW Id-No: 164263

586653**SET OF 3 SOFT JAWS**

Set of soft jaws AWB-D250 with serration $1/16'' \times 90^\circ$ for power chuck SMW HFKS 255 / HFKS 320
Hole spacing: 28mm
Groove width: 21 mm
Length: 120mm

SMW Id.-No: 081618

586652**SET OF 3 HARDENED JAWS**

Set of hard reversible jaws MHB-D251 for power chuck SMW BH-D 250 and BH-D 315 / **HFKS 255 / HFKS 320**.

Hole spacing: 30 mm

Groove width: 21 mm

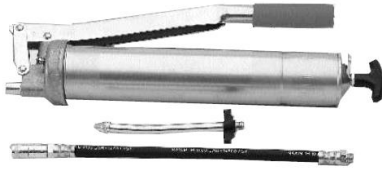
SMW Id.-No: 12083036

486440**POWER CHUCK 3QLC-KS 250/101/Z8/HB11**

FORKARDT power chuck with centrifugal force compensation and extra large through hole of $\varnothing 101\text{ mm}$. Base jaw serration $1/16'' \times 90^\circ$, incl. hardened top jaws Type: HB11 ground together with the chuck, incl. T-slot nut type FN 231
Max. speed: 5000 rpm
Max. jaw travel: 5,3 mm
Spindle connection: A2-8 (DIN55026)

R3Y410**SET OF 3 SOFT JAWS**

Set of soft jaws for 571200 with a serration of $1/16'' \times 90^\circ$

574630**GREASE GUN SMW INCL. 2 ADAPTORS**

Grease gun including:

- Nosepiece for cone headed grease nipple
- Nosepiece for funnel grease nipple
- 500 g cartridge of special grease K05

Suitable for RÖHM and SMW power chucks.

TOOL HOLDER VDI30-AXIAL (DIN 69 880):

R6Z850Z



Symbol photo !!

TOOL HOLDER PACKAGE–VDI30/AXIAL STATIONARY TOOLS

Tool holder package consisting of:

- 2x - RADIAL tool holder M4 (R3Z350)
- 1x - RADIAL tool holder M3 (R3Z360)
- 2x - Collet holder ESX 25 (W1Z480)
- 1x - Carbide insert drill holder $\varnothing 25$ (R3Z430)
- 1x - Boring bar holder $\varnothing 16$ (R3Z300W)

R6Z860Z



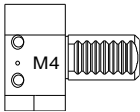
Symbol photo !!

TOOL HOLDER PACKAGE–VDI30/AXIAL STATIONARY AND DRIVEN TOOLS

Tool holder package consisting of:

- 2x - RADIAL tool holder M4 (R3Z350)
- 1x - RADIAL tool holder M3 (R3Z360)
- 2x - Collet holder ESX 25 (W1Z480)
- 1x - Carbide insert drill holder $\varnothing 25$ (R3Z430)
- 1x - Boring bar holder $\varnothing 16$ (R3Z300W)
- 1x - Angular milling holder – 90° (R2Z780)
- 1x - Milling holder straight (440420W)

R3Z350SP

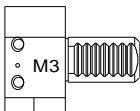


RADIAL TOOL HOLDER M4 / FORM B1

O.D. Turning tool holder VDI 30 for shanks

- 20x20

R3Z360SP

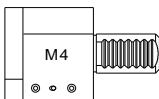


RADIAL TOOL HOLDER M3 / FORM B3

O.D. Turning tool holder VDI 30 for shanks

- 20x20, over head (e.g. threading operation)

R3Z370SP

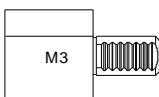


AXIAL TOOL HOLDER M4 / FORM C1

VDI 30 tool holder to be used for face grooving and face turning

- 20x20, M4 spindle direction

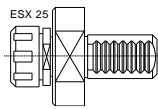
R3Z380SP



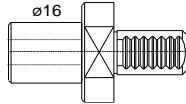
AXIAL TOOL HOLDER M3 / FORM C3

VDI 30 tool holder to be used for face grooving and face turning

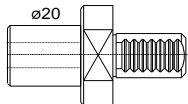
- 20x20, M3 spindle direction

W1Z480SP**COLLET HOLDER ESX 25 / FORM E3**

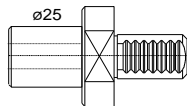
VDI30 tool holder for ESX 25 collets with a clamping range from \varnothing 2-16mm and internal coolant supply.

R3Z480SP**INDEXABLE DRILL HOLDER \varnothing 16 / FORM E1**

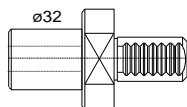
VDI 30 tool holder for indexable drills with a shank \varnothing 16mm and internal coolant supply.

R3Z420SP**INDEXABLE DRILL HOLDER \varnothing 20 / FORM E1**

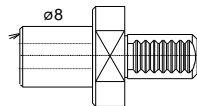
VDI 30 tool holder for indexable drills with a shank \varnothing 20mm and internal coolant supply.

R3Z430SP**INDEXABLE DRILL HOLDER \varnothing 25 / FORM E1**

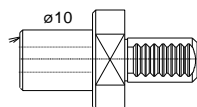
VDI 30 tool holder for indexable drills with a shank \varnothing 25mm and internal coolant supply.

R3Z440SP**INDEXABLE DRILL HOLDER \varnothing 32 / FORM E1**

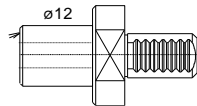
VDI 30 tool holder for indexable drills with a shank \varnothing 32mm and internal coolant supply.

R3Z270SP**BORING BAR HOLDER \varnothing 8 / FORM E2**

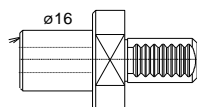
VDI 30 tool holder for boring bars \varnothing 8mm and external coolant nozzle.

R3Z280SP**BORING BAR HOLDER \varnothing 10 / FORM E2**

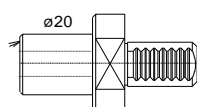
VDI 30 tool holder for boring bars \varnothing 10mm and external coolant nozzle.

R3Z290SP**BORING BAR HOLDER \varnothing 12 / FORM E2**

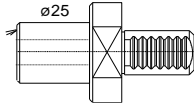
VDI 30 tool holder for boring bars \varnothing 12mm and external coolant nozzle.

R3Z300SP**BORING BAR HOLDER \varnothing 16 / FORM E2**

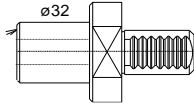
VDI 30 tool holder for boring bars \varnothing 16mm and external coolant nozzle.

R3Z310SP**BORING BAR HOLDER \varnothing 20 / FORM E2**

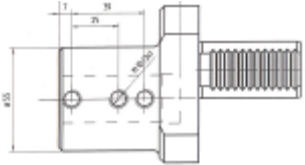
VDI 30 tool holder for boring bars \varnothing 20mm and external coolant nozzle.

R3Z320SP**BORING BAR HOLDER $\varnothing 25$ / FORM E2**

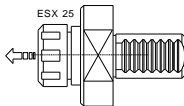
VDI 30 tool holder for boring bars $\varnothing 25$ mm and external coolant nozzle.

R3Z340SP**BORING BAR HOLDER $\varnothing 32$ / FORM E2**

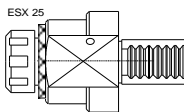
VDI 30 tool holder for boring bars $\varnothing 32$ mm and external coolant nozzle.

R6Z730**OFFSET BORING BAR HOLDER $\varnothing 25$** 

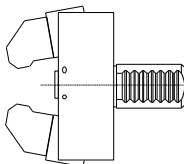
15 mm offset VDI 30 tool holder for boring bars $\varnothing 25$ mm with internal and external coolant line.

573896**TAPPING HOLDER ESX 25**

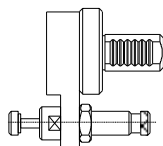
VDI 30 tool holder for tapping operation with length compensation
Tap size: M4-M20

573877**FLOATING REAMER HOLDER**

VDI 30 tool holder for reaming operation with adjustable axially parallel compensation ESX 25

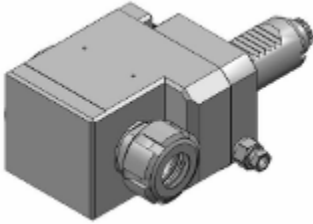
574402SP**BAR-PULLER**

Spring loaded 2-jaw bar-puller
VDI 30 to work from bar stock without a bar-feeder.
for bar diameters $\varnothing 10$ -63mm.

R3Z890**BAR STOP**

dampened bar stop
 $\varnothing 20$ mm incl. VDI 30 holder,
Note: important to use with „short bar loaders“

DRIVEN TOOL HOLDERS (DIN5480):

R2Z780**ANGULAR MILLING HOLDER - 90°**

Used for drilling, milling and rigid tapping operation, ESX 25 collets, clamping range \varnothing 2-16mm, length 78mm, $i=1:1$ - **VDI 30 Coupling DIN5480**
(Alignment bolt distance: 40/48mm)

440420W**Drilling/Milling holder straight – 95mm**

For drilling, milling and synchronized tapping at the main or counter spindle, ER 25 collets, external coolant supply
Clamping range \varnothing 2-16mm, $i=1:1$, EK
95mm long - VDI 30

12x VDI 30 BORE PLUG IN THE BASIC MACHINE!

TOOL HOLDER – VDI40 AXIAL (DIN 69 880)

442710W



Symbolfoto !!

TOOL HOLDER PACKAGE VDI40/AXIAL STATIONARY TOOL HOLDERS

Tool holder package consisting of:

- 2x Face and O.D. Turning holder -M4 (442010)
- 1x Face and O.D. Turning holder -M3 (442020)
- 2x Collet holder ER40 (442130)
- 1x I.D. Turning holder Dm32 (442060)
- 1x I.D. Turning holder Dm25 (442070)

442721W



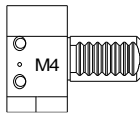
Symbolfoto !!

TOOL HOLDER PACKAGE VDI40/AXIAL STATIONARY + DRIVEN TOOL HOLDERS

Tool holder package consisting of:

- 2x Face and O.D. Turning holder -M4 (442010)
- 1x Face and O.D. Turning holder -M3 (442020)
- 2x Collet holder ER40 (442130)
- 1x I.D. Turning holder Dm32 (442060)
- 1x I.D. Turning holder Dm25 (442070)
- Driven tool holder:
 - 1x Drilling/Milling holder straight (442145W)
 - 1x Angular Drilling/Milling holder (442275W)
 - 1x Set of hand-tools

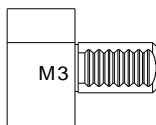
442010SP



RADIAL-TOOL HOLDER M4 (SHORT)

O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M4

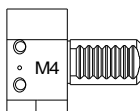
442020SP



RADIAL-TOOL HOLDER M3 (SHORT)

O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M3

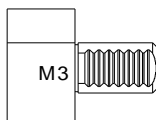
442030SP



RADIAL-TOOL HOLDER M4 (LONG)

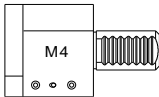
O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M4

442040SP

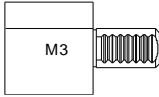


RADIAL-TOOL HOLDER M3 (LONG)

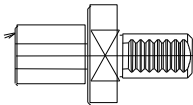
O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M3

442210SP**AXIAL-TOOL HOLDER M4**

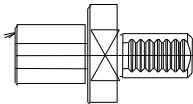
O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M4

442220SP**AXIAL-TOOL HOLDER M3**

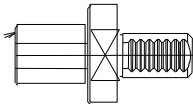
O.D. Turning tool holder VDI 40 for shanks 25x25,
spindle-direction M3

442050SP**BORING BAR HOLDER DIA 40**

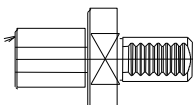
VDI 40 tool holder for boring bars Dia. 40mm,
internal and external coolant supply

442060SP**BORING BAR HOLDER DIA 32**

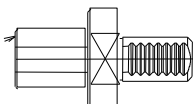
VDI 40 tool holder for boring bars Dia. 32mm,
internal and external coolant supply

442070SP**BORING BAR HOLDER DIA 25**

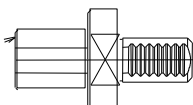
VDI 40 tool holder for boring bars Dia. 25mm,
internal and external coolant supply

442080SP**BORING BAR HOLDER DIA 20**

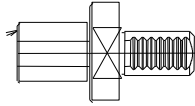
VDI 40 tool holder for boring bars Dia. 20mm,
internal and external coolant supply

442090SP**BORING BAR HOLDER DIA 16**

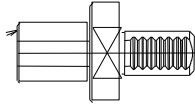
VDI 40 tool holder for boring bars Dia. 16mm,
internal and external coolant supply

442100SP**BORING BAR HOLDER DIA 12**

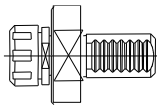
VDI 40 tool holder for boring bars Dia. 12mm,
internal and external coolant supply

442110SP**BORING BAR HOLDER DIA 10**

VDI 40 tool holder for boring bars Dia. 10mm,
internal and external coolant supply

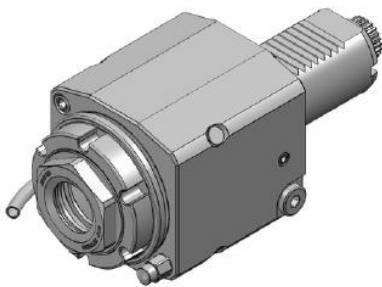
442120SP**BORING BAR HOLDER DIA 8**

VDI 40 tool holder for boring bars Dia. 8mm,
internal and external coolant supply

442130SP**COLLET HOLDER ER/ESX 40**

VDI 40 tool holder for ER/ESX 40 collets, with internal
coolant supply.
Clamping range \varnothing 3-26mm

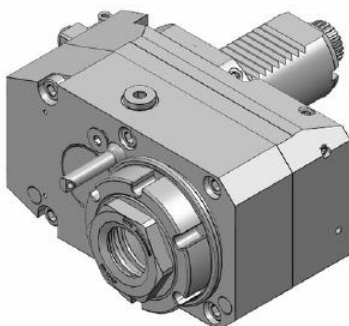
DRIVEN TOOL HOLDERS (DIN5480):

442145W**DRILLING/MILLING STRAIGHT/RIGHT - VDI 40**

For drilling, milling and synchronized tapping. ER 32 collets or Quick Flex-Modular system, clamping range \varnothing 2-20 mm, $i=1:1$, max. 6000 rpm, 106 mm long, external coolant supply, VDI 40 / coupling DIN 5480

(to be used in the EMCOTURN E65 with axial-turret and HYPERTURN 95/110 with radial-turret)

WTO: 420132077-40R

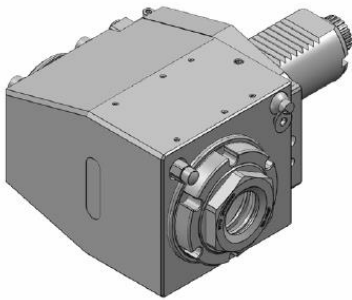
442241W**DRILLING/MILLING STRAIGHT - DESAXIAL / VDI 40 / ICS**

For drilling, milling and synchronized tapping. *Inclusive pin-adjustment plate!* ER 32 collets or Quick Flex-Modular system, clamping range \varnothing 2-20 mm, $i=1:1$, max. 6000 rpm, 50 mm offset, ICS / ECS (max. 80 bar), VDI 40 / coupling DIN 5480

(to be used in the E65 and MT95 with axial-turret)

WTO: 420132055-40R

442275W



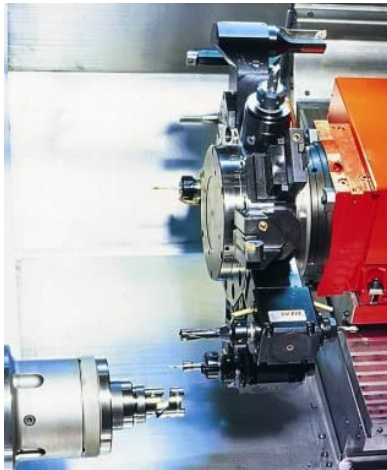
ANGULAR-DRILLING/MILLING HOLDER – RIGHT / VDI40

For drilling, milling and synchronized tapping, *Inclusive pin-adjustment plate!*
ER 32 collets or Quick Flex-Modular system, i=1:1, clamping range \varnothing 2-20 mm, max. 6000 rpm, 70 mm long, external coolant supply, VDI 40 / coupling DIN 5480
(to be used in the E65 and MT95 with axial-turret)

WTO: 420532042-40R

TOOL HOLDERS VDI 30-RADIAL (DIN 69 880):

442571W



Tool holder package VDI30/RADIAL MT65M

Tool holder package consisting of:

Stationary tool holder:

3x Face and O.D. Turning holder – left (R4Z410W)

1x Cut-off holder M3 - M4 (R4Z451W)

2x I.D. Turning holder universal – short (R4Z550W)

1x I.D. Turning holder left – short (R4Z540W)

1x I.D. Turning holder left – long (R4Z560W)

2x Collet holder ER32 (442600W)

1x Reduction bushing (\varnothing 25mm) (442660W)

1x Reduction bushing (\varnothing 20mm) (442650W)

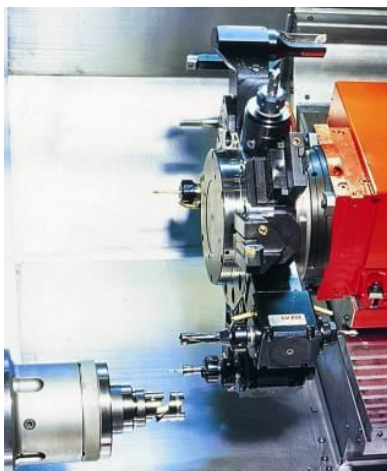
Driven tool holder:

2x Drilling/Milling holder straight - 90mm (440441W)

2x Angular Drilling/Milling holder left –short (R6Z581W)

1x Set of hand-tools (446305)

442581W



Tool holder package VDI30/RADIAL E65SM / MT65SM

Tool holder package consisting of:

Stationary tool holder:

3x Double Face and O.D. Turning holder (R6Z410W)

1x Cut-off holder M3 - M4 (R4Z451W)

1x I.D. Turning holder left – short (R4Z540W)

1x I.D. Turning holder right – short (R6Z460W)

2x I.D. Turning holder universal – short (R4Z550W)

1x I.D. Turning holder left – long (R4Z560W)

2x I.D. Turning holder universal – long (R4Z640W)

4x Collet holder ER32 (442600W)

1x Reduction bushing (\varnothing 25mm) (442660W)

1x Reduction bushing (\varnothing 20mm) (442650W)

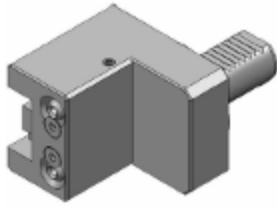
1x Reduction bushing (\varnothing 16mm) (442640W)

Driven tool holder:

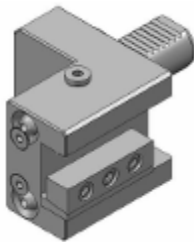
2x Drilling/Milling holder straight – 90mm (440441W)

2x Double Angular Drilling/Milling holder –short (R6Z571W)

1x Set of hand-tools (446305)

R4Z410W**Face and O.D. Turning holder - left**

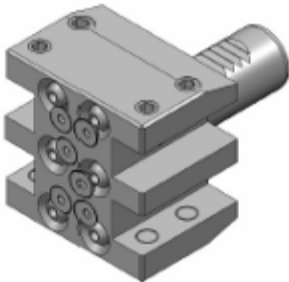
Single tool holder for machining at the main spindle or between both spindles for shank 20 x 20 mm,
Spindle direction M3/M4
- **VDI 30** (according to DIN 69880)

R4Z230W**Face and O.D. Turning holder - right**

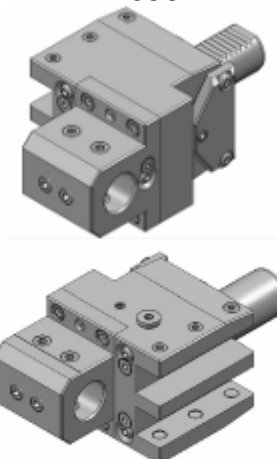
Single tool holder for machining at the counter spindle or between both spindles for shank 20 x 20 mm,
Spindle direction M3/M4
- **VDI 30** (according to DIN 69880)

R6Z410W**Double Face and O.D. Turning holder**

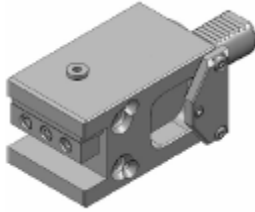
Double tool holder for machining on both spindles for shank 20 x 20 mm,
Spindle direction M3/M4
- **VDI 30** (according to DIN 69880)

442750W**Double facing and O.D. turning holder offset in Y axes (VDI30)**

4-fold tool holder for O.D. turning on main or counter spindle;
Both spindle directions M3/M4
For square shank tooling 4x 20x20mm
VDI 30

442690W**Combination Tool holder in Y axis**

Combination tool holder for I.D. machining and O.D. machining. To be used at the main and counter spindle with internal coolant supply;
2 slots for square shank 20x20mm
1 hole for round shank $\varnothing 25$ mm
Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 30

R4Z580W**Facing and I.D. Turning holder**

Axial-tool holder for face machining at the main- or counter spindle for shank 20x20 mm,

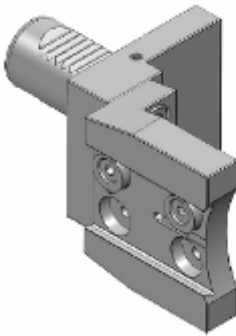
Spindle direction M3/M4

Inclusive EMCO adjustment plate – no alignment necessary !!

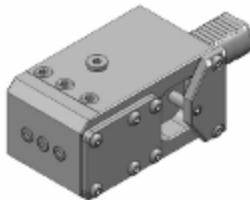
- **VDI 30** (according to DIN 69880)

R4Z490**DISTANCE-PLATES**

Set of 10 plates to compensate height of 3/4" shanks (0,95mm)

R4Z451W**CUT-OFF HOLDER M3-M4 / VDI30**

VDI 30-Single tool holder for cut-off blades with a height of 26 mm. The holder can be used for both spindle directions (M3/M4) by changing the set-up

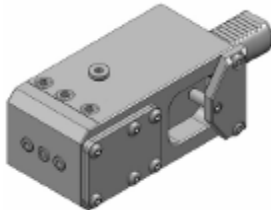
R4Z550W**I.D. Turning holder universal - short**

For I.D. machining at the main or counter spindle with internal coolant supply,

Clamping seat diameter $\varnothing 32\text{mm}$

Inclusive EMCO adjustment plate – no alignment necessary !!

100mm long - VDI 30

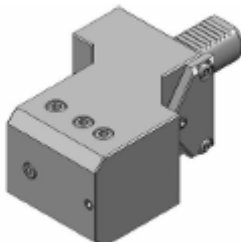
R4Z640W**I.D. Turning holder universal - long**

For I.D. machining at the main or counter spindle with internal coolant supply,

Clamping seat diameter $\varnothing 32\text{mm}$

Inclusive EMCO adjustment plate – no alignment necessary !!

120mm long - VDI 30

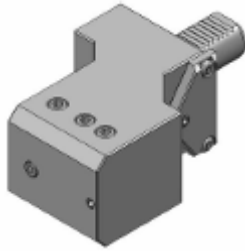
R4Z540W**I.D. Turning holder left - short**

For I.D. machining at the main spindle with internal coolant supply,

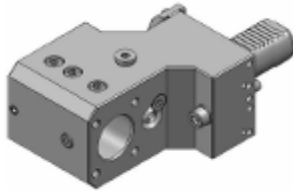
Clamping seat diameter $\varnothing 32\text{mm}$

Inclusive EMCO adjustment plate – no alignment necessary !!

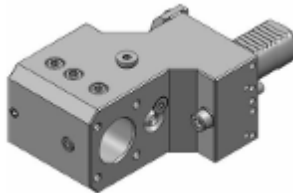
100mm long - VDI 30

R4Z560W**I.D. Turning holder left - long**

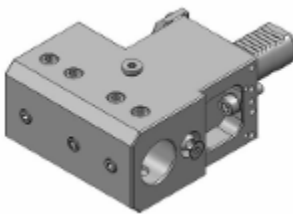
For I.D. machining at the main spindle with internal coolant supply,
Clamping seat diameter $\varnothing 32\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
120mm long - VDI 30

R6Z460W**I.D. Turning holder right - short**

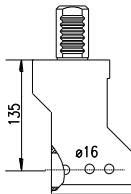
For I.D. machining at the counter spindle with internal coolant supply,
Clamping seat diameter $\varnothing 32\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 30

R4Z510W**I.D. Turning holder right - long**

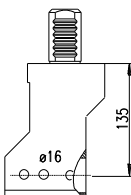
For I.D. machining at the counter spindle with internal coolant supply,
Clamping seat diameter $\varnothing 32\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
120mm long - VDI 30

442680W**Double I.D. Turning holder - long**

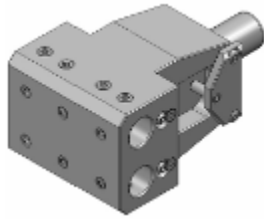
For I.D. machining at the main and counter spindle with internal coolant supply,
Clamping seat diameter $\varnothing 32\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
120mm long - VDI 30

R6Z370**I.D. TOOL HOLDER EXTRA LONG
 $\varnothing 16\text{MM}$ - LEFT**

for I.D. machining with internal coolant-supply for boring bars $\varnothing 16\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
135mm long - VDI 30

R6Z380**I.D. TOOL HOLDER EXTRA LONG
 $\varnothing 16\text{MM}$ - RIGHT**

for I.D. machining with internal coolant-supply for boring bars $\varnothing 16\text{mm}$
Inclusive EMCO adjustment plate – no alignment necessary !!
135mm long - VDI 30

442700W**Multiple I.D. Turning holder in Y axis**

Multiple tool holder for I.D. machining on the main or counter spindle with internal coolant supply;

For shank diameter: 4x \varnothing 25mm

Inclusive EMCO adjustment plate – no alignment necessary !!

125 mm long - VDI 30

442670W**Collet holder ER25**

Collet holder \varnothing 32mm for ER25 collets;

Clamping range \varnothing 1-16mm

442600W**Collet holder ER32**

Collet holder \varnothing 32mm for ER32 collets;

Clamping range \varnothing 2-20mm

442610W**Reduction bushing \varnothing 8mm**

Reduction bushing \varnothing 32mm for boring bars \varnothing 8mm.

442620W**Reduction bushing \varnothing 10mm**

Reduction bushing \varnothing 32mm for boring bars \varnothing 10mm.

442630W**Reduction bushing \varnothing 12mm**

Reduction bushing \varnothing 32mm for boring bars \varnothing 12mm.

442640W**Reduction bushing \varnothing 16mm**

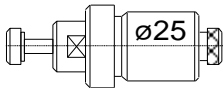
Reduction bushing \varnothing 32mm for boring bars \varnothing 16mm.

442650W**Reduction bushing \varnothing 20mm**

Reduction bushing \varnothing 32mm for boring bars \varnothing 20mm.

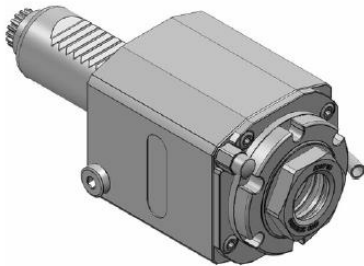
442660W**Reduction bushing \varnothing 25mm**

Reduction bushing \varnothing 32mm for boring bars \varnothing 25mm.

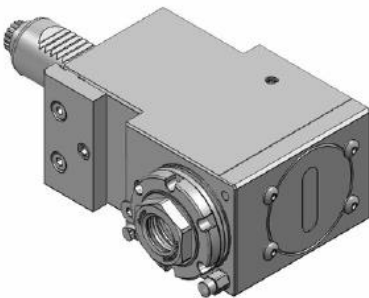
R6Z890**BAR STOP**

Special made dampened bar stop with a \varnothing 25mm shank to be used with an I.D. Tool holder.

DRIVEN TOOL HOLDER VDI30 (DIN5480)

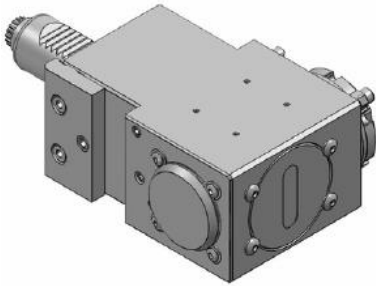
440441W**DRILLING/MILLING HOLDER STRAIGHT – 90 mm**

For drilling, milling and synchronized tapping at the main or counter spindle, ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range \varnothing 1-16mm, $i=1:1$, max. 6000 rpm, 90 mm long, external coolant supply
VDI 30 / coupling DIN 5480

WTO: 420125010-30L**R6Z581W****ANGULAR DRILLING/MILLING HOLDER –LEFT/SHORT**

For drilling, milling and synchronized tapping at the main spindle, Inclusive EMCO adjustment plate – no alignment necessary!
ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range \varnothing 1-16mm, max. 6000 rpm, external coolant supply, 100 mm center height,
VDI 30 / coupling DIN 5480

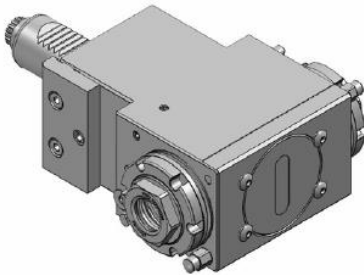
WTO: 420525071-30L

R6Z591W**ANGULAR DRILLING/MILLING HOLDER
-RIGHT/SHORT**

For drilling, milling and synchronized tapping at the counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 1-16\text{mm}$, max. 6000 rpm, external coolant supply, 100 mm center height, VDI 30 / coupling DIN 5480

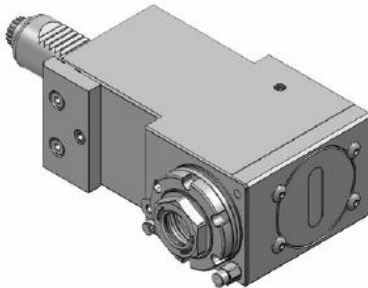
WTO: 420525071-30R

R6Z571W**ANGULAR DRILLING/MILLING HOLDER
-DOUBLE/SHORT**

For drilling, milling and synchronized tapping at the main and counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 1-16\text{mm}$, max. 6000 rpm, external coolant supply, 100 mm center height, VDI 30 / coupling DIN 5480

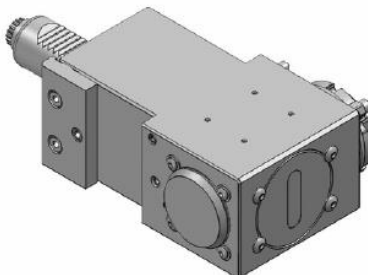
WTO: 420525073-30

R6Z811W**ANGULAR DRILLING/MILLING HOLDER
-LEFT/LONG**

For drilling, milling and synchronized tapping at the main spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 1-16\text{mm}$, max. 6000 rpm, external coolant supply, 120 mm center height, VDI 30 / coupling DIN 5480

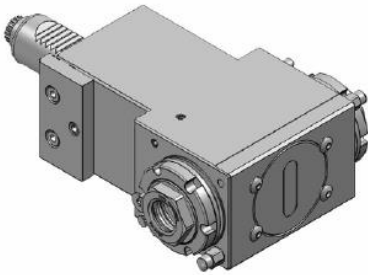
WTO: 420525076-30L

R6Z821W**ANGULAR DRILLING/MILLING HOLDER
-RIGHT/LONG**

For drilling, milling and synchronized tapping at the counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 1-16\text{mm}$, max. 6000 rpm, external coolant supply, 120 mm center height, VDI 30 / coupling DIN 5480

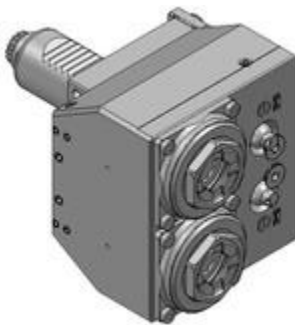
WTO: 420525076-30R

R6Z801W**ANGULAR DRILLING/MILLING HOLDER
-DOUBLE/LONG**

For drilling, milling and synchronized tapping at the main and counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 25 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 1-16\text{mm}$, max. 6000 rpm, external coolant supply, 120 mm center height, VDI 30 / coupling DIN 5480

WTO: 420525078-30

442740W**Double milling holder straight offset in Y
axes (VDI30)**

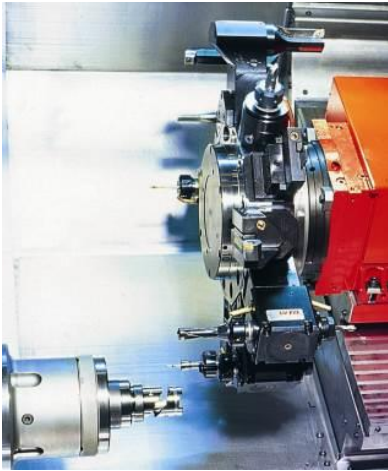
Double milling holder for drilling, milling and synchronized tapping at the main or counter spindle,

Inclusive EMCO adjustment plate – no alignment necessary !!

ER 20 collets, external coolant supply
Clamping range $\varnothing 1-13\text{mm}$, $i=1:1$, EK
VDI 30

TOOL HOLDERS VDI 40-RADIAL (DIN 69 880):

442575W



Tool holder package VDI40/RADIAL MT65M / HT65PM

Tool holder package consisting of:

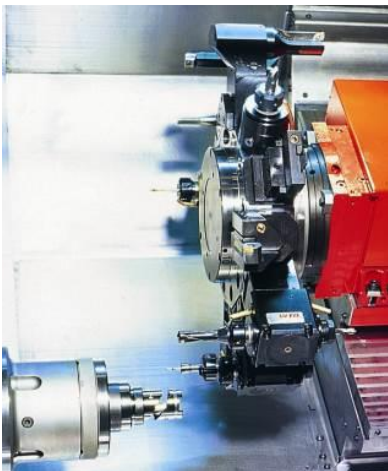
Stationary tool holder:

- 3x Face and O.D. Turning holder – left (442350)
- 1x Cut-off holder M3 - M4 (R9Z455)
- 2x I.D. Turning holder, universal (442310)
- 2x I.D. Turning holder universal – left/short (442290)
- 2x Collet holder ER32 (442320)
- 1x Set of reduction bushings (ø16/20/25/32mm)
442330W)

Driven tool holder:

- 2x Drilling/Milling holder straight – 88mm (442141W)
- 2x Angular Drilling/Milling holder –short/left (442261W)
- 1x Set of hand-tools (446307)

442585W



Tool holder package VDI40/RADIAL E65SM / MT65SM / HT65PM

Tool holder package consisting of:

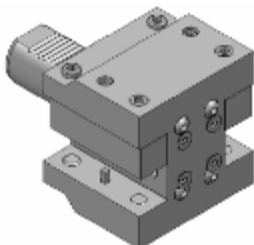
Stationary tool holder:

- 3x Double Face and O.D. Turning holder (442340)
- 1x Cut-off holder M3 - M4 (R9Z455)
- 2x I.D. Turning holder left / short (442290)
- 2x I.D. Turning holder right / short (442300)
- 2x I.D. Turning holder universal (442310)
- 1x I.D. Turning holder universal / short (442280)
- 4x Collet holder ER32 (442320)
- 1x Reduction bushing (ø16/20/25/32mm) (442330W)

Driven tool holder:

- 2x Drilling/Milling holder straight – 88mm (442141W)
- 2x Double Angular Drilling/Milling holder–short (442251W)
- 1x Set of hand-tools (446307)

442340



RADIAL- DOUBLE-TOOL HOLDER M3/M4 - VDI40

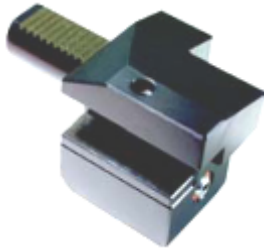
Double tool holder to work on both spindles,
for shank 25x25mm

M3/M4 spindle direction, Form D1/D2

-VDI 40 (According to DIN 69880)

442350**TOOL HOLDER - VDI40 / FORM C2**

Single tool holder to work at the main spindle or between spindles, for shank 25x25mm, M4 spindle direction (HT/MT)
Form C2
-VDI 40 (According to DIN 69880)

442360**TOOL HOLDER - VDI40 / FORM C4**

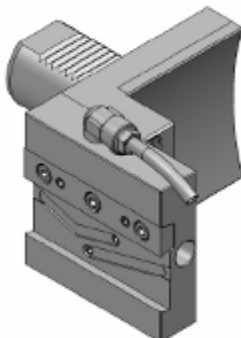
Single tool holder to work at the main spindle or between spindles, for shank 25x25mm, M3 spindle direction (HT/MT)
Form C4
-VDI 40 (According to DIN 69880)

442370**RADIAL/AXIAL-HOLDER LEFT - VDI40/
FORM B2/C2**

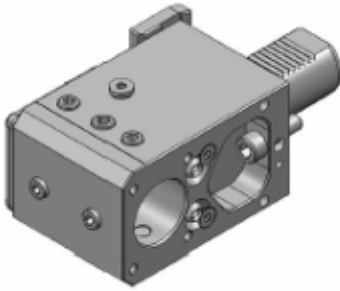
Single tool holder for axial grooving tool,
shank 25x25mm,
M4 spindle direction (HT/MT)
Form B2/C2
-VDI 40 (According to DIN 69880)

442380**RADIAL/AXIAL-HOLDER RIGHT - VDI40/
FORM B1/C1**

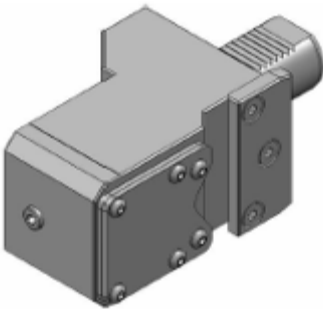
Single tool holder for axial grooving tool,
shank 25x25mm
M4 spindle direction (HT/MT);
Form B1/C1
-VDI 40 (According to DIN 69880)

S6Z450**CUT-OFF HOLDER M3-M4 / VDI40**

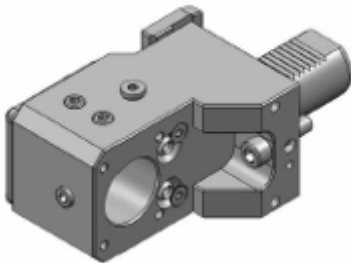
VDI 40-Single tool holder for cut-off blades
with a height of 26 mm. The holder can be
used for both spindle directions (M3/M4) by
changing the set-up

442280**DOUBLE I.D. TOOL HOLDER \varnothing 40MM - VDI 40**

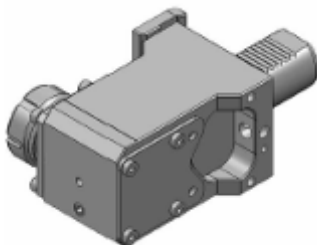
for I.D. machining at main- and counter spindle with internal coolant-supply, Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 40

442290**I.D. TOOL HOLDER \varnothing 40MM LEFT – VDI 40**

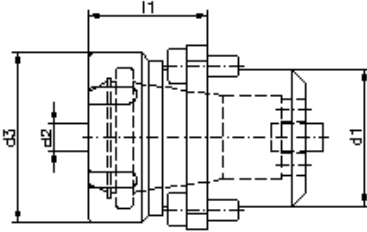
for I.D. machining at the main spindle with internal coolant-supply, Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 40

442300**I.D. TOOL HOLDER \varnothing 40MM RIGHT – VDI 40**

for I.D. machining at the Counter spindle with internal coolant-supply, Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 40

442310**I.D. TOOL HOLDER LEFT/RIGHT – VDI 40**

for I.D. machining at main- or counter spindle with internal coolant-supply and assembled with collet holder ESX 32 (clamping range \varnothing 2-20mm) Inclusive EMCO adjustment plate – no alignment necessary !!
100mm long - VDI 40

442320**COLLET HOLDER ESX 32**

Collet holder with clamping nut, internal Stop-screw and 4 fastenings screws.
For ESX 32 collets with clamping range $\varnothing 2-20\text{mm}$.

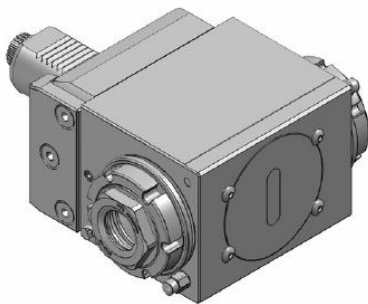
Used with 442 280, 442 290, 442 300 !!

d1	d2	d3	l1
40	2-20	50	35

442330**SET OF REDUCTION SLEEVES $\varnothing 40\text{mm}$**

4 different sized reduction sleeves $\varnothing 16, 20, 25$ und 32 mm .

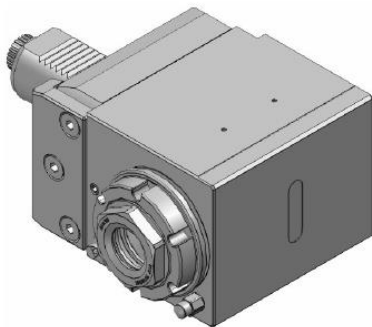
Used with 442 280, 442 290, 442 300 !!

DRIVEN TOOL HOLDERS - VDI40 (DIN5480):**442251W****DOUBLE-ANGULAR-DRILLING/MILLING HOLDER - VDI40**

For drilling, milling and synchronized tapping at the main and counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 32 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 2-20\text{ mm}$, max. 6000 rpm, 85 mm long, external coolant supply, VDI 40 / coupling DIN 5480

WTO: 420532110-40

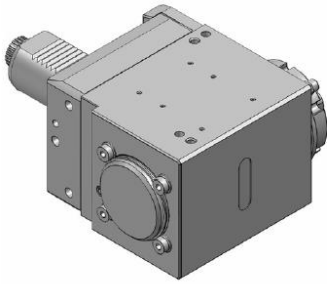
442261W**ANGULAR-DRILLING/MILLING HOLDER – LEFT / VDI40**

For drilling, milling and synchronized tapping at the main spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 32 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 2-20\text{ mm}$, max. 6000 rpm, 85 mm long, external coolant supply, VDI 40 / coupling DIN 5480

WTO: 420532044-40L

442271W

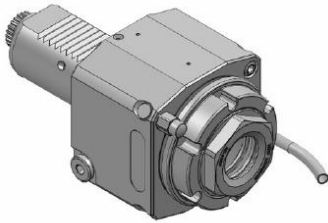

**ANGULAR-DRILLING/MILLING HOLDER
– RIGHT / VDI40**

For drilling, milling and synchronized tapping at the counter spindle, Inclusive EMCO adjustment plate – no alignment necessary!

ER 32 collets or Quick Flex-Modular system, $i=1:1$, clamping range $\varnothing 2-20$ mm, max. 6000 rpm, 85 mm long, external coolant supply, VDI 40 / coupling DIN 5480

WTO: 420532044-40R

442141W




**DRILLING/MILLING STRAIGHT/LEFT -
VDI 40**

For drilling, milling and synchronized tapping. ER 32 collets or Quick Flex-Modular system, clamping range $\varnothing 2-20$ mm, $i=1:1$, max. 6000 rpm, 88 mm long, external coolant supply, VDI 40 / coupling DIN 5480

WTO: 420132069-40L

ADDITIONAL TOOL HOLDERS ON REQUEST!

446600	QUICKFLEX®-STARTERSET ER25	
	<p>Quickflex® starter set size ER25 to be used for several drilling and milling tool holders from WTO, consisting of:</p> <ul style="list-style-type: none"> • Single-hand wrench; 107725000 • Doppelschlüssel; 107525020 • Clamping wrench ER25; 107525000 • Weldon/Wistle-Notch-adaptor $\varnothing 16$mm; 320125016 • Milling arbor holder $\varnothing 16$mm; 320225016 • Collet adaptor ER25; 320025016 	
446620	QUICKFLEX®-STARTERSET ER32	
	<p>Quickflex® starter set size ER32 to be used for several drilling and milling tool holders from WTO, consisting of:</p> <ul style="list-style-type: none"> • Single-hand wrench; 107732000 • Double wrench; 107532020 • Clamping wrench ER32; 107532000 • Weldon/Wistle-Notch-adaptor $\varnothing 20$mm; 320132020 • Milling arbor holder $\varnothing 22$mm; 320232022 • Collet adaptor ER32; 320032020 	

EMCOTURN E65		02.07.2024	page 96 of 111
446305	SET OF SINGLE-HAND-WRENCH 25-25		
	Patented Single-hand-wrench size 25 for comfortable clamping and unclamping of Quick Flex-quick-change adaptors. Consisting of two wrenches.		
446307	SET OF SINGLE-HAND-WRENCH 32-32		
	Patented Single-hand-wrench size 32 for comfortable clamping and unclamping of Quick Flex-quick-change adaptors. Consisting of two wrenches.		

ZETA Collet nut and spanner wrench:

442410

COLLET NUT ER-25QF-A (WTO)



Collet nut ER-25QF-A short with external thread according to DIN6499.

The ZETA®-Safety clamping system is a safe and trouble-free clamping system developed for machine tools.

WTO: 202125001

442411

ZETA SCREW-ON-ADAPTER ED32/ER25QF (WTO)

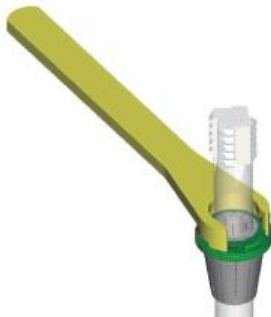


Screw-on-adapter for ZETA collet nuts ER25. With this hand adapter the collet nut can be easily crews into the holder and fastened hand-tight.

WTO: 107532104

442415

SPANNER WRENCH E 32 ZETA/ER25



Spanner wrench for collet nut ER-25QF-A short.

The ZETA®-Safety clamping system is a safe and trouble-free clamping system developed for machine tools.

WTO: 107532101

442420

COLLET NUT ER-32QF-A (WTO)

Collet nut ER-32QF-A short with external thread according to DIN6499.

The ZETA®-Safety clamping system is a safe and trouble-free clamping system developed for machine tools.

WTO: 202132001

442421

ZETA SCREW-ON-ADAPTER ED40/ER32QF (WTO)

Screw-on-adapter for ZETA collet nuts ER32.
With this hand adapter the collet nut can be easily crews into the holder and fastened hand-tight.

WTO: 107532104

442425

SPANNER WRENCH E 40 ZETA/ER32

Spanner wrench for collet nut ER-32QF-A short.




The ZETA®-Safety clamping system is a safe and trouble-free clamping system developed for machine tools.

WTO: 107540101






MANUALS: EMCOTURN E65 (828D/0iTF)

Standard-Languages:

One set included – please confirm one of the standard languages for free.

DE4063	E65 Instruction Manual / GERMAN
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
EN4063	E65 Instruction Manual / ENGLISH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
TA4063	E65 Instruction Manual / ITALIAN
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.

Additional languages for extra costs:

FR4063	E65 Instruction Manual / FRENCH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
SP4063	E65 Instruction Manual / SPANISH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
SE4063	E65 Instruction Manual / SCHWEDISH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
CZ4063	E65 Instruction Manual / CZECH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
DK4063	E65 Instruction Manual / DANISH
	Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.

NL4063 	E65 Instruction Manual / DUTCH Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
FI4063 	E65 Instruction Manual / FINNISH Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
HU4063 	E65 Instruction Manual / HUNGARIAN Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
PL4063 	E65 Instruction Manual / POLISH Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
PT4063 	E65 Instruction Manual / PORTUGUESE Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
RU4063 	E65 Instruction Manual / RUSSIAN Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
TR4063 	E65 Instruction Manual / TURKISH Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.
CN4063 	E65 Instruction Manual / CHINESE-SIMPLE Includes information how to install, operate, maintain and program the machine. The control manuals are provided electronically on a CD-ROM due to environmental reasons.

ELECTRICAL DOCUMENTATION

INCLUDED IN THE BASIC MACHINE !!

PACKING FOR MACHINE

ZVZ343620

STANDARD PACKING E65

For easy pick-up with the forklift.
Consisting of: pallet, rolamit-cover

ZVP547737

CLIMATE PACKING E65

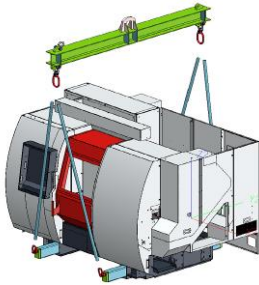
for transportation over-sea.
Consisting of: pallet, dehumidifier,
aluminium-cover and miscellaneous

ZVZ303620

WOODENBOX E65

Additional protection for critical
transportation

S6E001



**CRANE TRANSPORTATION UNIT E65
(S6Exxx)**

Machine lifting frame to be used with
a crane. More details to be found in
the user manual.
The crane rack is only lent for
unloading of the machine and must be
returned promptly.


TECHNICAL DATA OF THE MACHINE

Work area		
Swing over bed	[mm]	ø 610
Swing over cross slide	[mm]	ø360
Distance between centers (tailstock-version)	[mm]	682
Distance between spindle noses (S-version)	[mm]	840
Max. machining diameter	[mm]	ø 500
Max. machining length	[mm]	520
Max. bar work diameter	[mm]	ø 65
Travel		
X-axis travel	[mm]	260
Y-axis travel	[mm]	+/-40
Z-axis travel	[mm]	610
Main spindle (belt driven)		
Spindle speed range	[rpm]	60-5000
Max. power (S6 @ 100/40% D.C.)	[kW]	17/22
Max. torque (S6 @ 40% D.C.)	[Nm]	305
Spindle nose according to DIN 55026		A2-6
Spindle bearing inner diameter	[mm]	ø 105
Spindle bore diameter	[mm]	ø 73
Max. Chuck size	[mm]	ø 250
Main spindle SuperBigBore 95 (belt driven)		
Spindle speed range	[rpm]	60-3500
Max. power (S6 @ 100/40% D.C.)	[kW]	17/22
Max. torque (S6 @ 40% D.C.)	[Nm]	380
Spindle nose according to DIN 55026		A2-8
Spindle bearing inner diameter	[mm]	ø 160
Spindle bore diameter	[mm]	ø 105
Max. Chuck size	[mm]	ø 250
Counter spindle (belt driven)		
Spindle speed range	[rpm]	60-5000
Max. power (S6 @ 100/40% D.C.)	[kW]	11/16,5
Max. torque (S6 @ 40% D.C.)	[Nm]	80/125
Spindle nose according to DIN 55026		A2-6
Spindle bearing inner diameter	[mm]	ø 105
Spindle bore diameter	[mm]	ø 73
Max. Chuck size	[mm]	ø 200
C-axes		
Resolution	[°]	0,001°
Rapid speed Siemens/Fanuc	[rpm]	1000 / 100
Holding torque of spindle disc brake	[Nm]	?
Turret (Standard)		
Number of tool station		12
Quick change tool shank according to DIN 69880	[mm]	VDI 30
Shank height for square tools	[mm]	20 x 20
Shank diameter for boring bars	[mm]	ø 32
Turret indexing time	[sec]	0,2


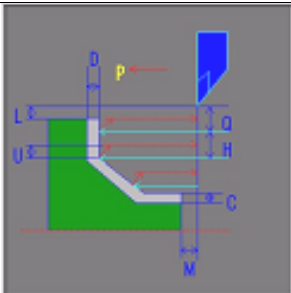
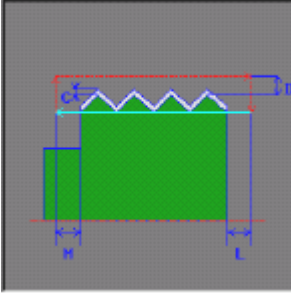
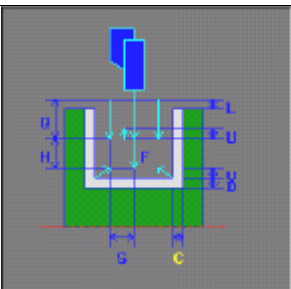
Rotary tools – VDI30 / coupling DIN5480		
Speed range	[rpm]	0-5000
Max. torque	[Nm]	25
Max. power	[kW]	6,7
Number of rotary tools		12
Max. duty cycle for max. speed or max. power	[%]	25
Turret VDI 40 (Option)		
Number of tool station		12
Quick change tool shank according to DIN 69880	[mm]	VDI 40
Shank height for square tools	[mm]	25 x 25
Shank diameter for boring bars	[mm]	ø 40
Turret indexing time	[sec]	0,3
Rotary tools – VDI40 / coupling DIN5480		
Speed range	[rpm]	0-4500
Max. torque	[Nm]	25
Max. power	[kW]	6,7
Number of rotary tools		12
Max. duty cycle for max. speed or max. power	[%]	25
Feed drives		
Rapid traverse X / Z	[m/min]	30 / 15 / 30
Max. feed thrust in X-axis	[N]	5000
Max. feed thrust in Y-axis	[N]	7000
Max. feed thrust in Z-axis	[N]	7000
Acceleration	[m/sec ²]	0,4
Positioning variation P _s in X / Z (VDI 3441)	[µm]	3,5 / 3,5 / 4
Automatic tailstock		
Tailstock travel	[mm]	500
Tailstock thrust	[N]	8000
Tailstock travel speed	[m/min]	ca. 20
Tailstock bore taper		MT 4
Coolant system		
Tank capacity	[l]	230
Coolant pump power 3,5 / (optional 14 bar)	[kW]	0,57/(2,2)
Coolant delivery @ 3,5 bar / 1,5 bar	[l/min]	15/65
Hydraulic system		
Oil tank capacity	[l]	10
Max. pressure for work holding	[bar]	50
Pneumatic unit		
Air pressure required	[bar]	6
Air volume required	[l/min]	5
Quality according to DIN ISO 8573-1		Class 4
Lubrication system		
Guide ways and ball screws (featuring oil-save logic)		Autom. Central oil lubrication
Main spindle (free of maintenance)		Grease lubrication

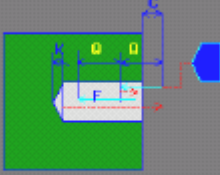
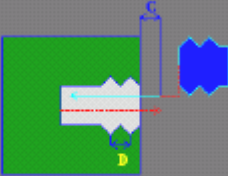
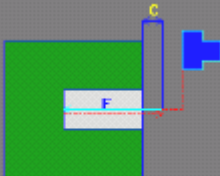
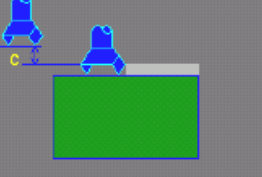
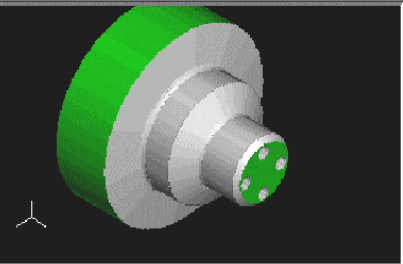
Chip conveyor (Option)		
The chip conveyor interface includes „Coolant-Saver Logic“ software		√
Parts-catcher (Option)		
Pneumatically operated	[bar]	6
Max. finished part length	[mm]	175
Max. finished part diameter	[mm]	ø 65 (95)
Max. finished part weight	[kg]	4,5
Painting – Texture Paint		
Signal white		RAL Nr. 9003
Cobalt blue		RAL Nr. 5013
Graphite grey		RAL Nr. 7024
Red		RAL Nr. 3020
Power supply		
Voltage	[V]	3x400 / PE
Max. voltage fluctuations	[%]	+/-10
Frequency	[Hz]	50/60
Connected load value Sinumerik / Fanuc	[kVA]	25 / 39
Main fuse for machine Sinumerik / Fanuc	[A gG,gL]	50 / 63
Required short circuit power Sinumerik / Fanuc	[kVA]	1120 / 2100
Operable temperature range	[°C]	+10 to +35
Dimensions / weight		
Spindle height above floor	[mm]	1150
Machine total height	[mm]	2060
Floor space WxD (without chip conveyor)	[mm]	3450x2080
Total weight of the machine	[kg]	6500
Sound intensity level		
Average sound emission level	[db(A)]	75
According to the following conditions:		
Measuring mode: enveloping surface according to DIN 45 635		
Measured point: 1m distance and 1.6m above ground		
Operating mode: maximum speed running w/ no load		

CONTROL DESCRIPTION: FANUC serie 0*i*


CNC control / drives	
	<p>Fanuc serie <i>i</i> CNC control incl. manual Guide i Dialog programming system.</p> <p>Continuous-path control with high sophisticated technology functions using digital drives for standard and complex machining, such as turning, milling, drilling, rigid tapping, polygon turning, ...</p> <p>High dynamical and precise digital drives (αi-serie) offer functions such as:</p> <ul style="list-style-type: none"> • Spindles with C-axis functionality • Synchronous spindles • Exact Stop and retract function • High-speed process signals • ...
Interpolation	<ul style="list-style-type: none"> • Linear interpolation (G00, G01) • Multi-quadrant circular interpolation (G02,G03)
Thread functions	<ul style="list-style-type: none"> • Constant lead threading (G33) • Multiple thread cutting (G33) • Continuous thread cutting(G33) • Thread cutting retract
Feed functions	<ul style="list-style-type: none"> • Feed mode in increments per minute (G94) • Feed mode in increments per revolution (G95) • Dwell (G04)
Reference function	<ul style="list-style-type: none"> • Reference position return (G28,G30, G53)
Coordinate system	<ul style="list-style-type: none"> • Local workpiece coordinate system (G52) • Workpiece coordinate system (G53-G59) • Workpiece coordinate system preset (G92) • Coordinate system (work shift)
Values of coordinate and dimensions	<ul style="list-style-type: none"> • Absolute programming (G90) • Incremental programming (G91) • Inch (G21) or metric (G20) mode • Decimal point programming • Diameter programming in X
Spindle functions	<ul style="list-style-type: none"> • C-axis contour control (angular programming) • Constant surface speed control (G96) • Direct spindle speed (G95) • Spindle orientation
Tool functions	<ul style="list-style-type: none"> • Tool wear and geometry corrector • Tool nose radius compensation (G40, G41, G42) • Tool offset pairs – 64
Auxiliary functions	<ul style="list-style-type: none"> • Standard M-functions • Number of miscellaneous M-codes – 4 pairs
Macro	Macro B parametric programming

Program creation and edition	<ul style="list-style-type: none"> • Part program directory (number and name) • Sub-programs • Program block search • Extended part program editing function • Background editing • Registered program – 400 • Part program storage - 512 KB
Canned cycles	<ul style="list-style-type: none"> • External / internal roughing cycle (G77) • Thread cutting cycle (G78) • Facing cycle (G79) • Canned cycle for drilling (G80, G83, G85) • Rigid tapping cycle (M29+G84)
Conversational programming	MANUAL GUIDE i
Data in/out	<ul style="list-style-type: none"> • Key switch to protect data • PCMCIA Interface (additional memory space for program data) • Serial interface RS232
Display	FANUC LCD colour display 15"
Displayed data	<ul style="list-style-type: none"> • Axes positioning • Spindle speed • Feedrate display • Programmed codes display (T,S,M,F) • Modale G codes • Parts counter • Run hour display • Clock
Input increments	0,001mm (0,00001inch) or 0,001°
Override	Spindle speed : 50% to 120% Feed rate: 0% to 120% Rapid speed: 0% to 120%
Feedrate range	0,001mm/rev to rapid traverse rate
Manual operations	<ul style="list-style-type: none"> • Electronic handwheel (MPG) – optional • Manual continuous feed - JOG • Feedrate override • Spindle override
Execution operations	<ul style="list-style-type: none"> • Manual Data Input operation – MDI • Automatic • Single block • Program stop (M00) • Optional program stop (M01) • Block delete - SKIP • Program restart • DRY RUN
Alarm and diagnostic functions	<ul style="list-style-type: none"> • Emergency functions • Alarm messages • Alarm history display • Operation history display • Maintenance history display • Help screen • Diagnostic screen

Polygonal turning	Due to the synchronisation of the main spindle with the driven tool spindle, the machine is capable to machine flats (square, hexagon,...) on the workpiece very efficient.
Limit stop switch	Software limit switches on any linear axis
Work area limitation	Adjustable for the operator
Spindle pitch compensation	Available for any linear axes
Back-Lash compensation	Available for any linear axes
Control language	Language reversible (German or. English)
	German English French Italian Spanish
MANUAL GUIDE	
	<p>MANUAL GUIDE i is the operation guidance to support an operator on many situations such as creating a part program, checking by machining simulation, set-up and actual machining. These operations can be done on the only one screen.</p> <p>ISO code form is adopted as the part program format, it is widely used on many CNC machine tools, furthermore, machining cycles, which can realize complicated machining motions by simple programming, are provided.</p>
	<p>Stock removal cycle</p> <p>With the „Stock removal“ cycle, a contour programmed can be produced from a blank by means of paraxial stock removal. The contour can include relief-cut elements. The technology (roughing/finishing/complete machining) is selectable. The cycle can be called from any collision-free position.</p>
	<p>Thread cutting cycle</p> <p>With the „Thread cutting“ cycle you can machine cylindrical and tapered outside and inside threads with constant lead in longitudinal or face machining. Both single threads and multiple threads can be cut. In multiple thread cutting, the threads are cut one after the other. Infeed is automatic. You can select either constant infeed per cut or constant cross-section of cut. A right-hand thread is determined by the spindle direction. Feedrate and spindle override both have no effect in thread travel blocks.</p>
	<p>Grooving cycle</p> <p>The grooving cycle allows symmetrical recesses to be produced for longitudinal and facing operations on any straight contour elements. Outside and inside recesses can be made.</p>

	<p>Drilling cycle</p> <p>The tool drills at the programmed spindle speed and feedrate to the programmed final drilling depth. Deep hole drilling is performed with a depth infeed of a maximum definable depth executed several times, increasing gradually until the final drilling depth is reached. The drill can either be retracted to the reference plane+safety distance after every infeed depth for swarf removal or retracted in each case by 1mm for chip breaking.</p>
	<p>Rigid tapping</p> <p>The tool drills at a programmed spindle speed and feedrate to the programmed thread depth. With this CYCLE84 you can perform rigid tapping operations. No special holder with an integrated length compensation is needed.</p>
	<p>Reaming cycle</p> <p>This cycle can be used to ream axial or radial holes.</p>
	<p>Milling cycles</p> <p>A wide range of milling cycles can be used for milling operations. This ensure easy programming at the machine and a quick set-up for the production.</p>
<p>Graphical simulation</p>	
<p>SIMULATE-ANIMATE</p> 	<p>Fast and realistic simulation incl. Animation.</p> <p>Raw part and machining process is shown in 3D graphics.</p>

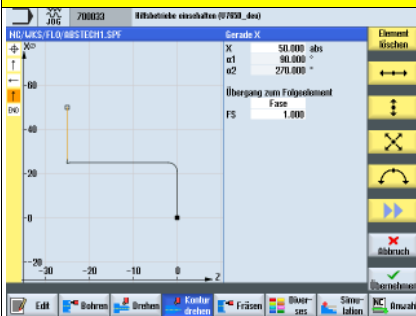
CONTROL DESCRIPTION: SIEMENS 828D

CNC control / drives	828D SolutionLine, Sinamics S120
	<p>High performance CNC control for ultimate accuracy and machining speed.</p> <p>SINUMERIK 828D and SINAMICS drive and motors are perfectly tailored for state of the art turning machines. Powerful CNC-functions combined with a unique 80bit NANOFP Accuracy (80 bit floating point accuracy from the position control to the internal encoder resolution) enable highest work-piece accuracy at a minimum of machining time. With a flexible CNC programming language and the state of the art ShopTurn machining step programming, single parts as well as large batch series can be programmed and machined with maximum effectiveness. Due to powerful kinematic transformations and a large set of technological cycles, SINUMERIK 828D also meets the demands of high sophisticated machine applications with driven tools and sub-spindle.</p>
Highlights	<ul style="list-style-type: none"> • Modern, colorful and clear user surface • Technology overlapping programming (turning, milling, drilling, tapping,...) • Contextual help function and support • 3D Graphics and 3D simulation • Animated support graphics • Simple programming via ProgramGUIDE • Calculator function • Program preview, USB-port, etc.
Data in/out	Via CNC full keyboard at the operator panel, USB-PORT and Ethernet.
Programming	<ul style="list-style-type: none"> • SINUMERIK G-code programming with high-level language commands for flexible programming of medium and large batch work-pieces • programGUIDE: technology cycle support for SINUMERIK G-code programs • ShopMill machining step programming for efficient programming of single and small batch work-pieces (CNC option) • Built-in ISO code interpreter • Program manager with readable part program names • Program manager with full access to all media devices
Display	operator panel incl. 15" Multi-Touch colour monitor
Buffered CNC memory	3 MB
Minimum block cycle time	~ 6 ms
Max. no. of tools/cutting edges	128/256
Program storage	Work piece / part program / sub program directories with alpha-numeric character (max. 24) are used for user friendly and transparent handling.
Sub-program	maximum 8 subroutine levels,
Math. calculation functions	+, -, ×, ÷, cos, sin, tan, e-function, ln, =, >, <, ≤, etc.
System of units	Metric or inch (reversible)
Smallest increment unit	0,001mm (0,00001inch) or 0,001°

Input dimension	incremental or absolute dimension
Feedrate	One to one in mm/rev or mm/min
Override	Spindle override: 50% to 120% Feed override: 0% to 120% Rapid override: 0% to 120%
Feedrate range	0,001mm/rev to rapid traverse rate
Threading operation	Longitudinal, transversal or tapered with constant or linear in/decreasing lead, single or multiple threads with angular approach or run-out path.
Synchronous tapping	Taps can be machined with any spindle without compensation holder. Speed and feedrate is fully synchronised.
Work shift	Adjustable or programmable via FRAMES (TRANS,ROT, MIRROR,SCALE)
C-axis	Resolution 0,001
Spindle speed	Input in rpm or V-const. m/min
Spindle speed limitation	Adjustable or programmable
Coordinate system	Cartesian or polar coordinates and cylinder-coordinates
Tool data	Tool offset selection via T- and D-number (PowerMill: „Random access“ tool management for the tool changer, tool life management,...)
Cutter radius compensation	Programmable via G40,G41,G42
Real-time clock	Time is still set after the machine is switched off.
Machining time	The time between cycle start and end of program (M30) is shown on the control. Machining segments can be timed individually.
Limit stop switch	2 Software limit switches on any axis
Work area limitation	Adjustable for the operator
Spindle pitch compensation	Available for any axes
Back-Lash compensation	Available for any axes
Cylinder interpolation	Simplified due to TRACYL (X/Y/Z)
Face side interpolation	Simplified due to TRANSMIT function - (X/Y/Z))
Helical interpolation	Enables internal and external thread milling.
Program simulation	Graphical CNC simulation in 3D rendering and also in the planes
Block search	Program number, line number and target position can be searched.
Dry-run	Used to test the program without spindle rotation and coolant. The feed override controls any axis movement.
Access protection	Several programs, tool data, work shifts, etc. can be locked via a key switch.
Back-ground editing	Programs can be written and edited while the machine is in production.
Machining from external	Programs can be loaded and executed via a network or USB-Port.
Diagnose function	Continuous condition monitoring due to the integrated diagnose system. Alarms are display in plain text format.
Program coordination	Programs can be synchronized by using WAITMARKS.
Operating modes	
	JOG AUTOMATIC MDA – Manual Data Automatic REPOS REFERENCE

ProgramGUIDE and ShopTurn cycles

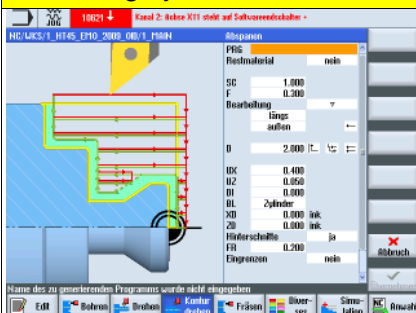
Contour calculator



Free contour programming;

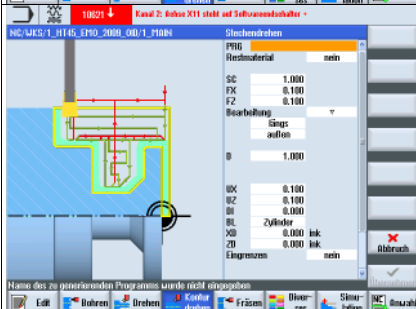
An integrated contour calculator calculates any missing parameter for you, provided that they can be computed from other parameters. You can chain a maximum of 50 contour elements. Contour transition elements “radius and chamfer” are also provided to help you chain contour elements. The programmed contours are transferred to the edited parts program.

Machining cycles



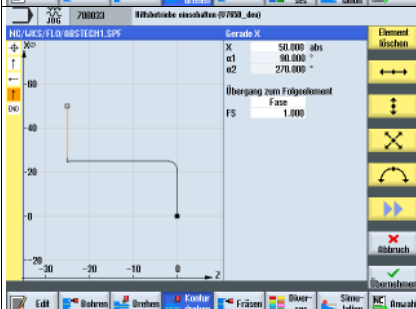
Stock removal cycle

With the „Stock removal“ cycle, a contour programmed in a subroutine can be produced from a blank by means of paraxial stock removal. The contour can include relief-cut elements. The technology (roughing/finishing/complete machining) is selectable. The cycle can be called from any collision-free position.



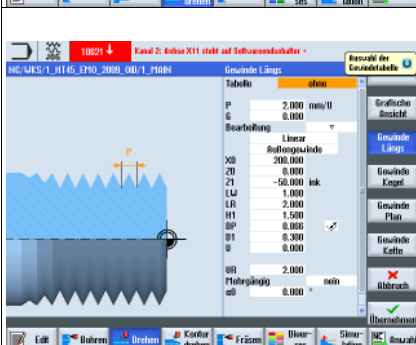
Grooving cycle

The grooving cycle allows symmetrical and asymmetrical recesses to be produced for longitudinal and facing operations on any straight contour elements. Outside and inside recesses can be made.



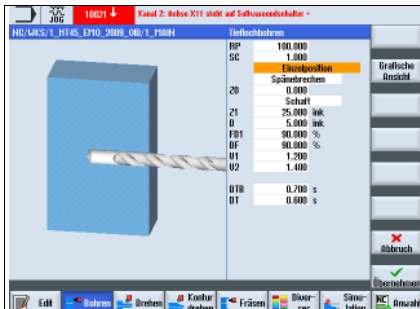
Undercut cycle

With this cycle, undercuts to DIN509 of forms E and F can be produced with usual loading for a finished part diameter > 3mm.



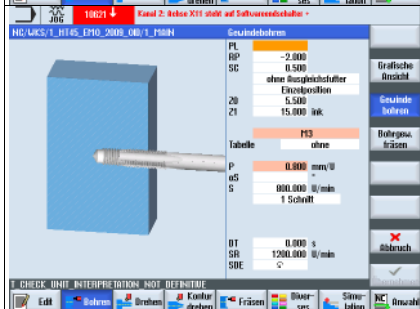
Thread cutting cycle

With the „Thread cutting“ cycle you can machine cylindrical and tapered outside and inside threads with constant lead in longitudinal or face machining. Both single threads and multiple threads can be cut. In multiple thread cutting, the threads are cut one after the other. Infeed is automatic. You can select either constant infeed per cut or constant cross-section of cut. A right-hand thread is determined by the spindle direction. Feedrate and spindle override both have no effect in thread travel blocks.



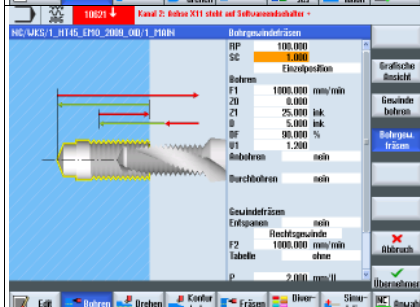
Drilling cycle

The tool drills at the programmed spindle speed and feedrate to the programmed final drilling depth. Deep hole drilling is performed with a depth infeed of a maximum definable depth executed several times, increasing gradually until the final drilling depth is reached. The drill can either be retracted to the reference plane+safety distance after every infeed depth for swarf removal or retracted in each case by 1mm for chip breaking.



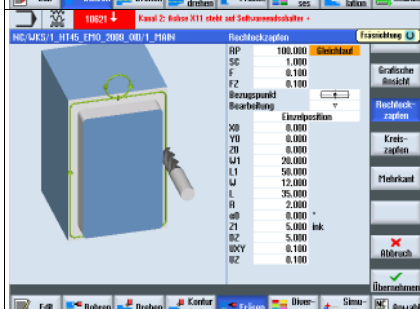
Rigid tapping

The tool drills at a programmed spindle speed and feedrate to the programmed thread depth. With this CYCLE84 you can perform rigid tapping operations. No special holder with an integrated length compensation is needed.



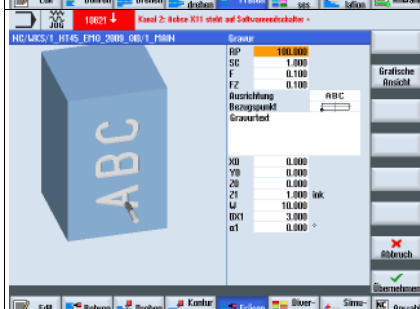
Tap drill-milling cycle

With a special tap-drill the core hole of the thread can be drilled and the thread milled right after.



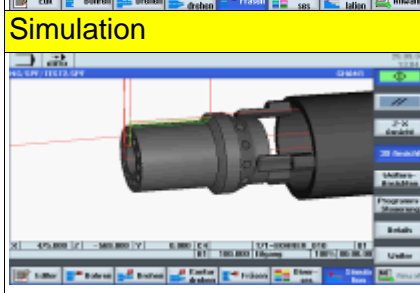
Milling cycles

A wide range of milling cycles can be used for milling operations. This ensures easy programming at the machine and a quick set-up for the production.



Engraving cycle

Allows to engrave text along a line or an arc. The text can be fixed or variable. E.g. date, clock time, part number, etc. can be written on the part.



Simulation

Simulation

- 2D-simulation of tool path
- 3D-simulation of finished part and tool path
- Calculation of cutting time
- Background editing while the machine is running