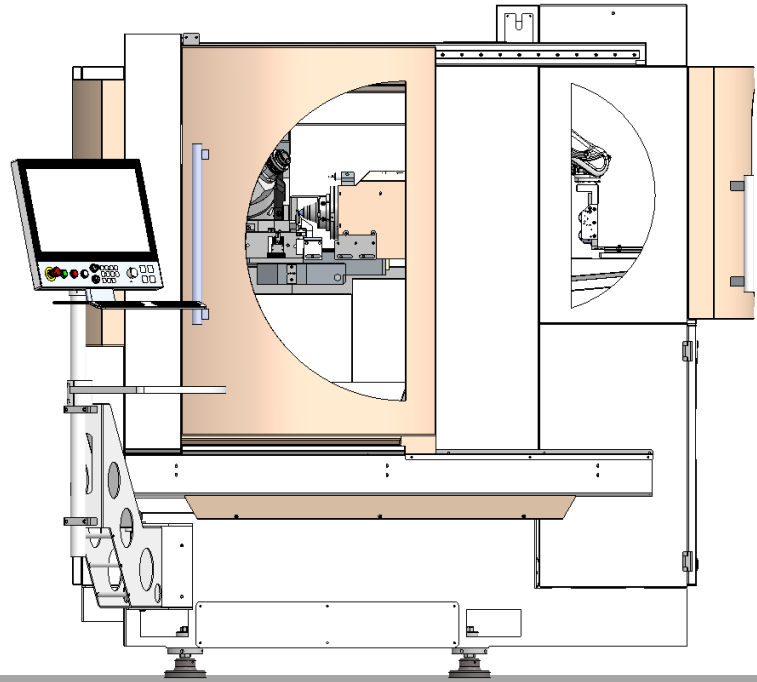
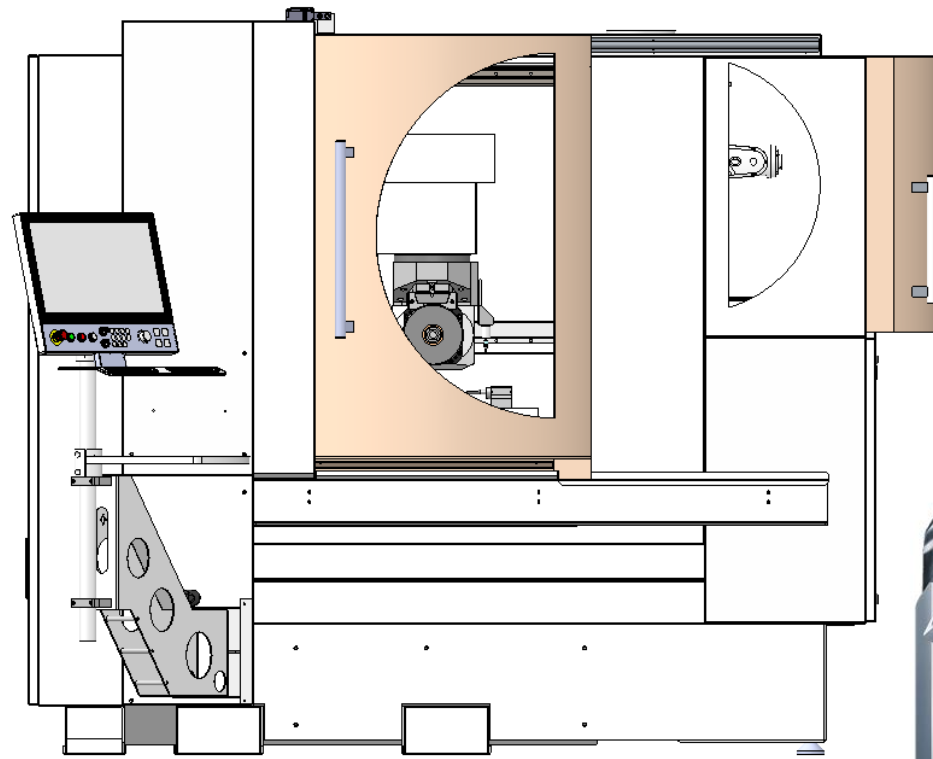


The future begins now

JOERG® S-tech +

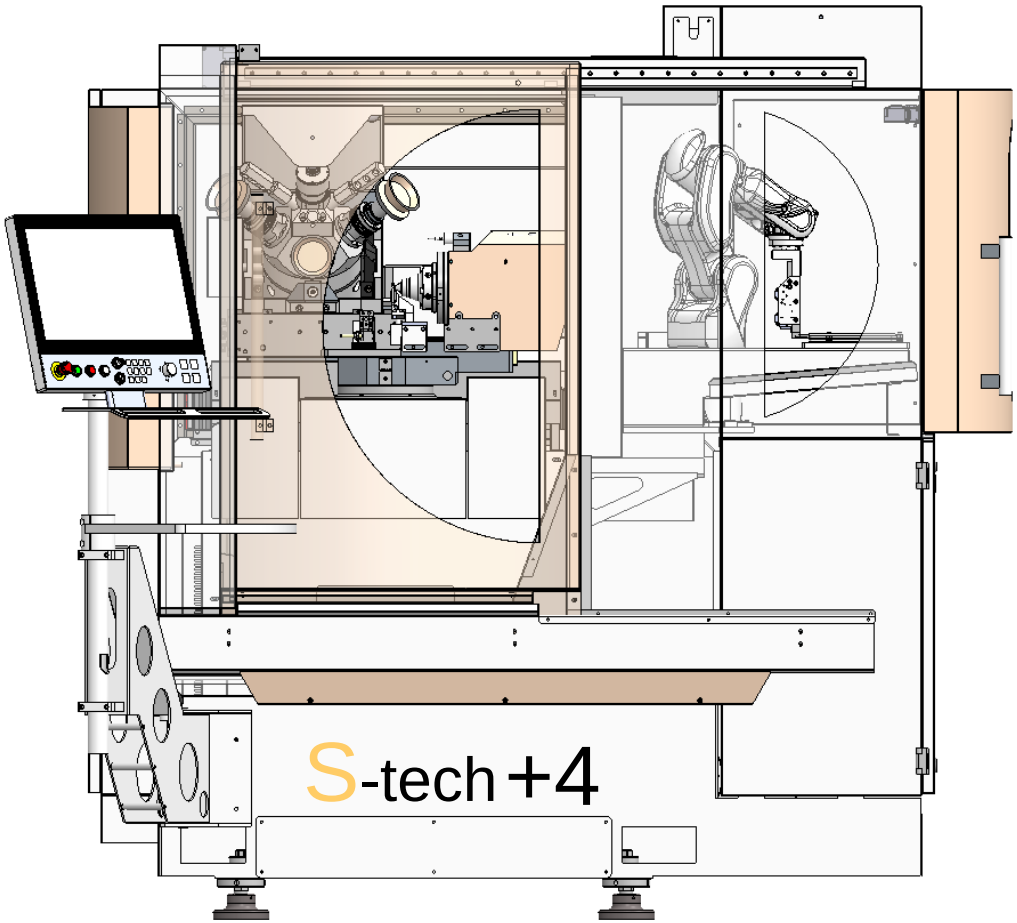


www.s-techplus.com

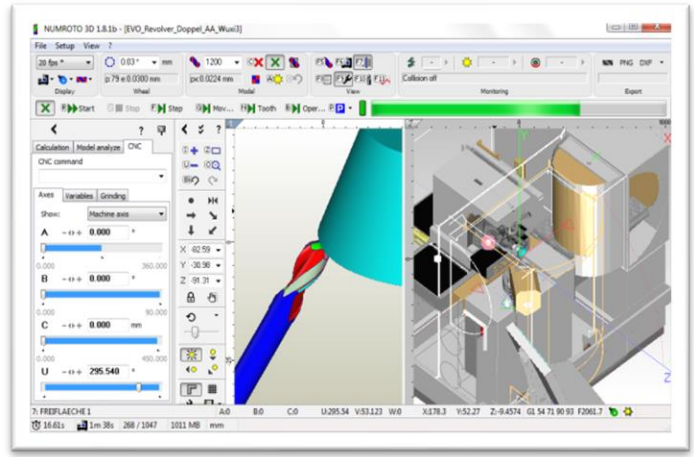
TOOL GRINDING MACHINES

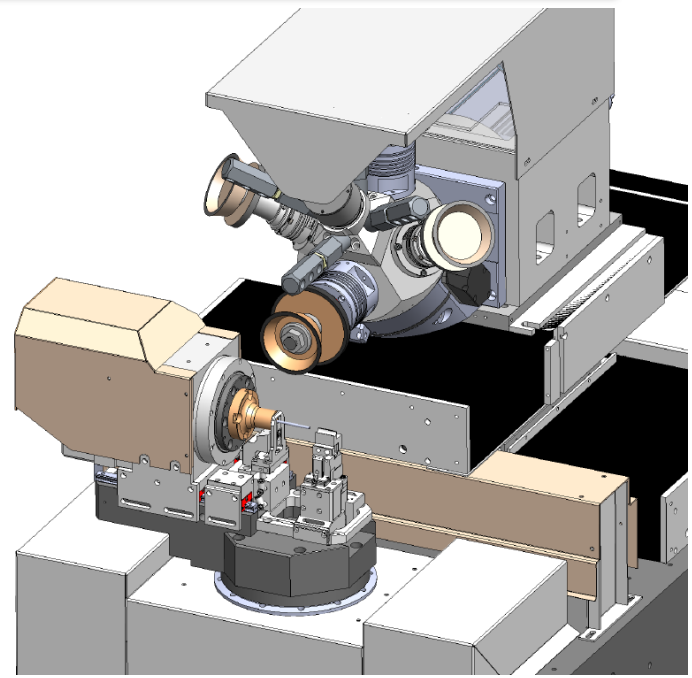
5 Axis Tool Grinding machine
The perfect solution for your standard tools

S-tech +4



NUM Control Flexium +68
NUMROTO plus grinding software





Technology on the highest level
5 Axis Tool grinding machine with linear motors in X,Y and Z
Direct drive in all rotary axis A und B
Hydraulic balance system in the vertical axis ensure the motor current and precision.

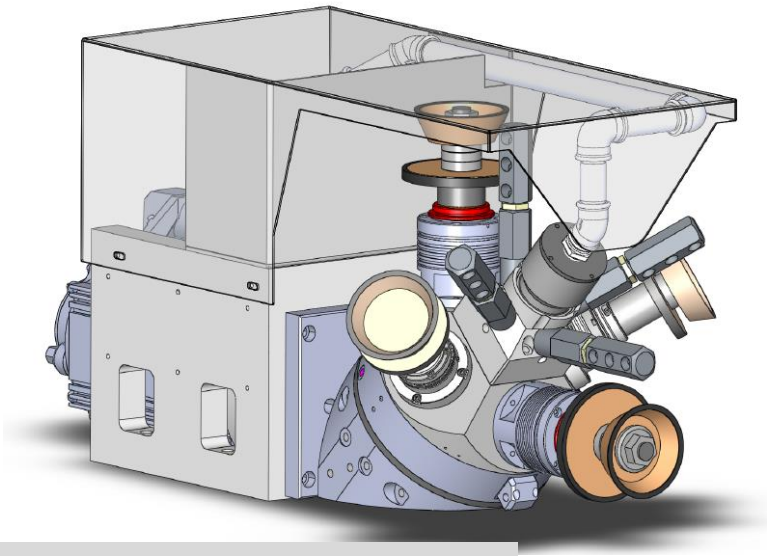
The heart of the machine is the grinding head turret with 4 grinding spindles. and one spindle motor.

The turret allows a wheel change in less than 6 sec.

JOERG

Technical Information
Turret head wheel changing time 6 sec

S-tech +4



Flexible Grinding head
gives the possibility to add up a high frequency spindle
Maximum Grinding wheel diameter125mm

Machine: L2,0 x W1,9 x H 1,95m
approx. 3000Kg

Machine base and axis components made of nature stone for high precision

Turret with up to 4 Grinding spindles
Free selection of HSK adaption 32,40 or 50.
3 Grinding wheels per wheel adapter
Perfect coolant in the process through simultaneous rotation together with the wheel

External Coolant device for Linear and torque motors

Technical Data:

Tool diameter
0.2mm to 16mm

Tool length:
Up to 120mm

Autom. Clamping
Schaublin W Type
NANN
GDS
Schunk

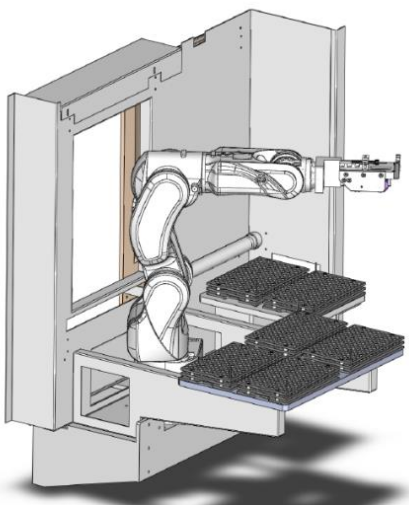
Tool loading:
3 Axis handling; 6 Axis Nachi robot

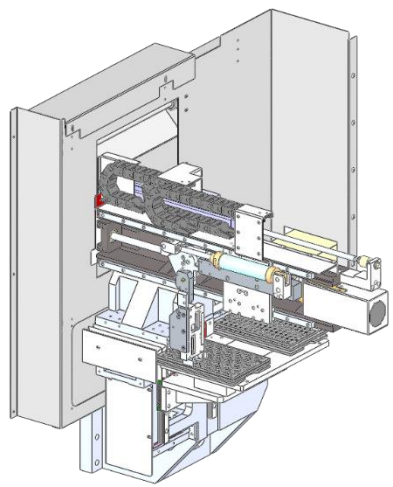
X Linear Motor	340mm
Y Linear Motor	185mm
Z Linear Motor	285mm
(Y weight balance)	
B Direct drive	210 Grad
A Direct drive	2000 rpm

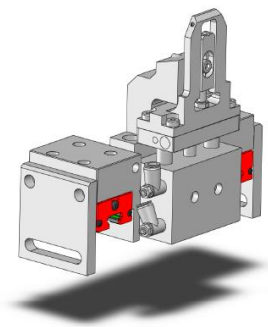
Spindle Motor: 10kW
10.000 rpm

Marposs/ Renishaw 3D:
Tool and wheel probe

Heidenhain measuring system all axis

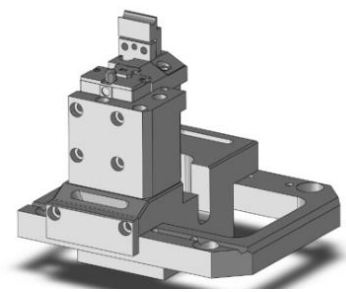






V Prism for perfect runout of the blanks

Support in different execution and length



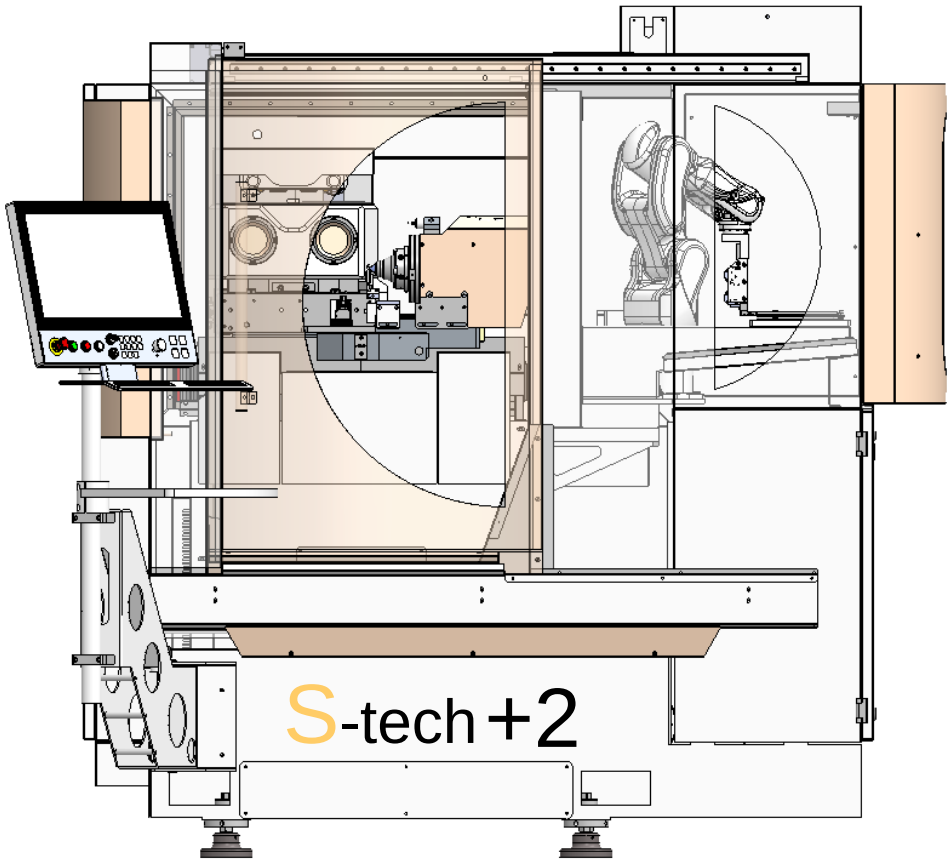
JOERG

5 Axis Tool Grinding machine
The perfect solution for your standard tools

S-tech +2

NUM Control Flexium +68
NUMROTO plus grinding software

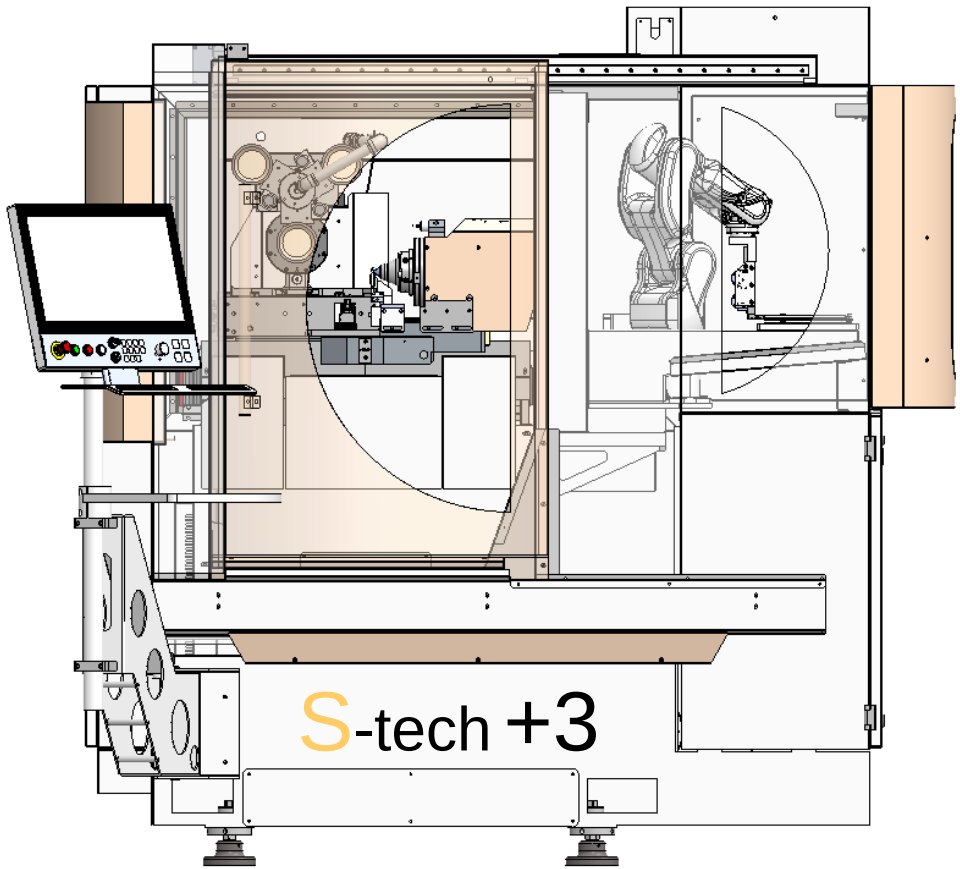
num CNC HighEnd Applications
numroto Total solution for tool grinding



Technology on the highest level
5 Axis Tool grinding machine with linear motors in X,Y and Z
Direct drive in all rotary axis A und B
Hydraulic balance system in the vertical axis ensure the motor current and precision.

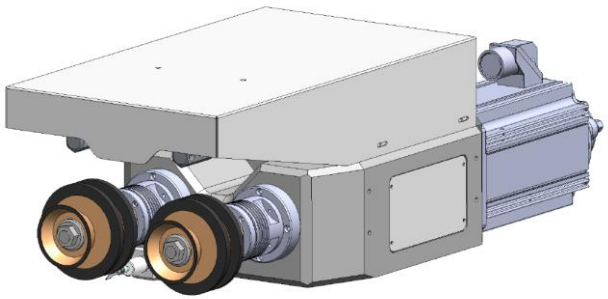
2 Grinding spindle HSK50, 40 or 32 with manual clamping bring you a lot advantage in precision
Flexibility from the software allows you to grind right or left side of the wheels on any spindle

1 Grinding spindle HSK50 with automatic clamping bring you a lot advantage in precision. Wheel changer have 2-3 positions for fast exchange
Flexibility from the software allows you to grind right or left side of the wheels on the spindle

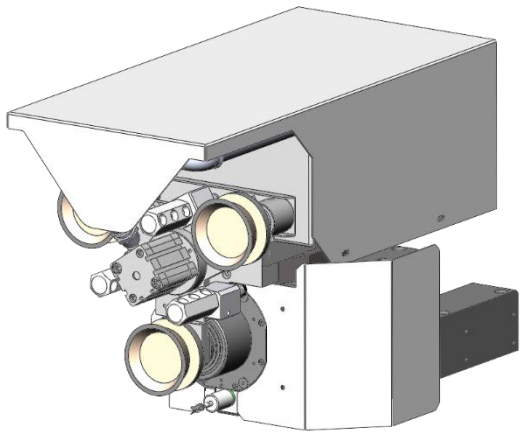


Technical Information
2 -3 Packages grinding head

S-tech +2



Select your spindle
HSK 50, 40 or 32
2 Grinding packages
for your standard
or special tools
(Horizontal)



Wheel changer with
2 -3 Positions
2 -3 Grinding packages
for your standard
or special tools
(Propeller)

Machine: L2,0 x W1,9 x H 1,95m
approx. 3000Kg

Machine base and axis components made of nature stone for high precision

Power full spindle motor with HSK selection

3 Grinding wheels per wheel adapter plus perfect coolant on each wheel

External Coolant device for Linear and torque motors

Technical Data:

Tool diameter
0.2mm to 16mm

Tool length:
Up to 120mm

Autom. Clamping
Schaublin W Type
NANN
GDS
Schunk

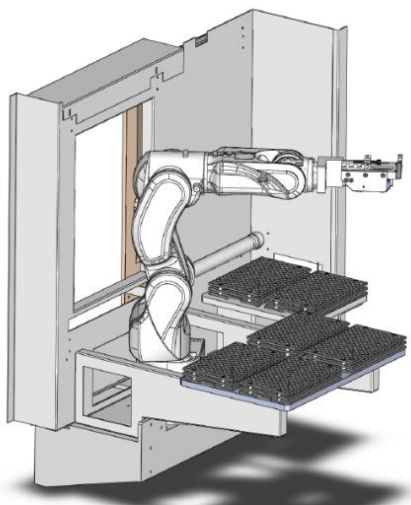
X Linear Motor	560mm
Y Linear Motor	185mm
Z Linear Motor	285mm
(Y weight balance)	
B Direct drive	210 Grad
A Direct drive	2000 rpm

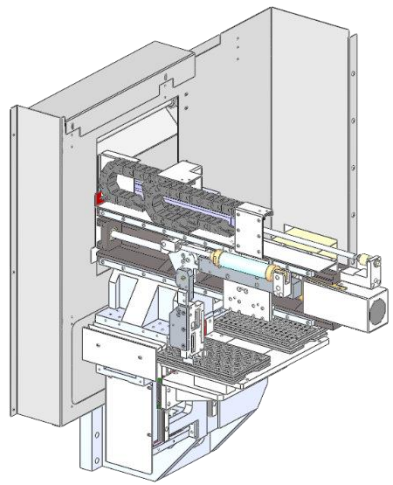
Spindle Motor: 10kW
10.000 rpm

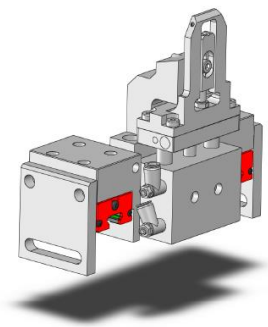
Marposs/ Renishaw 3D
Tool and wheel probe

Heidenhain measuring system all axis

Tool loading:
3 Axis handling; 6 Axis Nachi robot

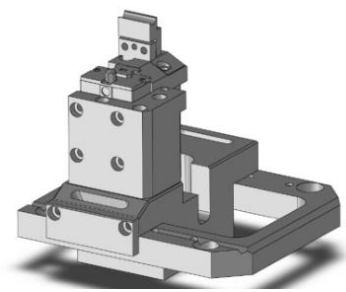






V Prism for perfect
runout of the blanks

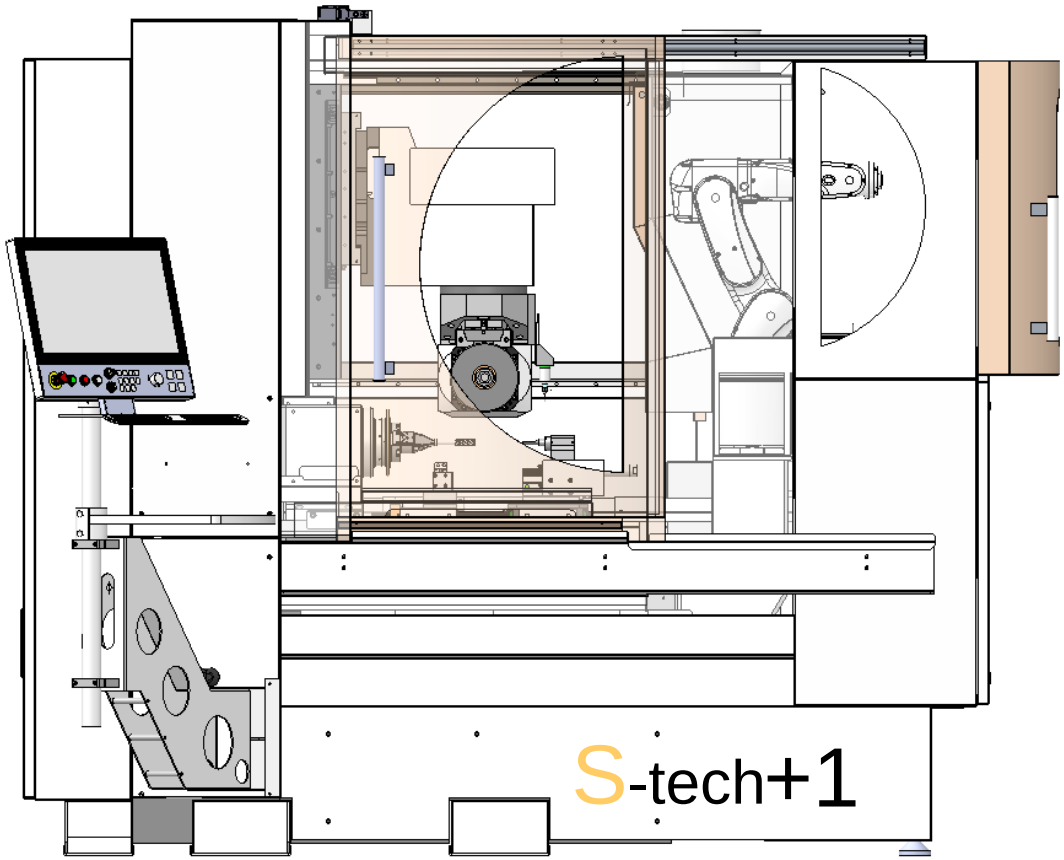
Support in different
execution and length



JOERG

5 Axis Tool Grinding machine
The talent for many different type tools

S-tech +1

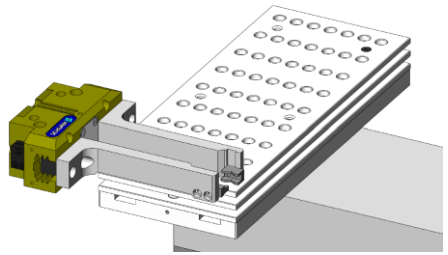


NUM Control Flexium +68

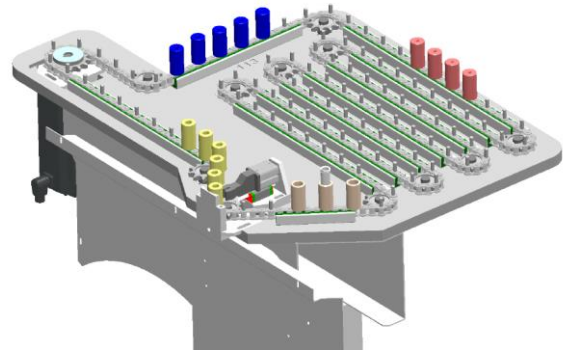
J+ TM / NUMROTO plus grinding software

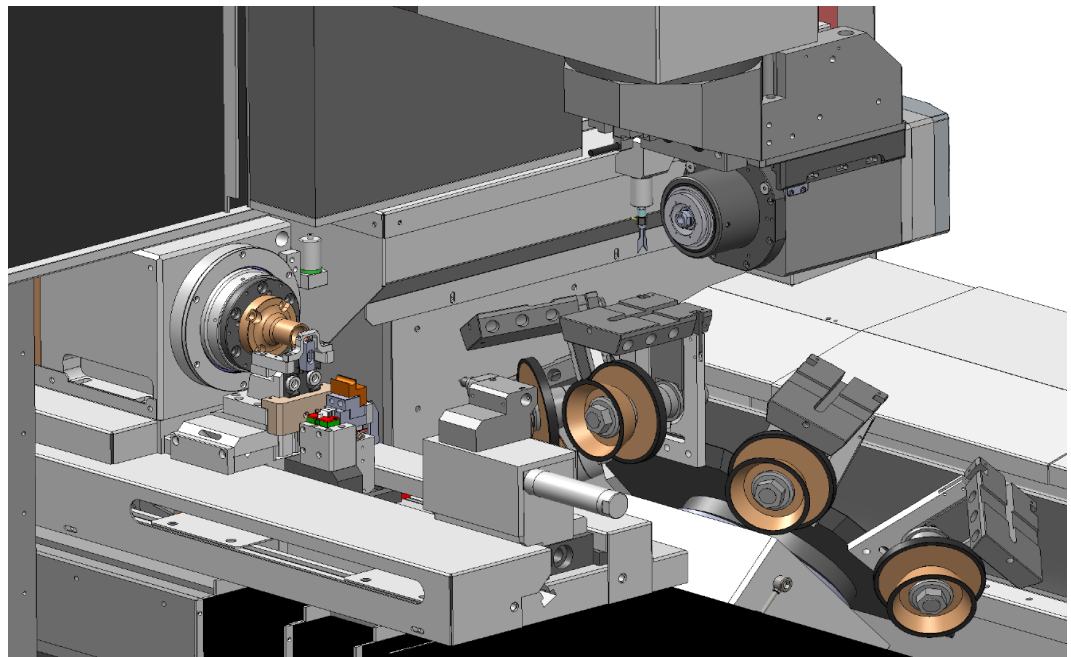
num CNC HighEnd Applications

numroto Total solution for tool grinding



Tool loading:
6 axis Nachi robot
Flexible chain loader
Blank pickup loader





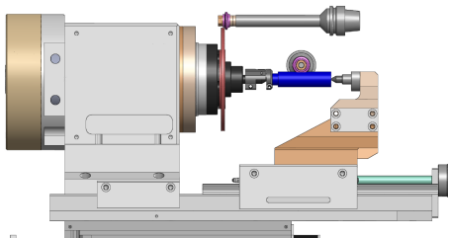
Technology on the highest level
5 Axis Tool grinding machine with linear motors in X,Y and Z
Direct drive in all rotary axis A und B
Hydraulic balance system in the vertical axis ensure the motor current and precision.

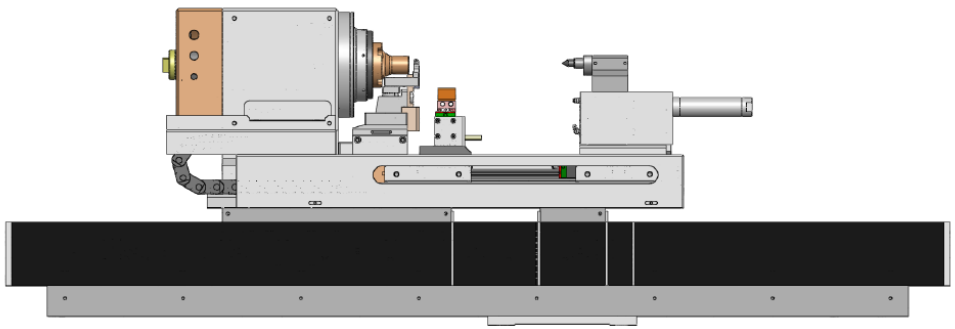
The talent for different type tools:
Milling cutter, Drills, Step drills, Reamer, Form cutter, Inserts, Shaper cutter, Hobs and a lot others.

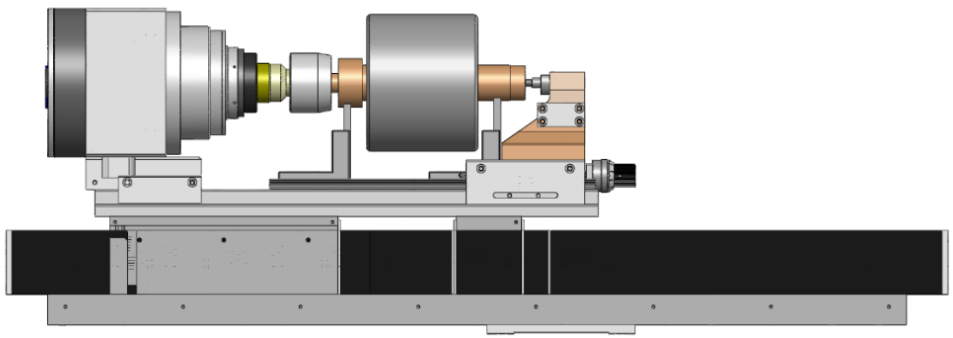
JOERG

Technical Information
Different components and option

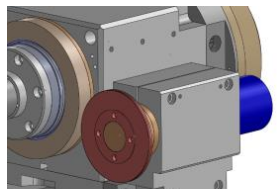
S-tech +1







Dressing spindle



Machine: L2,15 x W1,55 x H2,08m
approx. 4500 - 5800Kg

Machine base and axis components made of nature stone for high precision

Flexible kit:

Grinding spindle	(Single / Double)
Wheel changer	(3 / 4 / 5 Position)
Table	(Short / Long)
Support	(Manual / CNC)

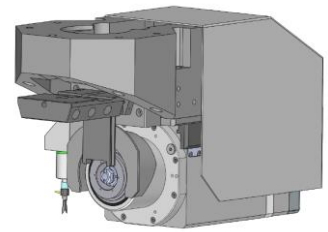
X Linear Motor	500mm (+ Option)
Y Linear Motor	245mm
Z Linear Motor	460mm
(Y Weight balance)	

B Direct drive	240Grad
A Direct drive	1500 rpm

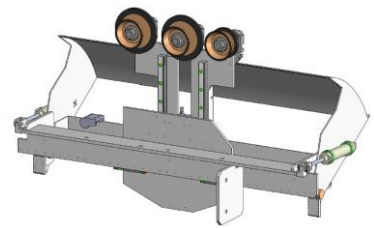
Heidenhain measuring system all axis

Marposs/ Renishaw 3D:
Tool and wheel probe

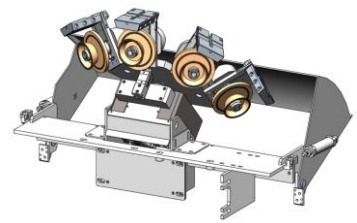
Motor spindle HSK F63/25kW



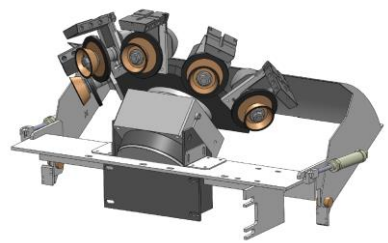
3 Station wheel changer hydraulic



4 Station wheel changer gear box



5 Station wheel changer direct drive

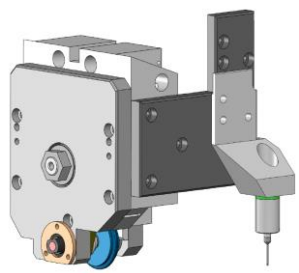


Base plate of nature stone allows us to design your table length you need

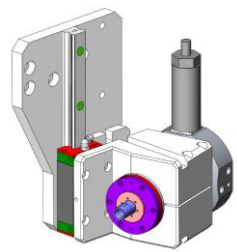
The flexible design can adapt several options

Manual / CNC supports in combination with Arobotec or normal bushes

Hob relief grind adapter



HF grinding spindle



Technical Data:

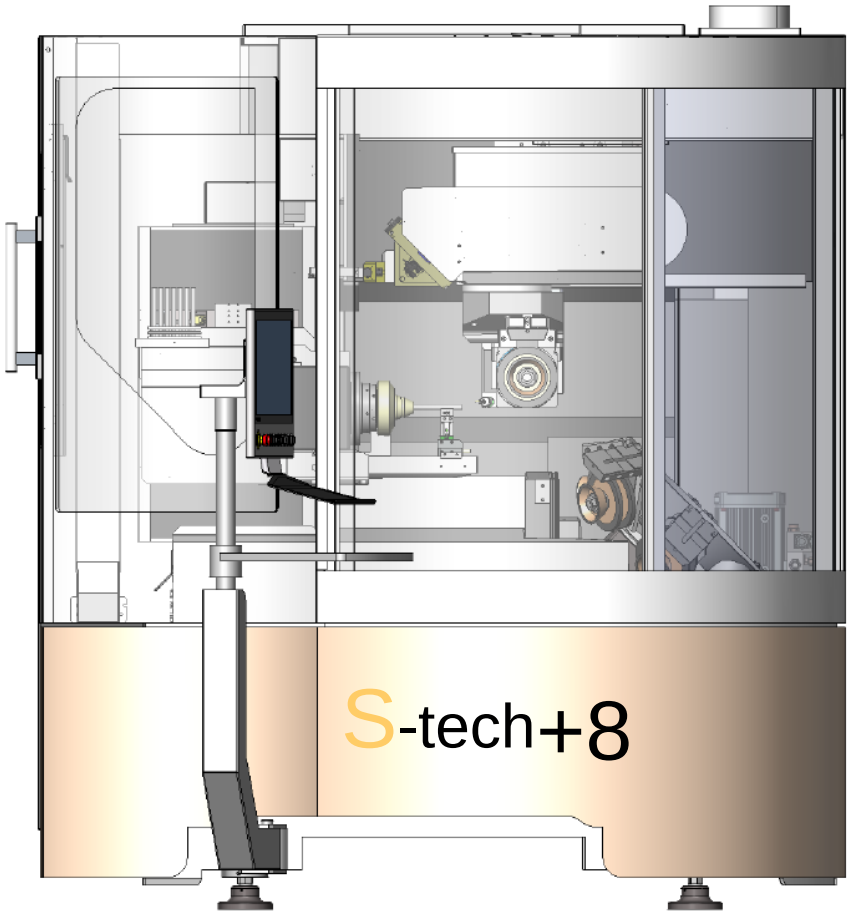
Tool diameter
0.5mm to 20 / 160mm

Tool length:
Standard 330mm (+ Option)

Autom. Clamping
Schaublin W Type; GDS; NANN
Schunk ISO / HSK 63

5 Axis Tool Grinding machine
The talent for many different type tools

S-tech +8



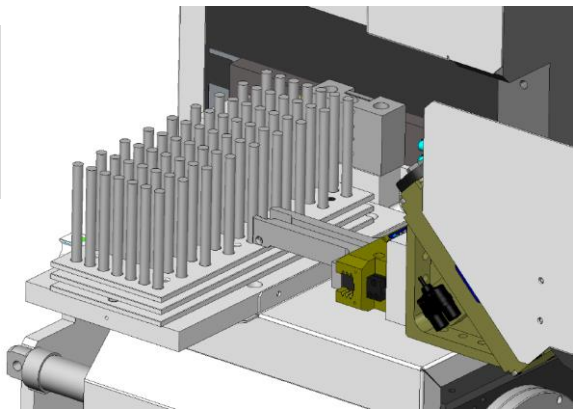
NUM Control Flexium +68

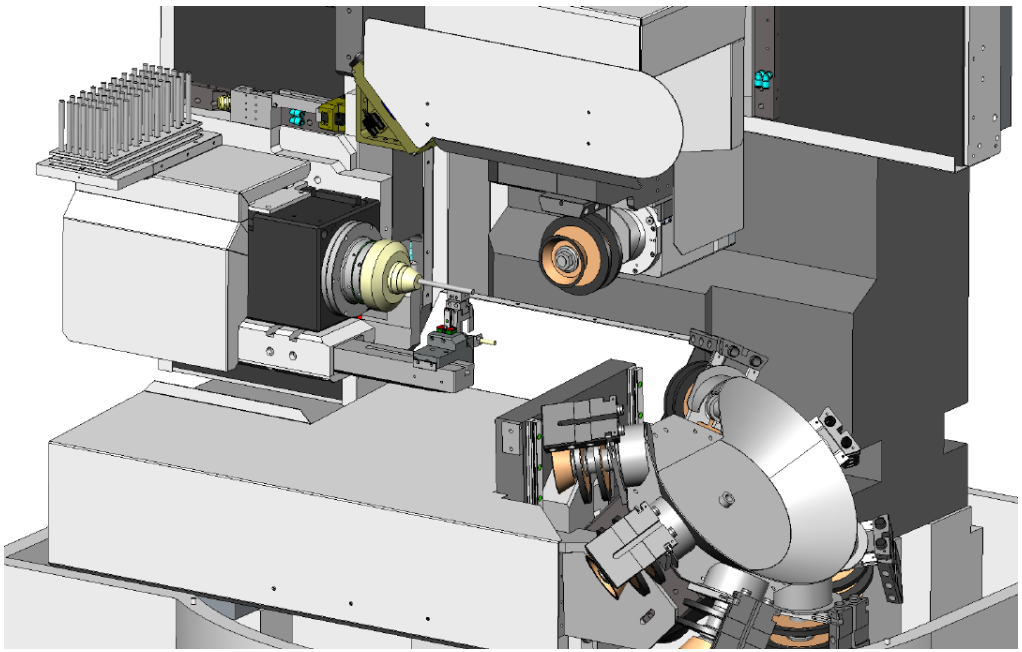
J+ TM / NUMROTO plus grinding software

num CNC HighEnd Applications

numroto Total solution for tool grinding

Tool loading:
Blank pickup loader 56 tools
Robot





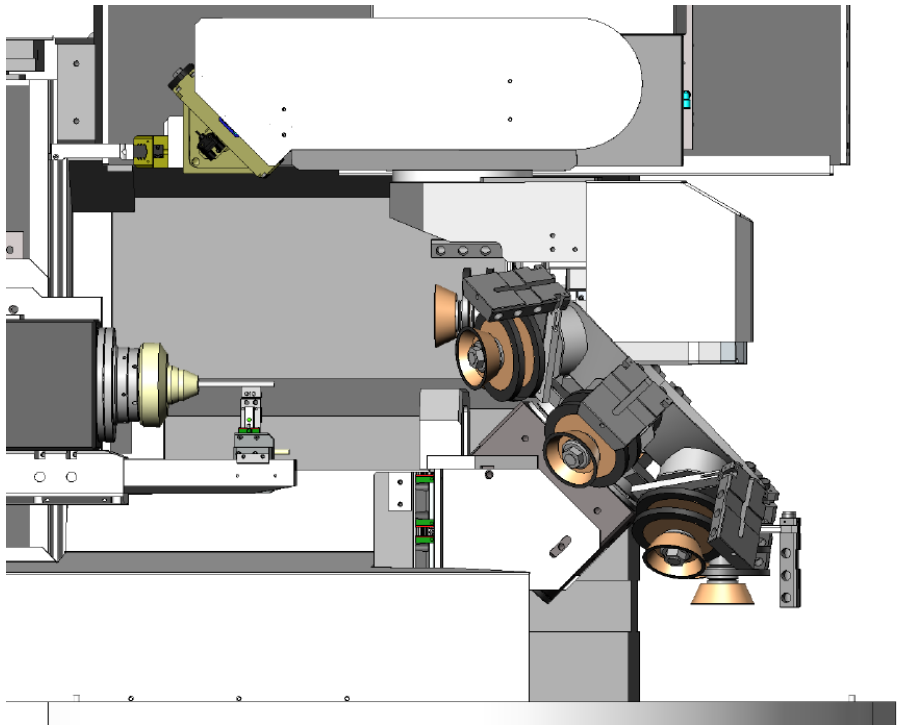
Technology on the highest level
5 Axis Tool grinding machine with linear motors in X,Y and Z
Direct drive in all rotary axis A und B
Balance system in the vertical axis ensure the motor current and precision.

The talent for different type tools:
Milling cutter, Drills, Step drills, Reamer, Form cutter, Inserts, Shaper cutter and a lot others.

JOERG

Technical Information
Different components and option

S-tech +8



Machine:	L2,15 x W2,15 x H2,20m approx. 6350Kg

Machine base and axis components made of nature stone for high precision

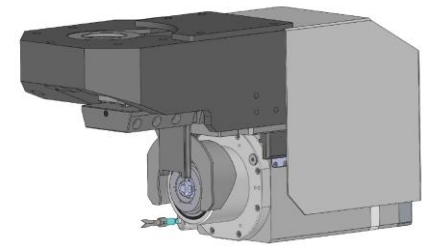
Grinding spindle	(Single nose)
Wheel changer	(4 / 8 Position)
Table	(Movable)
Support Hydr.	(Manual length movement)

X Linear Motor	540mm
Y Linear Motor	245mm
Z Linear Motor	360mm
(Y Weight balance)	
B Direct drive	240Grad
A Direct drive	2000 rpm

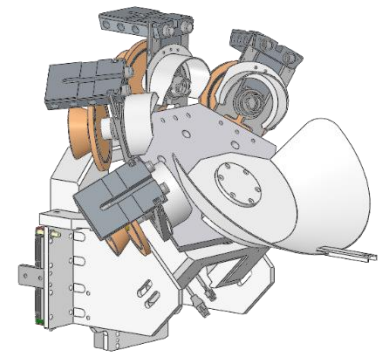
Heidenhain measuring system all axis

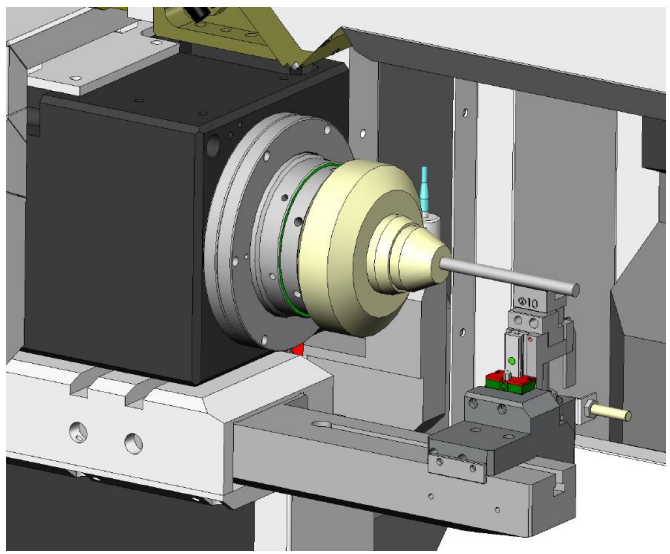
Marposs/ Renishaw 3D:
Tool and wheel probe

Motor spindle HSK F63/25kW



4 Station wheel changer gear box





Technical Data:

Tool diameter
0.5mm to 20 / 160mm

Tool length:
Standard 350mm

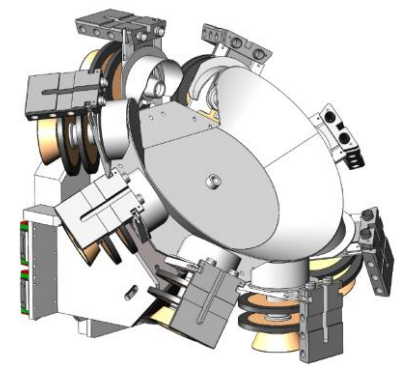
Autom. Clamping
Schaublin W Type; GDS; NANN
Schunk ISO / HSK 63

Separate chillers for Linear and Grinding Spindle motor

Hydraulic movement for wheel changing

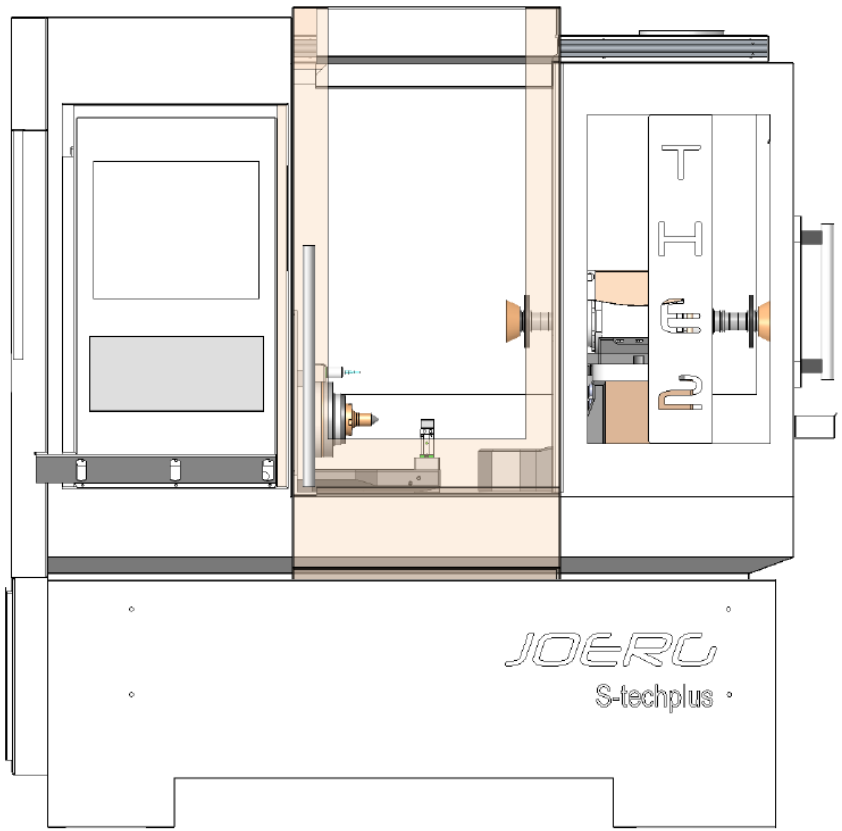
Round sliding doors

8 Station wheel changer direct drive



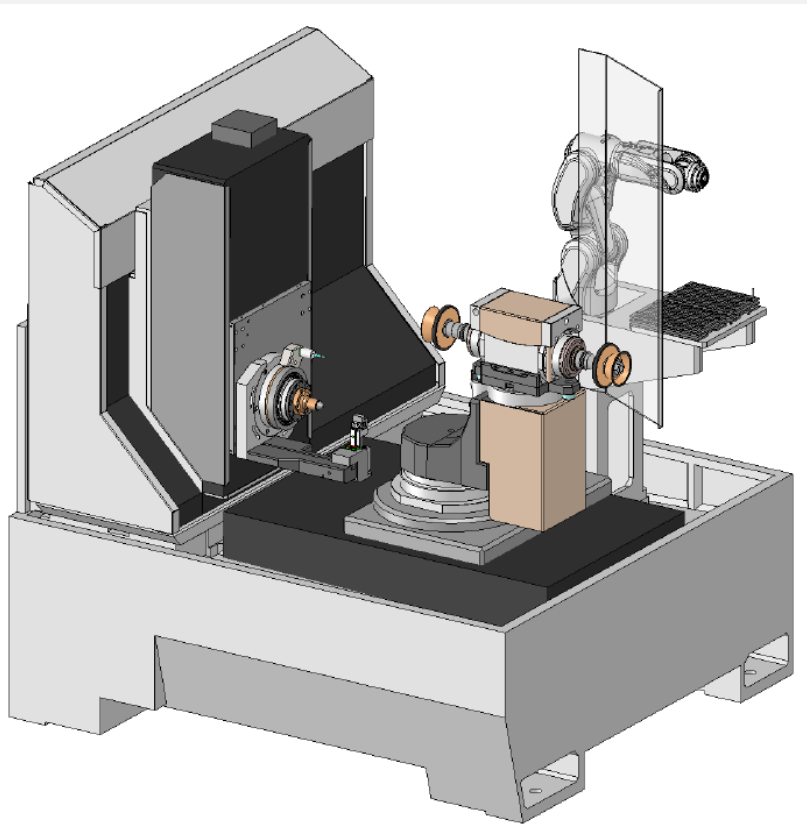
5 Axis Tool Grinding machine
The perfect solution for your standard tools

-tech THE2



NUM Control Flexium +68
NUMROTO plus grinding software

SYNTEC Control
Grinding Software sv&Toolbox or MTS



Technology on the highest level
5 Axis Tool grinding machine with linear motors in X and Z
Direct drive in all rotary axis A und B
Y axis driven by ball screw spindle .

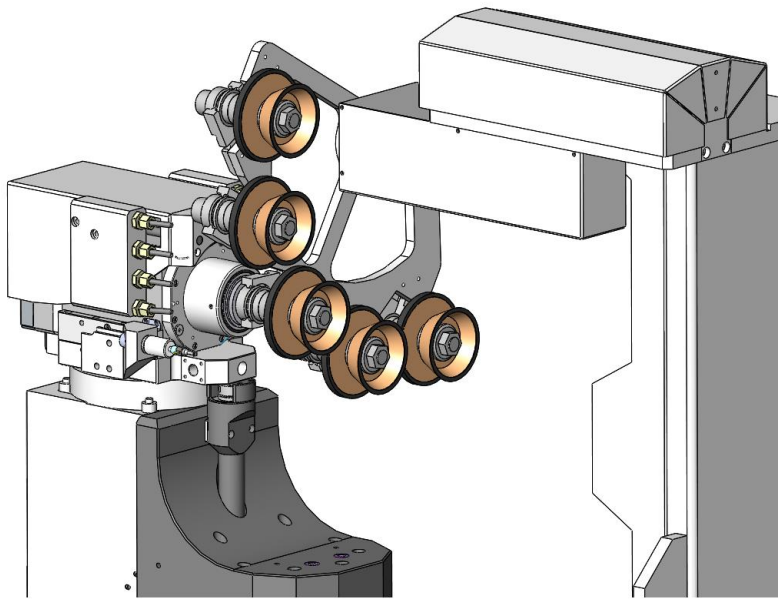
Double end grinding spindle with manual clamping of HSK50

Single end grinding spindle (Option) can be combinate with a
5 station wheel changer

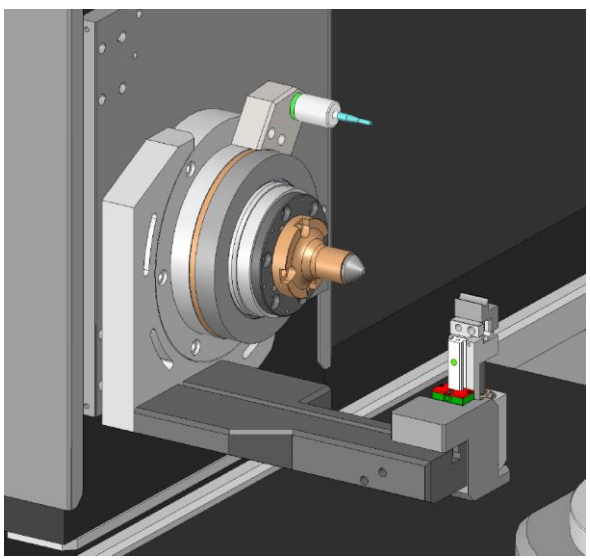
JOERG

Technical Information

S-tech THE2



5 Station wheel changer in combination with single nose grinding spindle



Tool and work piece probe (Renishaw)

V Prism for perfect runout of the blanks

Tool bush support

Rotation clamp

Support in different execution and length

Machine: L2,0 x W2.3 x H 2,0m approx. 5000Kg

Machine base and axis components made of nature stone and casting for high precision

Power full direct driven spindle motor with manual / automatic clamping

3 Grinding wheels per wheel adapter plus perfect coolant on each wheel

External Coolant device for Linear and torque motors

Technical Data:

Tool diameter
0.5mm to 20mm

Tool length:
Up to 180mm

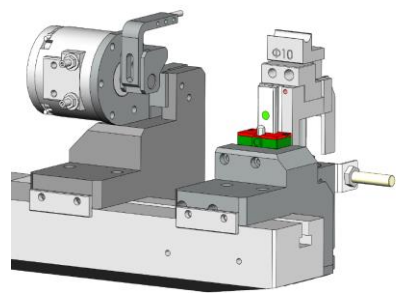
Autom. Clamping
Schaublin W Type
NANN
GDS
Schunk

X Linear Motor	360mm
Y Linear Motor	265mm
Z Linear Motor	500mm
B Direct drive	210 Grad
A Direct drive	1000 rpm

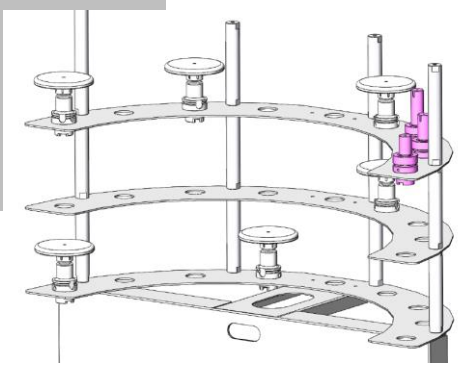
Spindle Motor: 22kW
12.000 rpm

Marposs/ Renishaw 3D:
Tool and wheel probe

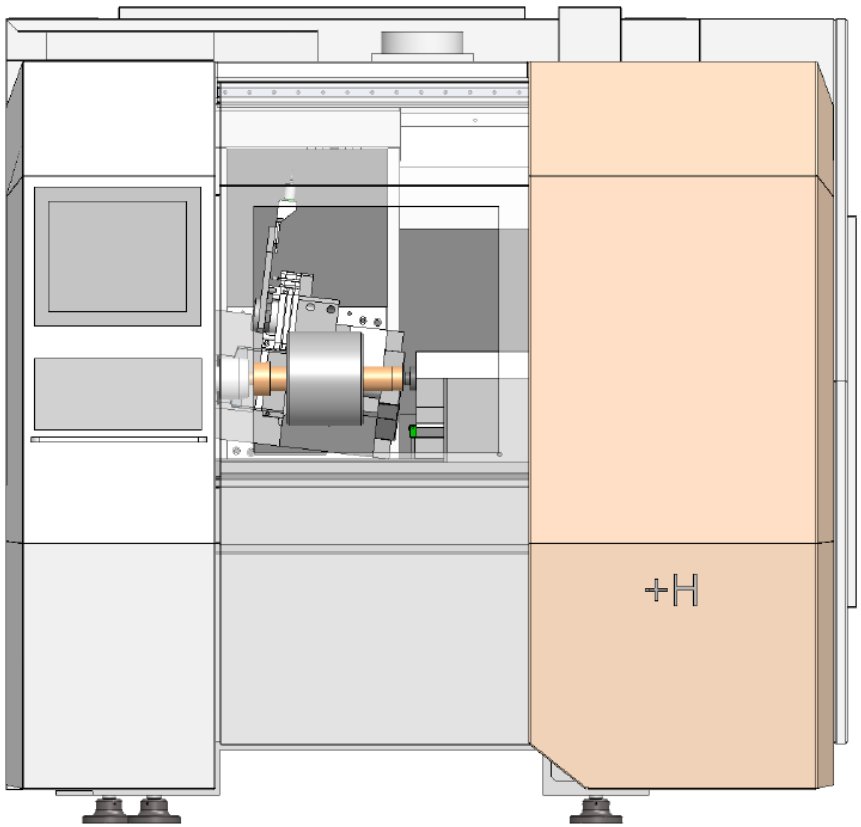
Heidenhain measuring system all axis



HSK63 Auto loading

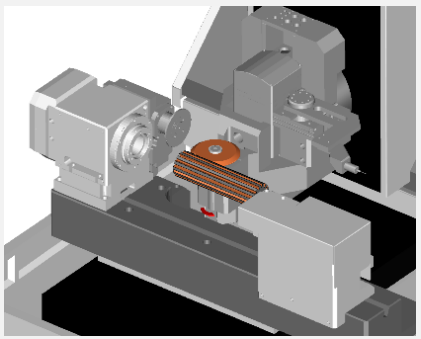


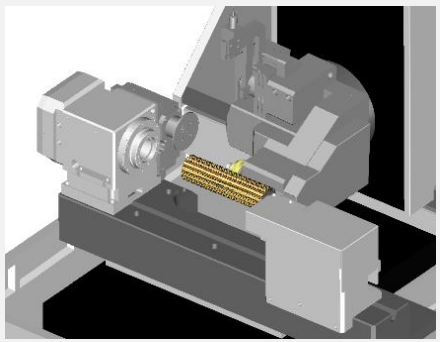
4 - 5 Axis Hob & Skiving cutter grinding machine for flute and profile grinding

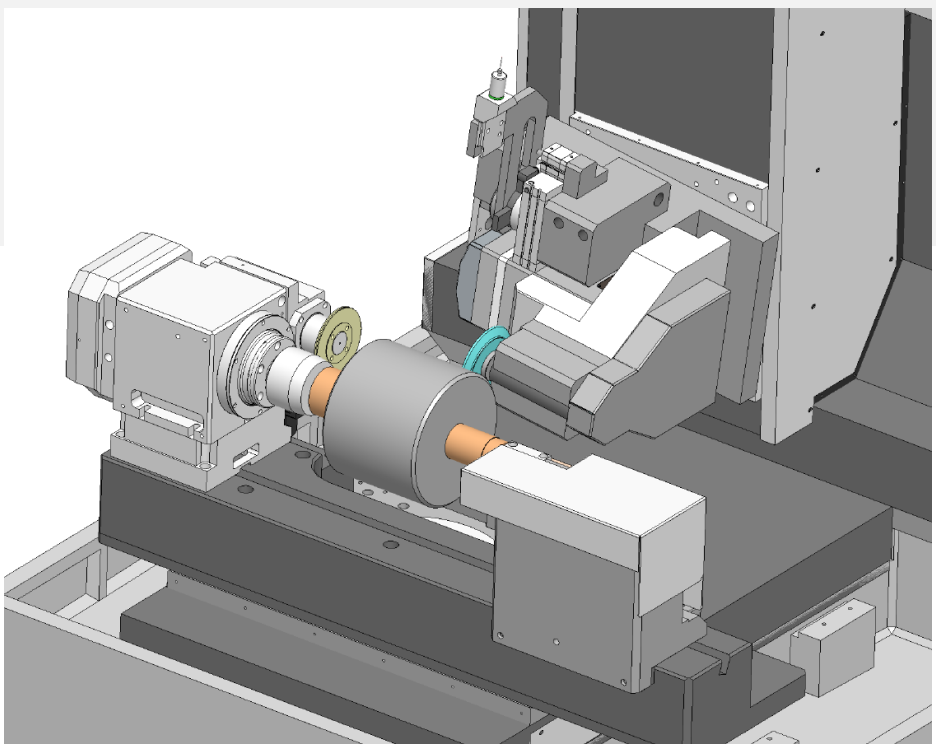


NUM Control Flexium +68

J+TM / NUMROTO plus grinding software





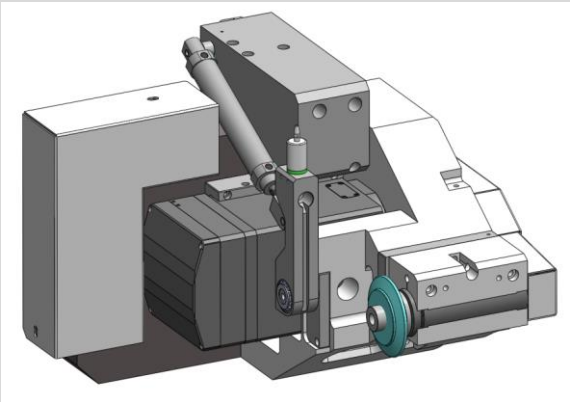


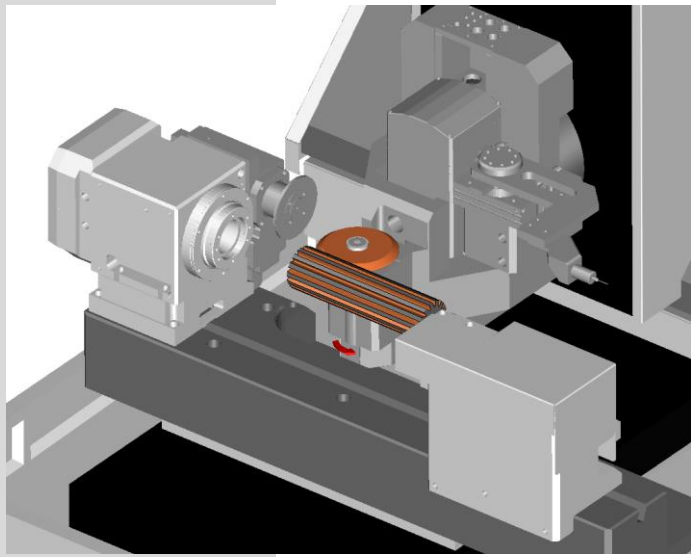
Technology on the highest level
4 or 5 Axis Tool grinding machine with linear motors in X and Y
Direct drive in all rotary axis A und B

5 Axis (Option) with ball screw spindle for hob flute grinding function

Different type tools:
Hobs and Shaper cutter

Technical Information





Spindle information from supplier

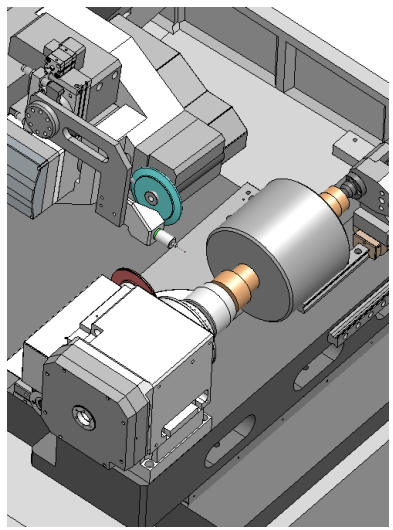
- TSA 32x160 L 60000 rpm
- TSA 40x160 L 45000 rpm
- TSA 50x160 L 35000 rpm
- TSA 60x160 L 30000 rpm

- Taper nose 1:7,5

Motor spindle with HSK F63 and automatic clamping for fast tooth pully changing
External oil cooler for temperature controlled
Continuously spindle running

- Lifetime grease lubrication
- High precision bearing
- Automatic HSK clamping
- Tooth belt driven grinding spindles

Machine: L2,15 x W2.00 x H2,15m
Weight: 5800 -6500Kg

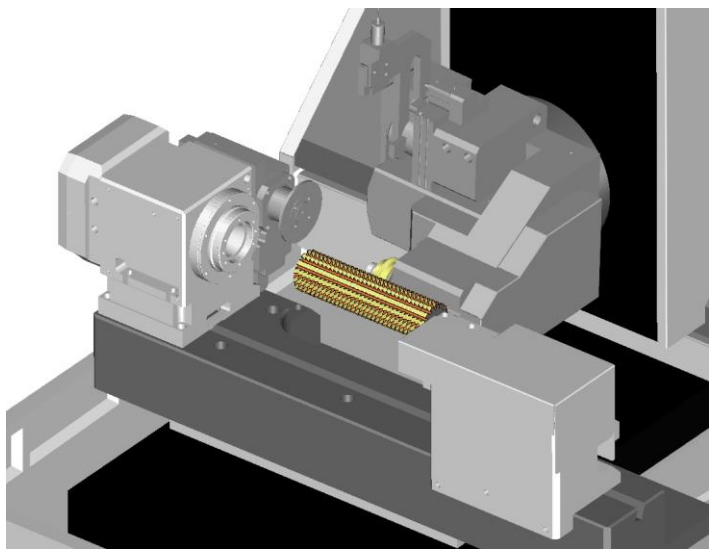


Tool probing function for positioning

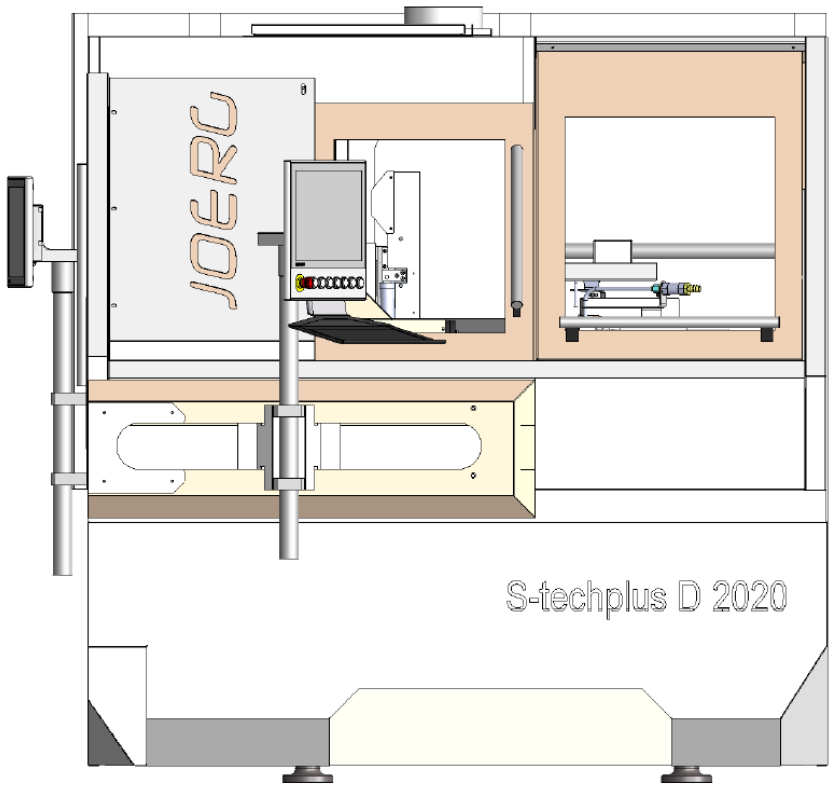
Hob Modul:	Until M6
Quality:	AA, AAA
Indexing accuracy:	+/- 10”
Tooth depth:	up to 14mm (25mm)
Diameter:	20mm - 200mm
Length:	380mm
Lead angle:	+/- 30°
Flute helix angle (Option):	+/- 45°
Wheel diameter:	from 30 up to 100mm
Spindle system:	2000- 28000 rpm
Syncron motor spindle	25kW
Distance between center:	550mm
Material:	Carbide / HSS
Tool weight:	200Kg

Dressing spindle:
Spindle driven by belt with an servo motor

Rotation speed:	200- 3000 rpm
Spindle adapter:	40mm

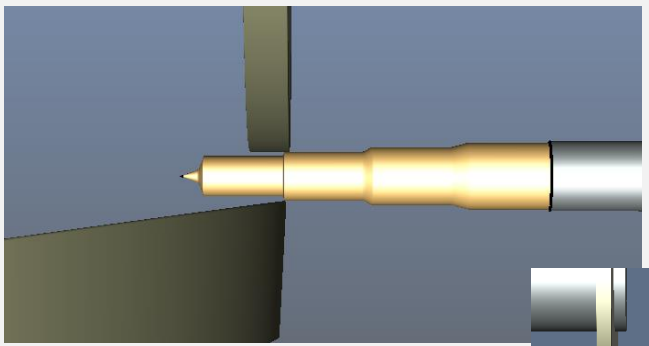


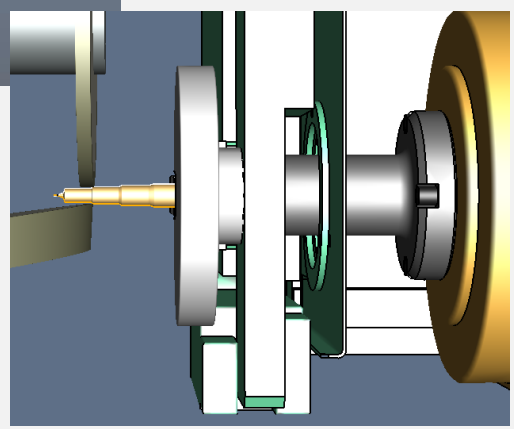
5 Axis cylindrical grinding machine
for perfect diameter and sure faces



Beckhoff or Syntec control

J+ TMOD / MTS





3D Tool simulation
Simple data input for your blanks

Precision:

Diameter: 0.0020mm
Runout: 0.0018mm

Controller: Beckhoff (Syntec)
Drives: Ball screw / Beckhoff -Yaskawa

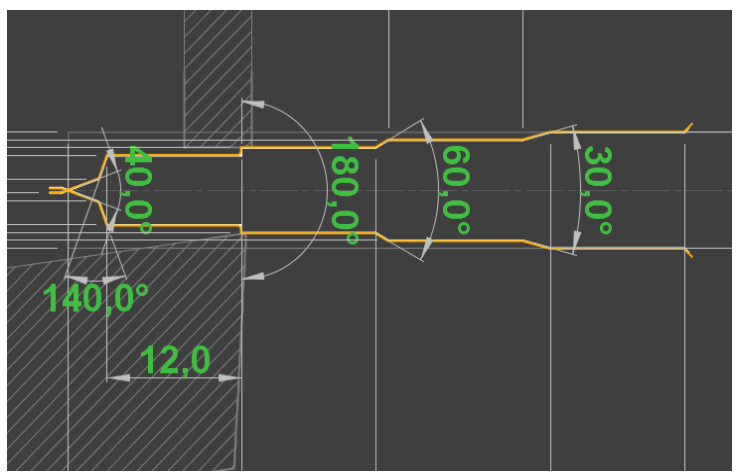
CNC Axis:

Y Axis	300mm
X/V Axis	30mm
Z Axis	100mm
Rotation	0-3000 rpm (option direct drive)
Chuck	W20 /25

V Prism with hydraulic pressure roller

Technology on the highest level

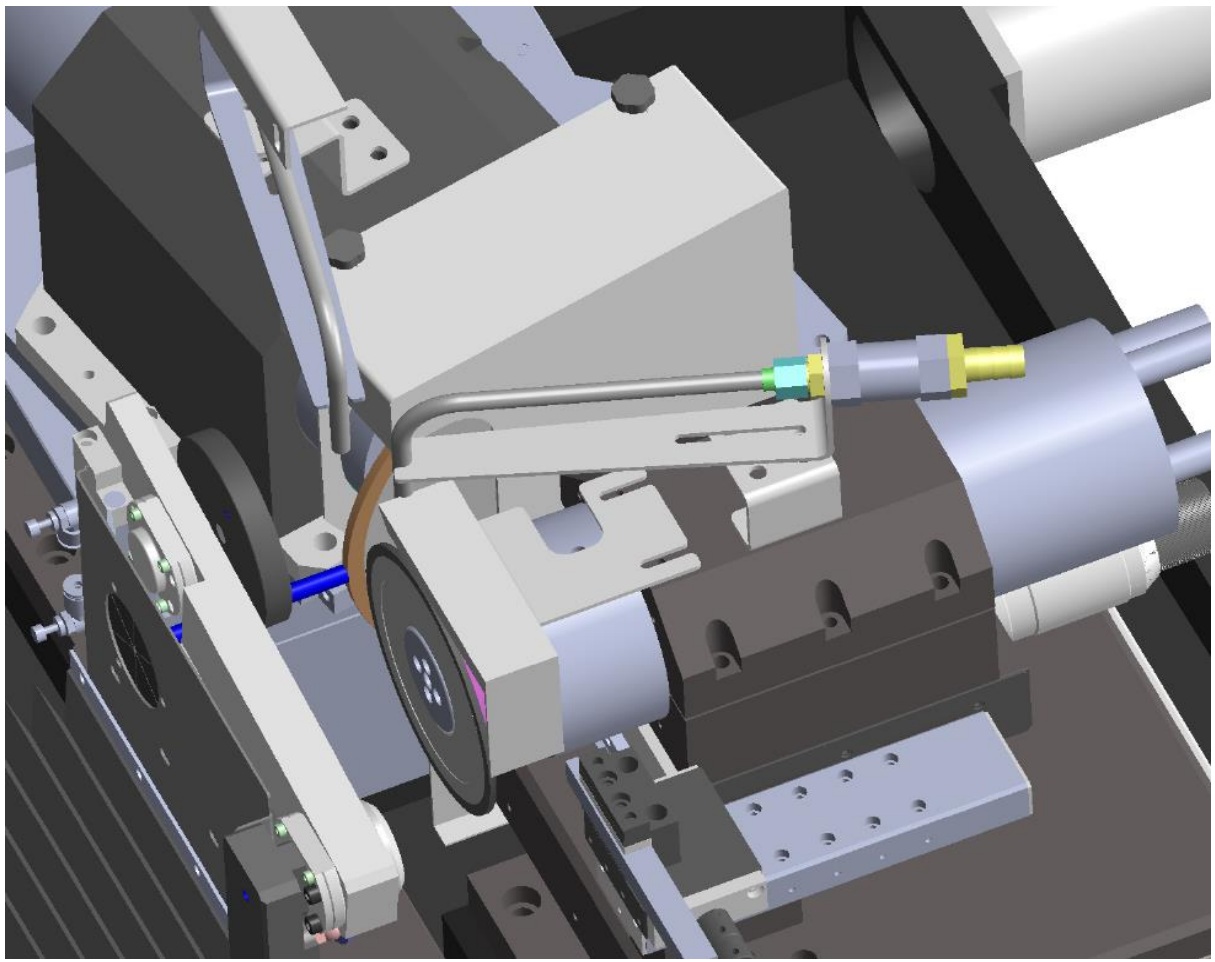
Cylindrical grinder for:
Cylindrical diameter, Step tools,
Punch, Forms, Conical tools,
Ball end face, drill point angle,
Spade and Weldorn



JOERG

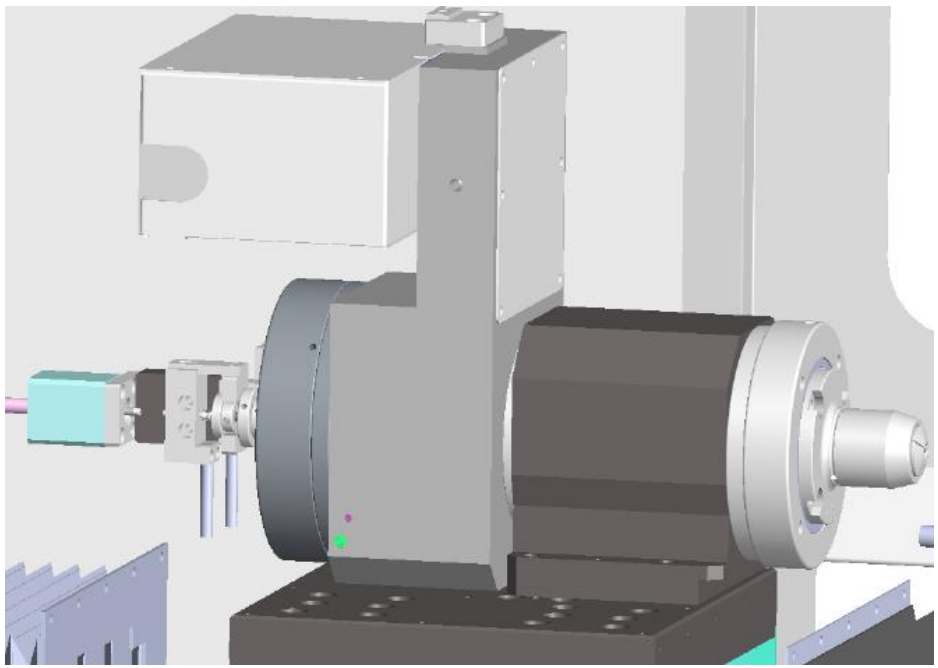
Technical Information

S-tech +D



Diameter grinder with rough and finishing grinding process in same operation

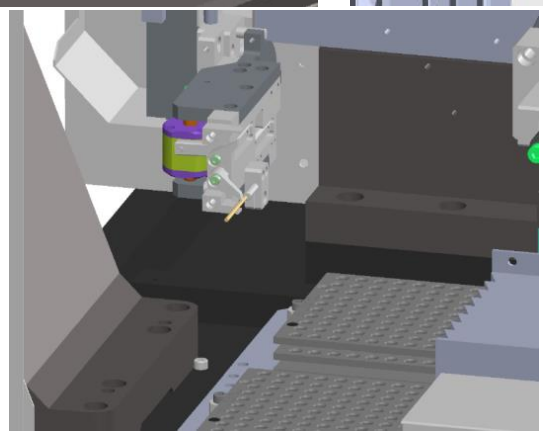
The pneumatic operated pressure roller keep the tool perfect with high precision in the V Block



Grinding spindles:

Roughing	10/20kW
Rotation speed	10000 rpm
Finishing	5 kW
Rotation speed	12000 rpm

L1,9 x W2,0 x H1,95m
approx. 3000Kg



Work piece rotation A axis:

Rotation speed	0- 3000 rpm
Chuck	W20/25

Tool loading:
3 Axis robot

Diameter work piece	1-16/25
Max- length work piece	50-250mm
Pallets	2-3

Contact and Company information

JOERG Shanghai Company works together with a local grinding machine manufacturer who has more than 25 years experience in grinding machine building.

We are new on the market but we know how to build perfect high class grinding machines.
With our world wide suppliers we can reach the German TÜV Rheinland CE certificate for best quality and safety standard.

Suppliers:
NUM, Schneider, Numroto, Bosch, Hawe, Hiwin, INA / FAG, Heidenhain, Pibomulti, Festo, Mapal, Hema, Euchner, Marposs, Renishaw, Rittal, SMC, usw.

JOERG S-techplus GmbH
75181 Pforzheim
Germany
Mail: Info@s-techplus.de
Web: www.s-techplus.com

Deviation in color and shape from the illustrations, errors and misprints excepted

Stand:
January 2024