

# U-Grind Series

## THE UNIVERSAL TOOL GRINDERS

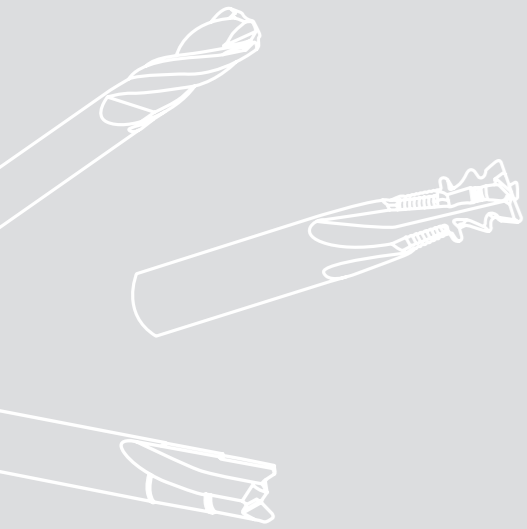


**Ultimate solutions for  
production or resharpening  
of high quality cutting tools.**

**strausak**  
Rollomatic Group

STRAUSAK is a well established **Swiss company** with a global footprint that supplies demanding industries with high performance equipment since **100 years**.

As a member of the **Rollomatic Group** we share common **values** – emphasizing our product **quality** and **precision**. Building customer satisfaction is our priority, supporting their success is our mission.



# U-Grind Highlights

## Compact

Small footprint and fully integrated workshop oriented solutions.

## Autonomous

Efficient and reliable tool or wheel loading systems. High capacity storages.

## User friendly

Performant programming interface including smart probing routines. Smart solutions for easy tool setup.



## Stable

Surdy cast iron base. High thermal stability.

## Ergonomic

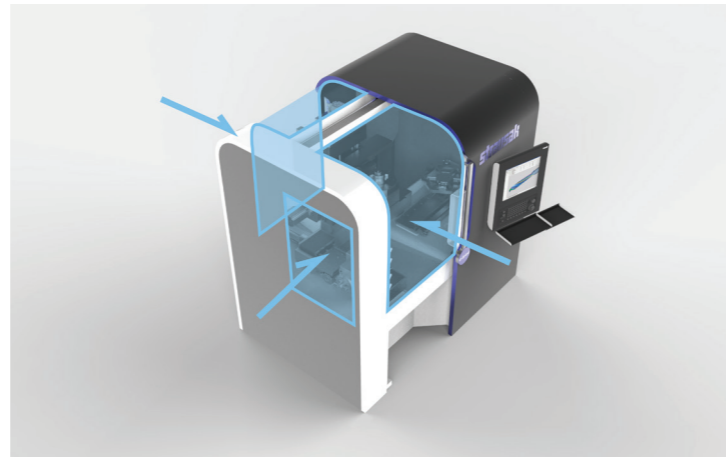
Large door and feet clearances. Multiple workarea access. Adjustable control angle and height.

**Highly versatile**  
**Full simultaneous 5-axis**  
**High-precision tools in single setups**

# Designed by Experts

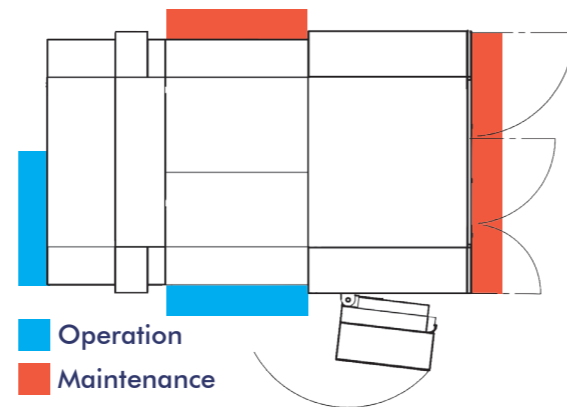
STRAUSAK U-Grind series  
5 axes CNC-Tool grinders  
with integrated automation

- Easy** innovative tooling  
unmatched ergonomics  
smart probing routines
- Performant** powerfull spindles  
efficient coolant delivery  
optimized stiffness
- Accurate** direct measuring systems  
embedded temperature control  
smart process monitoring
- Reliable** swiss key components  
oversized guides and drives  
efficient protection systems
- Safe** detailed 3D simulation  
preventive crash detection  
secure operating modes



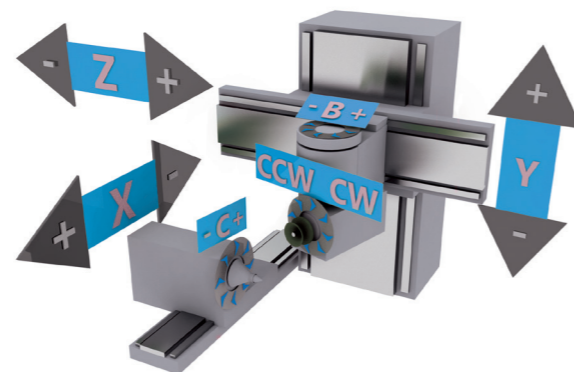
## Ergonomics first

Access from 3 sides and wide open view to the grinding process, enhances operational safety. Optimized ergonomics provided by the adjustable and control unit guarantees outstanding working comfort.



## Smart kinematics

Everything is within easy reach considering the generously proportioned working area. This is the result of a carefully engineered machine design.



# Masterpiece Gallery

When cutting tools become Art.



## Thread mill

Full solid carbide  
Mechanical production

- Narrow tolerances
- Sharp wheel geometry
- Perfect surface finish



## Parabolic endmill

Full solid carbide  
Mold industry

- Smooth shape transitions
- Perfect surface finish



## Circular milling cutter

Full solid carbide  
Watch industry

- Crossed helicoidal teeth
- Small corner radius
- High accurate geometries



## Special die punch

Full solid carbide  
Die/Mold industry

- High geometrical accuracy
- Perfect surface finish
- High material removal

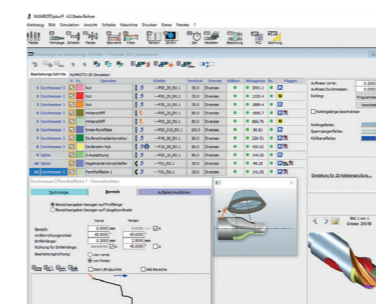
# Unlimited Programming

NUMROTOplus® – The professional's preferred interface.

more infos:  
num.com

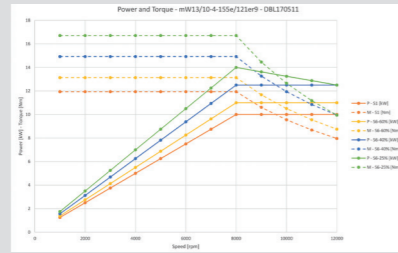
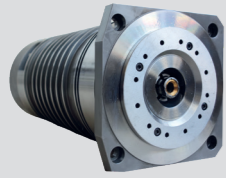


**NUM**  
CNC HighEnd Applications



# Tailored Equipment

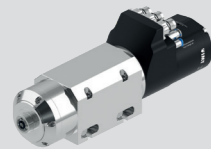
## Grinding spindles



**SWISS  
MADE**

### Main Spindle

- Automatic HSK interface
- High power and high torque
- Made in Switzerland



### HF spindle

- Automatic HSK 20 interface
- Up to 60 000 rpm

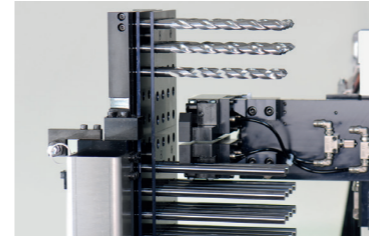


### Speed Multiplier

- Up to 35 000 rpm
- Automatic unit loading

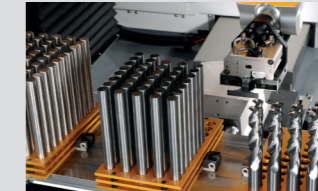
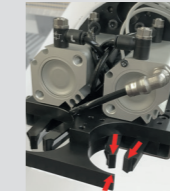
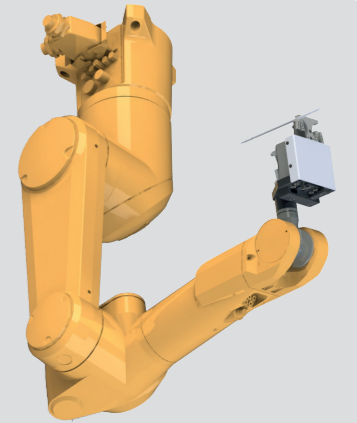
## Pick Up Loader

- Reliable loading system
- Cost effective automation
- Tool or collet loading
- Optional tool reverse unit
- Up to 60 tools



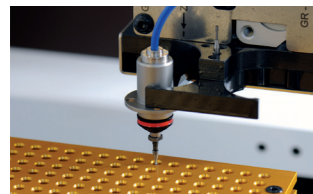
## Robot Loader

- Fast tool loading
- High autonomy
- Automatic calibration
- Wide tool range capacity
- Tool reverse / tool push-in functions
- Fully integrated
- Up to 1000 tools



## Measuring & Referencing Systems

- Direct measuring systems on each axes
- Tool probing and monitoring
- Wheel probing and monitoring
- Automatic calibration cycles



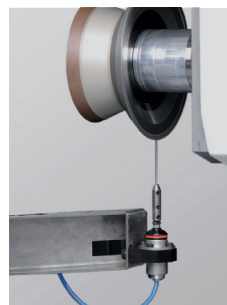
Pallet calibration



Linear scales / rotary encoders



Tool probing / monitoring



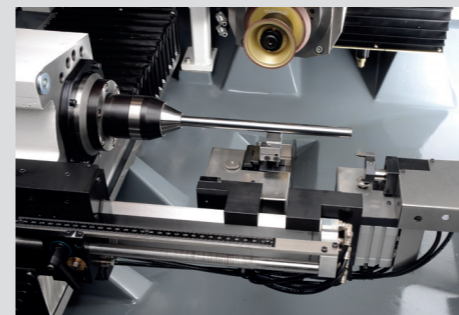
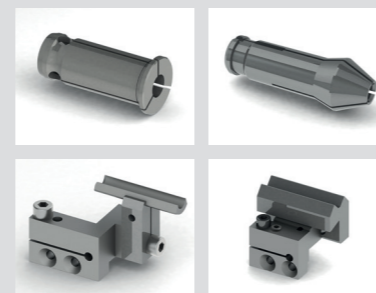
Wheel probing / monitoring



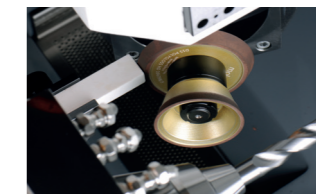
Gripper monitoring

## Direct Drive Work Head

- High dynamic and max rpm
- Versatile clamping interface
- Various tool support unit
- Quick setup system
- Runout reduction solutions



## Wheel Management



### Wheel Regeneration

- Wheel plunge cycle
- Wheel oscillation cycle



### Wheel Changer 6x

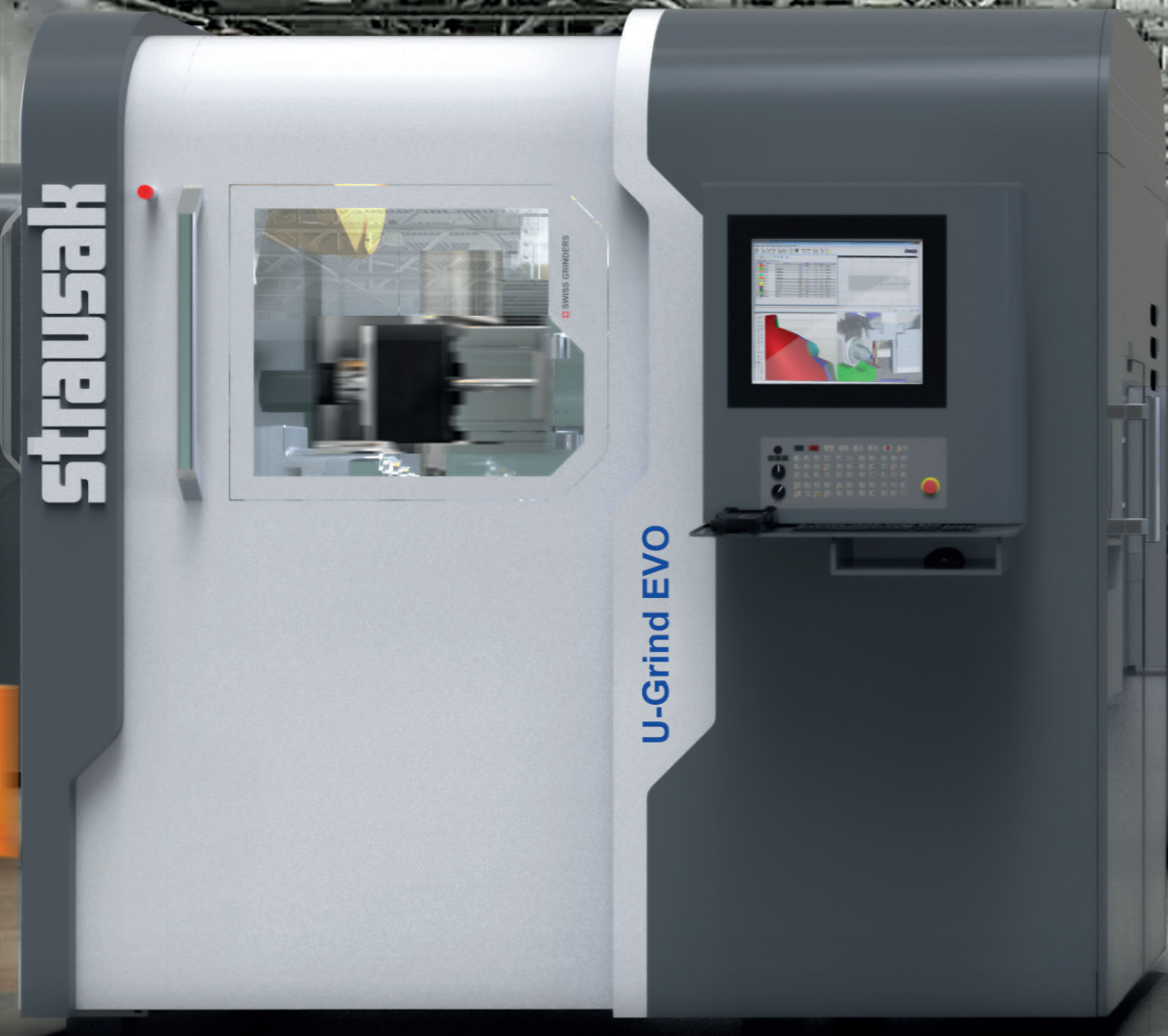
- Compact
- Reliable
- Separated from work area



### HSK 63F Wheel Arbor

- High rigidity
- Up to 3 wheels per arbor
- Compatible with HSK 50
- Integrated balancing holes

U-GRIND – IMAGINE THE POSSIBILITIES



**STRAUSAK** supplies  
demanding industries  
since 100 years.

Because expertise makes the difference, we are committed to focusing on innovations that continuously push the limits.

## U-Grind

A compact tool grinder designed for special tool production and sharpening jobs.

- + large grinding capacity
- + high accuracy
- + performant spindles
- + smart clamping systems
- + unmatched ergonomics
- + programming on NUMROTO

This configuration is specifically adapted for small batch production of special tools or regrinding jobs. The optional pickup loader allows for limited unattended operation.



## U-Grind EVO

A smart grinding center providing autonomy and performance on small footprint.

- + high productivity
- + wide equipment selection
- + efficient automation systems
- + integrated process monitoring

This version proposes a perfect balance between manual and automated production. Compact, efficient and user, the U-Grind EVO supports the versatility necessary to a flexible tool production.



# U-Grind EVO+

A fully equipped grinding center designed to meet the demanding expectations of cutting tool manufacturers.

- + adapted to 24/7 unattended production
- + fully integrated high capacity tool loader
- + double gate tool inspection module



In this special configuration the U-Grind EVO+ enables the highest productivity and best performance required for high volume, unattended production. The additional module integrates organizational space for the machine accessories, as well as the separation of the cutting tools from the working area.



## Specifications

### Grinding Capacity

Max. tool Ø (production)	32 mm	1.26"
Max. tool Ø (resharpening)	150 mm	5.90"
Max. tool length	500 mm	19.70"
Max. cutting length	300 mm	11.80"

### Rotary Axes

Range B-axis	340°
Range C-axis	unlimited
Rotation speed C-axis	2000 rpm
Resolution	0.0001°

### Workpiece Spindle

Clamping/Unclamping	mechanical/pneumatic
Attachment	ISO 50 SK 50

### Linear Axes

Rapid feed	15 m/min	590"/min
Resolution	0.0001mm	0.000004"

### Grinding Spindle

Attachment	HSK 63F or HSK 50E	
Speed Range	500 - 12 000 rpm	
Power (S1)	12 kW	16 HP
Torque (S1)	12.3 Nm	9 ft-lbs
Grinding wheel Ø	150 mm	6"

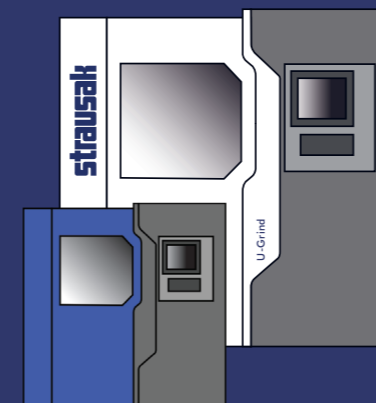
### CNC-Control

Type	NUM Flexium
Control interface	NUMROTO

### Wheel Changer

Capacity	6x
Attachment	HSK 63F or HSK 50E

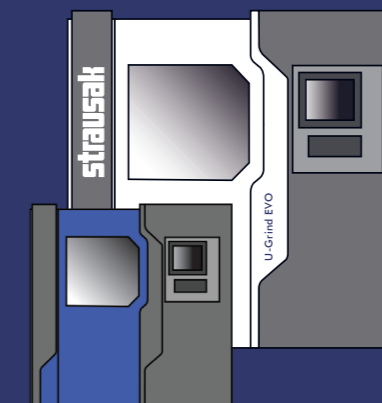
### Dimensions



#### U-Grind

Length × Depth × Height  
225 × 220 × 220 cm  
86" × 87" × 87"

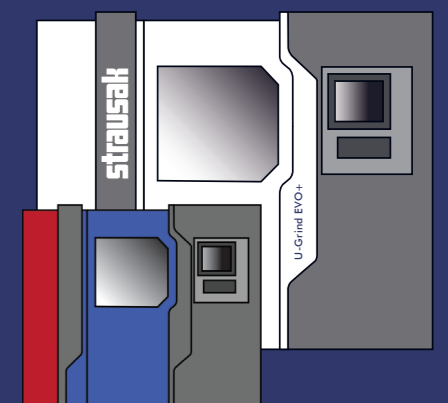
Weight  
4150 kg  
9130 lbs



#### U-Grind EVO

Length × Depth × Height  
225 × 220 × 220 cm  
86" × 87" × 87"

Weight  
4300 kg  
9460 lbs



#### U-Grind EVO+

Length × Depth × Height  
275 × 220 × 220 cm  
108" × 87" × 87"

Weight  
4600 kg  
10 120 lbs

Specifications are subject to change without notice.

Our mission is to build the best products and provide excellent services to ensure our customer's full satisfaction at every stage.

As reliable industrial partners, our support activities are essential parts of the solution we supply.



## North America

Strausak Inc.  
1295 Armour Blvd.  
Mundelein, IL 60060  
USA

Tel.: +1 847 393 2266

[sales@strausakusa.com](mailto:sales@strausakusa.com)  
[support@strausakusa.com](mailto:support@strausakusa.com)

## Europe

Strausak AG  
Alte Bernstrasse 53  
4573 Lohn-Ammannsegg  
Schweiz

Tel.: +41 32 677 55 55

[info@strausak-swiss.ch](mailto:info@strausak-swiss.ch)  
[sales@strausak-swiss.ch](mailto:sales@strausak-swiss.ch)  
[support@strausak-swiss.ch](mailto:support@strausak-swiss.ch)

## Asia

Strausak Ltd.  
No. 12-3, Zhuangqian Rd.,  
Shengang Dist.,  
Tachung City 42951  
Taiwan

Tel.: +886 4 25610676

[sales\\_asia@strausak-swiss.ch](mailto:sales_asia@strausak-swiss.ch)  
[support\\_asia@strausak-swiss.ch](mailto:support_asia@strausak-swiss.ch)