



60,000 rpm

8h continuous operation

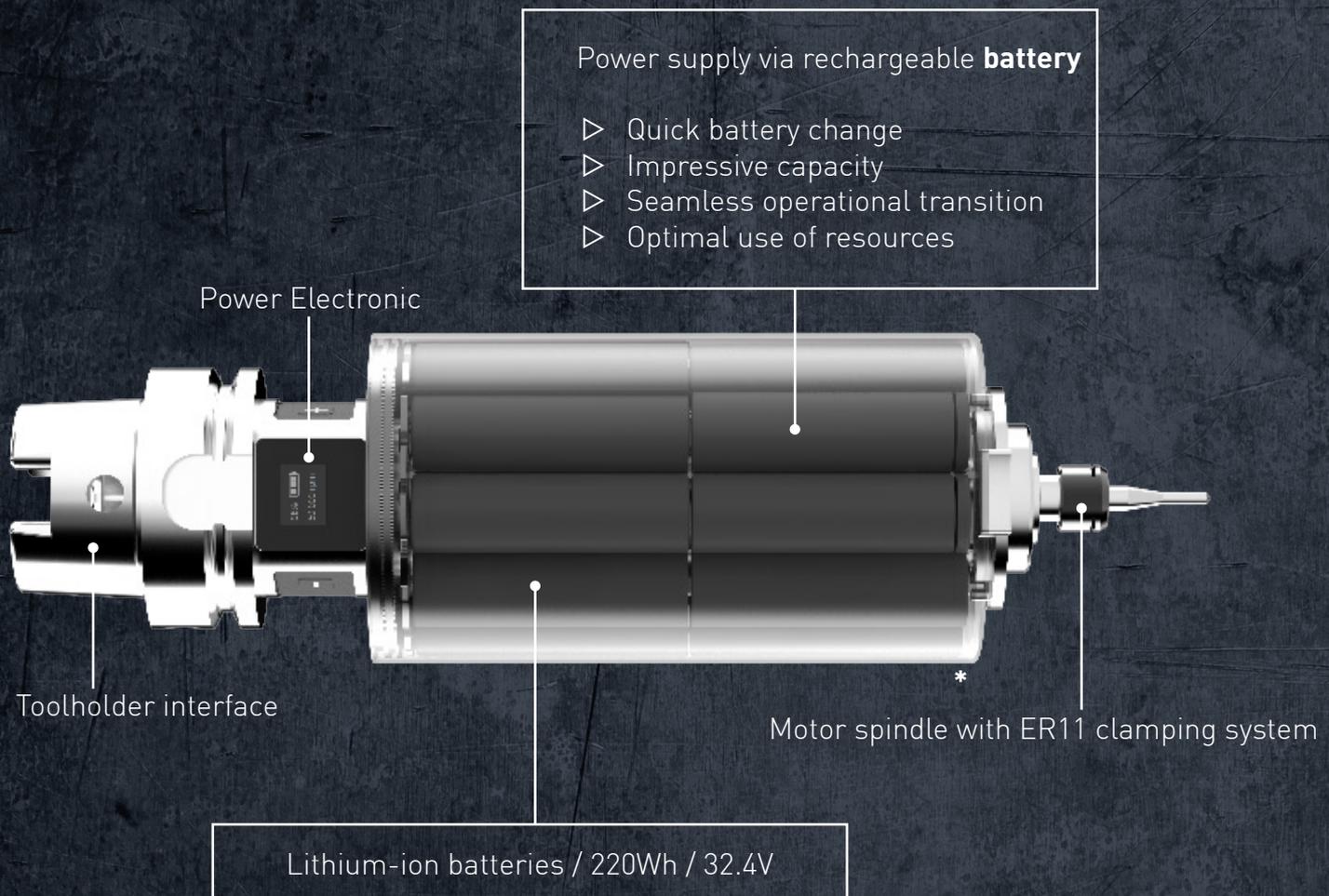
Higher productivity

HIGH SPEED BATTERY SPINDLE

SPEEDER 60 ER11

THE SOLUTION FOR HIGH SPEED ON EVERY CNC MACHINE

THE INNOVATIVE DESIGN OF THE **SPEEDER 60 ER11**



ALL IN ONE

HIGH FREQUENCY MOTOR SPINDLE - TOOL HOLDER - POWER ELECTRONICS - DISPLAY - BATTERY

The central component of the **SPEEDER** is a high-frequency motor spindle, which is equipped with a PM synchronous motor and enables machining speeds of up to 60,000 rpm.

Tool shanks up to \varnothing 7mm can be clamped in the ER11 clamping system used.

The specially developed frequency inverter represents an outstanding technological innovation.

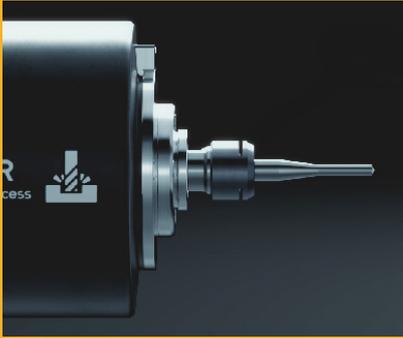
Despite its small size, it offers impressive performance and impresses in particular with highly accurate and stable speed control and an output power of up to 500 watts.

Effortless and intuitive operation of the **SPEEDER** is possible via the info display and the built-in buttons.



The energy supply of the system is provided by a rechargeable battery with a capacity for up to 8 hours of continuous operation. The battery is changed via an easy-to-operate bayonet lock and is done in seconds.

PLUG & PLAY



Insert tool



Set rotation speed



Insert into magazine



Replace **SPEEDER** from magazine



Start processing

TOOL INTERFACES

The different tool holder sizes provide flexibility and allow the **SPEEDER** 60 ER11 spindle to be used in a variety of CNC machines and applications.



HSK-63



HSK-80



HSK-100



SK40



SK50



Capto C6

SPEEDER 60 ER 11 / DIMENSIONS / HIGHLIGHTS



HIGHLIGHTS

- ▷ High speed cutting up to 60,000 rpm
- ▷ Reduced machining time
- ▷ Higher productivity
- ▷ Reduced tool wear
- ▷ Better surface quality

SPINDLE SERVICE / BATTERY CHANGE

In addition to the simple battery change via the bayonet lock, it is also possible to detach the spindle unit from the base unit using three screws.

This enables fast service.



- ▷ Motor replacement via 3 screws
- ▷ Battery replacement without tools

TECHNICAL DATA

Speed range	10,000–60,000 rpm
Clamping system	ER11 (max. Ø 7mm)
Cooling	Spray for outer cooling
Milling	Tools up to Ø 4mm
Drilling	Tools up to Ø 3mm
Battery capacity	Up to 8 h continuous working
Tool holder interface	HSK-63, HSK-80, HSK-100, Capto C5, Capto C6, SK40, SK50
Speed setting	via Display
Start / Stop	Internal tool cooling pressurization or slow rotation of main spindle
Output Power	max. 500 W
Weight	3.4 kg

Subject to change without notice

BENCHMARKING

4X UP TO FASTER

SPEEDER 60

03:53 min

MACHINE SPINDLE

16:30 min

Positive results

Time savings per part **76.5%**

Test date	2023
Country	Germany
Industry	molding
Application	Profile milling
Material group	Aluminium

Operation

Test data	Machine spindle	Speeder 60 ER11
Cutting tool	Micro milling cutter	Micro milling cutter
Diameter (mm)	3	3
Spindle speed	12,000 rpm	50,900 rpm
Cutting speed Vc (m/min)	113	480
Cutting depth (mm)	0.75	0.75
Machining time per workpiece (min)	16:30	03:53

SPEEDER ONLINE



* Sample Display



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