



# Modular balancing system for highest precision

## »toolBalancer«

Modern HSC machines operate at high rotational speeds and therefore require finely balanced tools. ZOLLER »toolBalancer« delivers this. The high-precision balancing system for tool holding fixtures, grinding wheels and rotors. It's modular design means it can be individually adapted to meet your requirements and in line with future developments.

This modern balancing system guarantees longer, controlled, effective, fast and high-quality production. This measurably decreases your scrap rate, machine downtime, production costs and delivery times.



- Image processing
- Maximum ease of use
- Consistent use of brand-name products
- Robust and able to withstand shop floor conditions
- Membrane keyboard for all functions of the spindle
- High-precision spindle
- Higher cutting power
- Longer tool life
- Better component quality

Spindle speed	300-1100 rpm	Max. tool diameter	380 mm
Measuring accuracy	< 0.5 gmm	Max. tool diameter opt	425 mm
Max. tool length	400 mm	Max. tool weight	300 N / 30 kg
Max. tool length opt	700 mm	Weight	approx. 4000 N













We reserve the right to make technical changes.

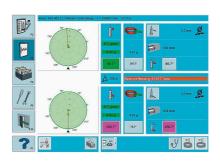
# Modular balancing system for highest precision

### »toolBalancer«

#### It's so simple.



1. Insert and lock the tool into the »toolBalancer« spindle. Start the automatic measuring procedure to determine imbalance.

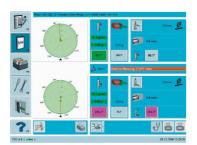


2. The automatic measuring procedure delivers results for the tool in one or two planes. After the measurement, click to rotate the tool to the right position and correct the imbalance.

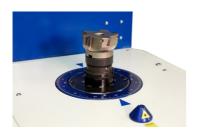


3. A laser marking displays the balancing point to identify the imbalance so it can be corrected. After the imbalance has been corrected by adding or removing mass, another measurement can be completed. The result and quality grade can be output as a protocol.

#### Image Processing



- intuitive graphical user interface
- dynamic cross-hair for precision
- measurement in real time without stop delay for presetting
- nigh-precision adapter system with automatic clamping
- fault tracking



#### High-precision Spindle

Thanks to the spindle diverse clamping inserts can be changed and you achieve highest concentricity.



#### Membrane keyboard

All power operated functions of the high-precision spindle are activated via a soft keystroke. That's easy, comfortable and guarantees constant quality



#### Maximum ease of use

Daily users of the ZOLLER »toolBalancer« appreciate such things as the single-hand operating device, membrane keyboard, spindle handwheel, swiveling operator controls, 180° access to the tools, control unit »cockpit« and many more.

We reserve the right to make technical changes.







#### Modular balancing system for highest precision

## »toolBalancer«







Set of balancing screws

Laser marking »toolBalancer« for standard cover

Color laser printer





**Pull-out controllers** 

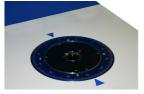


Adjustable control unit

Optimum access to the high-precision spindle







Membrane keyboard

**High-precision spindle** 





**Balancing adapter HSK** 

**Balancing adapter SKBT**