



TOOLDYNE micro

High precision balancing of
micro tools and tool holders



the expert for micro-machining

Whether it's medical instruments, fuel injectors for engines, components for watch making, dental implants or model parts – smaller and smaller parts must be manufactured these days with even greater precision.

This is done at high speed with micro-machining processes. This is based on extremely small

cutting tools, exceptionally high spindle speeds and very low residual unbalances. The balancing of tools and clamping devices are an important element in the overall manufacturing process in order to permanently ensure such precision at the limits of what is technically feasible.



A practical solution for manufacturing

We have been one of the leading experts for many decades when it comes to balancing small and very small rotors weighing just a few grams of such as dental turbines, miniature motors or watch balance springs. With the new Tooldyne^{micro} we offer a balancing solution, specifically designed for the dimensions of micro tools and their holders (e.g. HSK25/ 32, BT/CAT30). It can be used to transfer the level of quality required in the entire process to the tools as well as their holders.



Balancing significantly reduces or even completely avoids the influence of undesirable vibrations – the machining centre can then operate at full capacity with minimum wear.



Extremely simple handling – for your safety

The ergonomics and ease of operation were top of the priority list at the stage of designing our new Tooldyne^{micro}. The result is a compact solution with everything in its proper place: starting with the easy to operate protective cover, the ideal working height, right up to the ergonomic layout of all controls.

The measuring unit is ideally located in the line of vision and allows you simple and direct input of all data via a touch screen. The logical operating concept with clear and easily understandable displays, using symbols aligned to touch screen operation as well as a comprehensive range of operating aids, will quickly make the Tooldyne^{micro} a popular working device.





Tooldyne^{micro}

the complete system
for micro tools

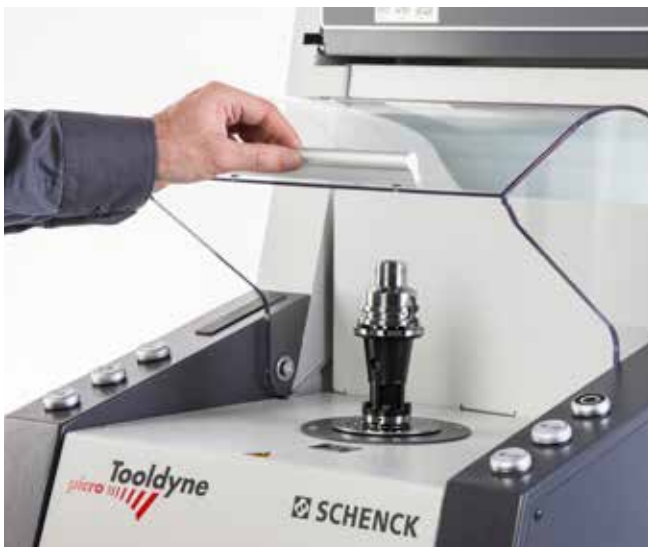
SET IT UP AND AWAY YOU GO

The only thing that you need to get started is a suitable table to set the machine up on as well as a power connection. This way, you immediately get the new Tooldyne^{micro} up and running in Plug and Play mode without any delay – and because space is at a premium in all companies, we have designed the machine to be extremely compact. Nevertheless it is easily accessible and "tidy" – a balancing machine that achieves great things in very limited space.

CALIBRATION RUNS ARE SUPERFLUOUS

The Tooldyne^{micro} is permanently calibrated so that you can start a measuring run as soon as you enter the geometric data of your tool. It requires no calibration runs during the entire balancing process.

Peak performance measuring system -
simple handling and maximum perfection



YOUR SAFETY COMES FIRST

The Tooldyne^{micro} fulfils all the requirements laid down in the latest Machinery Directive 2006/42/EC, valid since the beginning of 2010 and is CE certified. The protective cover fulfils the high standards set by ISO 7475 Class C - Protection against ejected parts.

Technical data

ROTOR DIMENSIONS:

- ▶ Maximum rotor weight: 0.7 kg
- ▶ Max. tool diameter: 100 mm
- ▶ Max. tool length (depending of the type): 115 / 140 / 150 mm
- ▶ Spindle speed: 1200 min⁻¹
- ▶ Smallest achievable residual unbalance: 0,08 gmm

MACHINE DATA:

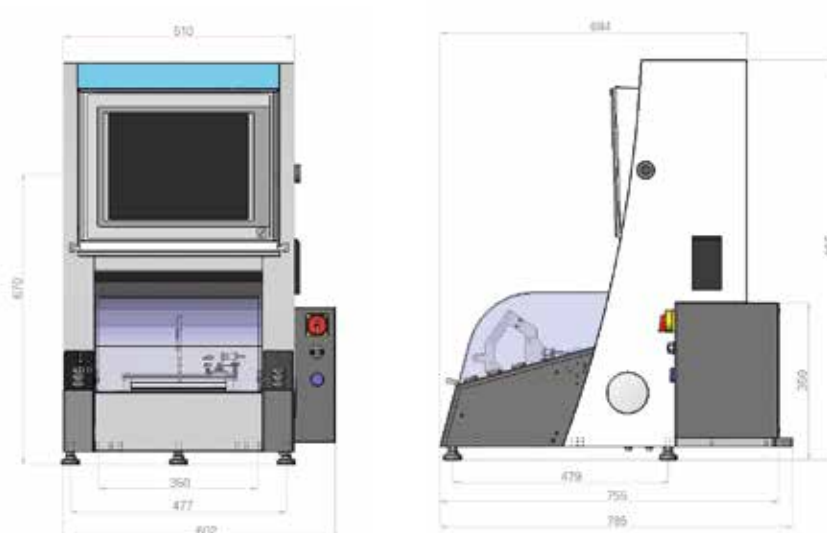
- ▶ Dimensions (see drawing)
- ▶ Total weight: 135 kg
- ▶ Mains connection: 230V ± 10 %, 50 / 60 Hz
- ▶ Drive capacity: 100 W
- ▶ Protective cover acc. ISO 21940-23 class C (Protection against ejected parts)
- ▶ 2-colour finish RAL7035 (light grey), RAL 7024 (graphite grey)

MEASURING UNIT

- ▶ Touch screen operation

ACCESSORIES:

- ▶ Printer for protocol printouts
 - ▶ Typical tool adapter, e.g. for HSK E 20 / 25 / 32 and SK/BT 30
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