

Tooldyne SV Balancing Machine for Tools and Tool Holders 2



- Improvement of machined surface quality and dimensional accuracy
- Reduction of vibration and noise
- Prevention of costly bearing damage
- Increase in tool and spindle operating life
- In accordance with the terms and conditions of the spindle manufacturer's warranty specifications

Range of application

Increasing demands on the performance of machine tools - greater speed, higher accuracy, better quality - have led to extraordinary advancements in machining technology, where capabilities once only imagined have now become industry standards. But, while today's highspeed machines offer impressive advantages, accuracy requirements can only be met, if tool, toolholder and spindle are precision balanced. As operating speeds increase, forces resulting from unbalance cause nonsymmetrical rotation. The results are harmful vibration, increased chatter, poor surface finish and excessive wear on the tool and spindle bearings.

As we continue to expand today's production capabilities and go beyond the quality standards that our customers expect, precision balancing becomes even more essential.

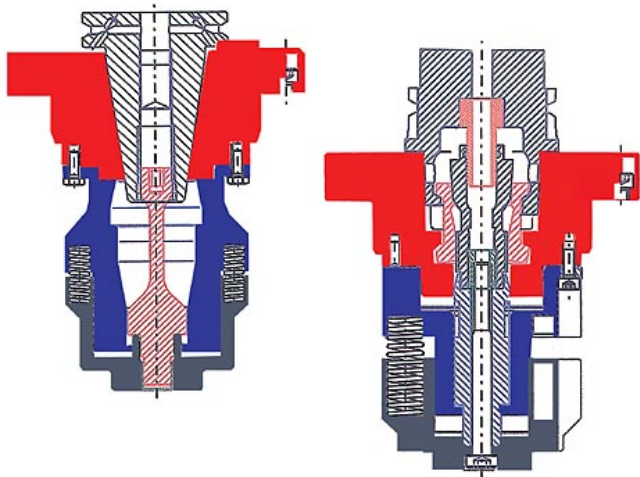
Tooldyne SC is specifically designed to provide precision results in the shortest amount of time for a wide range of tools and toolholders.

Design

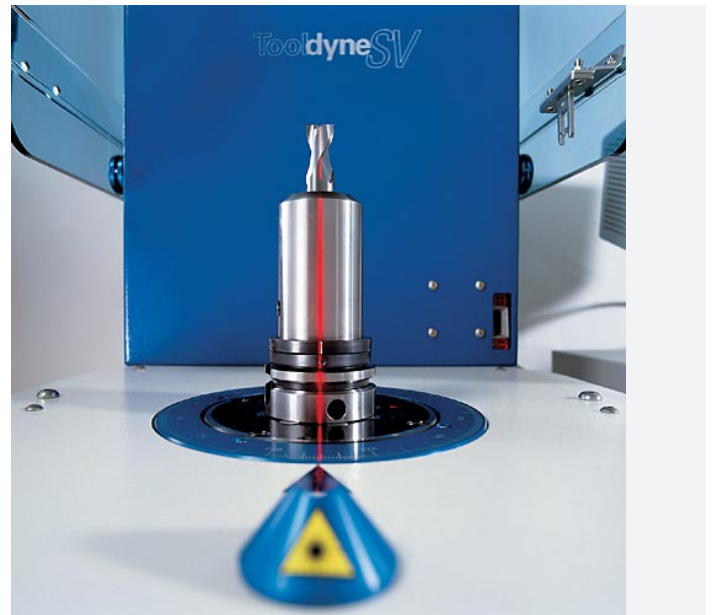
Compact, hard-bearing vertical balancing machine with integral operating and display unit. For higher convenience a PC can be used. Easy to use operator interface, menu driven operation with display on a monitor.

A pneumatically actuated clamping mechanism automatically draws the tool into the spindle to accurately simulate operating conditions and provide the repeatable fit necessary for precision balancing.

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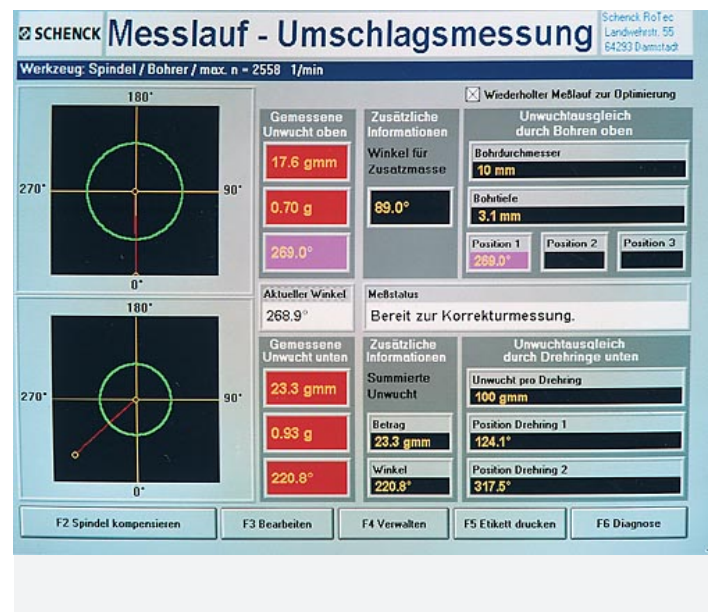
Clamping system for a taper cone / Clamping system for hollow shank cone



Machine tools and adapters with tapered cone (with and without clamping bolt) and hollow shank cone (including CAT and BT type) can be balanced. Correction calculation for drilling, milling, addition of weight and balancing rings are possible.

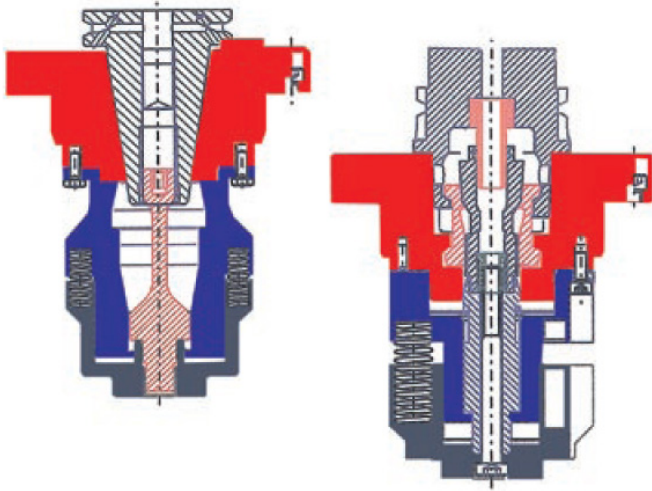


The vertical design of the machine with hard-bearing principle simplifies not only the operation, but also – through permanent calibration – the setup of the measuring equipment. A pneumatically activated, quick-acting clamping mechanism makes loading the machine easy and guarantees repeatable tool seating. An indexing aid with laser indicator assists in accurately locating the exact correction position.



The reliable and simple-to-operate balancing program makes special operator training unnecessary. The program runs on a PC with color monitor, keyboard and mouse interface. Up to 1000 rotor files can be stored in the data memory. Through the external 3.5" diskette drive the memory capacity can be extended practically without limit. The software is available in many language versions: English, German, French, Spanish and Italian. The unbalance display, formatted for balancing technology, is possible in either numeric or polar form. An automatic "Tolerance" display according to the balancing quality simplifies the evaluation of the balancing results.

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left: Clamping system for taperright: Clamping system for hollow taper shank

Tooldyne SV

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Technical data at a glance	Tooldyne SV
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Vertical table-top design	•
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Rotor data

Weight, max.	[kg]	30
Diameter, max.	[mm]	350
Length, max.	[mm]	400

Machine

Width	[mm]	500
Depth	[mm]	350
Height	[mm]	400
Balancing speed	[min ⁻¹]	300 - 1100
Measuring uncertainty	[gmm]	
Measuring time	[s]	10
Air pressure	[kPa]	600
Power supply	[V]	230
Power consumption	[kVA]	0,7

Order No.	R0140100.01
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Order No.	R0140103.01
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Adapter spindles for taper cones	Order No.	o.r.
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Adapter spindles for hollow-shank cones	Order No.	o.r.
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Software for correction at fixed locations	Order No.	R0140101.01
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Report printer	Order No.	R0140102.01
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2) Data non-binding, depending on respective equipment

o.r. On request