

HS 10 - 40, HS 10 Twin Balancing Machines for Small Rotors and Complete Assemblies



- Balancing of ready-for-use assemblies without dismantling
- Hard-bearing principle provides for high balancing accuracy and quick change-over from one work-piece type to the next
- Easy and simple operation
- Extensive range of safety equipment for protection classes B und C
- Modular structure caters for a variety of different applications

Range of application

Measurement of the unbalance of complete assemblies such as fan motors in medium to large batches.

Designed for standing or seated operator and for use in varying locations.

Change-over to a different rotor type can be achieved easily within a minimum of time.

Manual unbalance correction by addition of material (e.g. balancing plasticine or metal clips) directly on the machine or by removal of material on optional manually operated or semi automatic machine tools.

Design

Hard-bearing horizontal balancing machine of table-top design with one or two measuring stations. Designed for standing or seated operator with partly automated sequence of operations.

Microprocessor-based measuring instrumentation with permanent calibration.

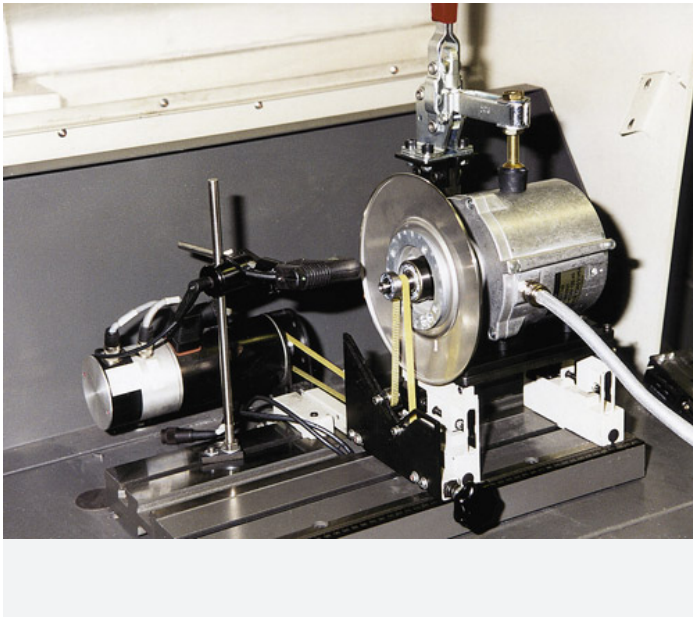
The two bearing pedestals are connected by means of a plate or a frame, accommodating an adapter/clamping device to support the assemblies.

The assemblies are driven by their own drive system through an integral power supply. Alternatively external drive by means of compressed air or belt drive can be used.

Many assemblies, particularly fans for use in vehicles or domestic appliances, gyroscope rotors or hard disc drives have to be balanced in the fully assembled condition.

Even if all individual parts are balanced carefully, assembly of the complete unit will create new unbalances, resulting from manufacturing errors, such as eccentricity, fit tolerances or concentricity errors.

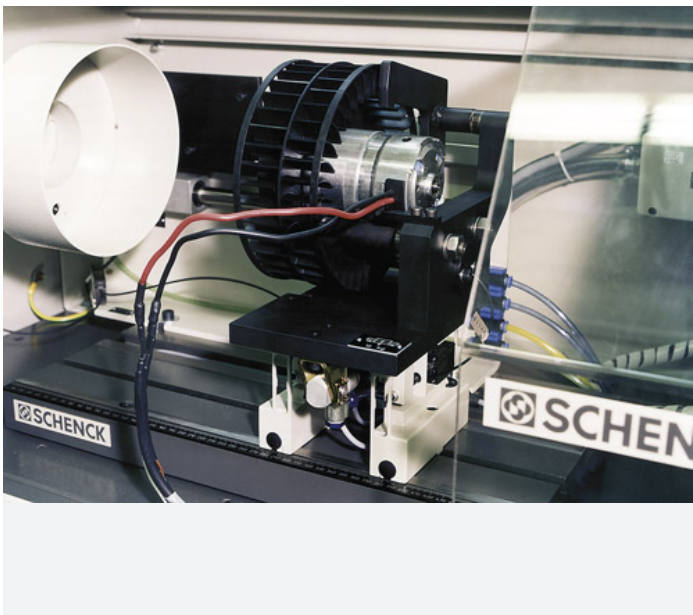
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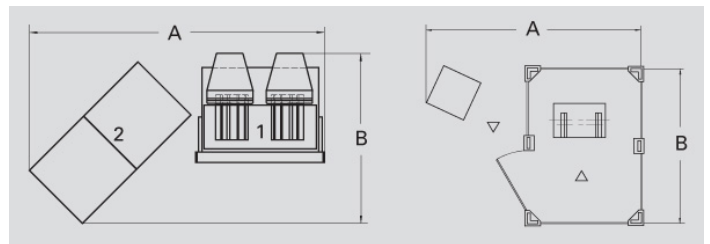
The machine concept is particularly variable. Subassemblies are mounted on specially adapted plates which can be interchanged easily. Underhung belt drive can be used universally for a variety of rotors having their own shaft journals.



For larger batches, a two-station machine is the optimum solution. The machine can be operated in overlapping cycle, i.e. while the unbalance of one rotor is being corrected, the unbalance of the next one can already be measured. Likewise, the operating and safety concept is designed with a view to short cycle times.



Fan motors usually come equipped with power supply connectors or leads and can therefore be accelerated to operating speed most conveniently using their own drive system. A built-in power supply system makes contact with the motor and enables the assembly to be tested at operating conditions coming as close as possible to the actual operating conditions.



1 Balancing machine 2 Measuring device

left: HS 10 Twin plan view (non-binding example)
right: HS 20 plan view (non-binding example)

HS 10 - 40, HS 10 Twin

Balancing Machines for Small Rotors and Complete Assemblies

Technical data at a glance	HS 10	HS 10 TWIN	HS 20	HS 30	HS 40
Measuring unit	CAB 700	CAB 700	CAB 700	CAB 700	CAB 700
Number of measuring stations	1	2	1	1	1
Drive by the rotor's own drive system	•	•	•	•	•
Protective device as per ISO 7475	•	•	•	•	•

Rotor

Weight, max.	[kg]	16	16	100	700	3000
Bearing journal diameter		6 - 70	6 - 70	9 - 140	10 - 160	15 - 240

Machine

Weight A	[mm]	980	980	1260	2620	3160
Depth B	[mm]	850	850	1175	2380	2380
Height C	[mm]	1520	1520	1465	2245	2245
Bearing cradle height	[mm]	105	105	240	430	510
Bearing cradle distance	[mm]	450	310	650	1300	1800
Balancing speed	[min ⁻¹]	variable	variable	variable	variable	variable
Measuring uncertainty	[gmm]	0.2	0.2	1.6	4	8
Measuring time	[s]					
Power supply	[V]	230	230	400	400	400

Order-Nr.	R0110100.01	R0110200.01	R0110300.01	R0110400.01	R0110500.01
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Order-Nr.	R0110101.01	R0110201.01	R0110301.01	R0110401.01	R0110501.01
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Report printer	Order-Nr.	R0110103.01	R0110203.01	R0110303.01	R0110403.01	R0110503.01
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Roller carriage assembly	Order-Nr.	-	-	R0110304.01	R0110404.01	R0110504.01
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Underslung belt drive BU	Order-Nr.	-	-	R0110305.01	R0110405.01	R0110505.01
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2) Data non-binding, depending on the respective equipment

3) Main configuration: 3 / PE AC 50Hz 400 V +6 / -10%

4) With optional roller carriage assemblies

o.r. On request