

HM 20 - HM 30
Horizontal Balancing Machines



- Universally applicable
- High balancing accuracy
- Easy upgrading through modular structure and a wide range of accessories
- Hard-bearing principle ensures fast change-over
- CAB 700 or CAB 920 measuring instrument, with extensive operator prompting
- Extensive safety equipment for all protection classes

Range of application
Universal balancing machines series HM enable precise balancing of a wide spectrum of rotors. They are suitable for cylindrical rotors having their own shaft journals and for balancing disc shaped rotors on balancing arbors.

Permanent calibration, ergonomic design and a logical operating sequence facilitate operation.

A modular design principle and a wide range of accessories make the machine highly flexible.

Schenck universal balancing machines series HM are a highly efficient investment, both for one-off rotors and for small batches.

Sequence of operations

- Manually load work-piece on the bearing pedestals, close hold-down bearings and connect drive (belt drive or drive shaft).
- Close protection device and start automatic measuring sequence:
- Acceleration, determination and display of the unbalance on the measuring instrument, brake. The readout is retained on the measuring instrument even after the measuring run has ended.
- Open protection device, manually correct unbalance (if required).
- Check correction result (with measuring instrument displaying whether the tolerance has been achieved) and unload the rotor from the machine.

Special features

- Easy to operate – hard-bearing principle eliminates the need for calibration runs
- Provides for correction in two planes or separate according to static and couple unbalance
- Rotors can be mounted on their original shafts or on mounting arbors, optionally with mounted anti-friction bearings
- Angle indexing display in case of belt drive
- Automatic measuring cycle with infinitely variable settings for acceleration, measuring and braking time
- Upgradeable by many additional modules e.g. for mass correction

SCHENCK

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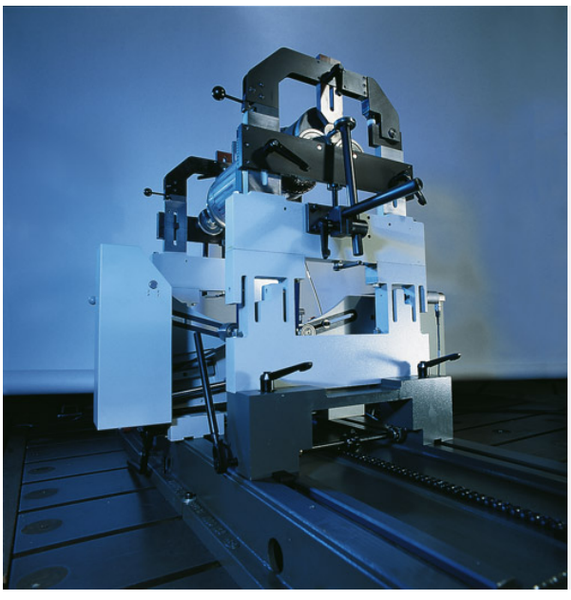
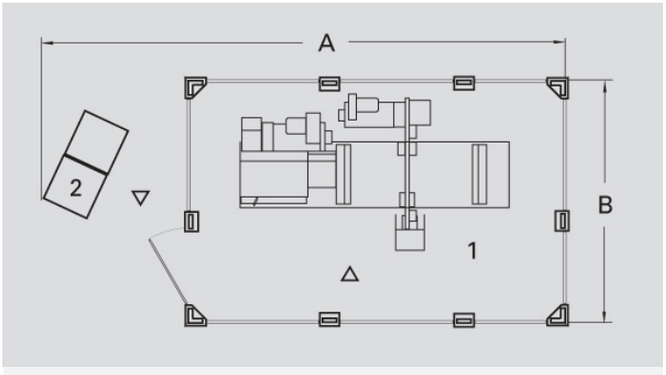


HM bearing pedestals: Extremely slim but highly sturdy bearing pedestals guarantee high overall stiffness, high linearity and low damping.Use of the Schenck force-measuring principle, with the middle part of the bearing pedestal designed as a dynamometer. The sensors are arranged outside the force path and are therefore not affected by impacts.



1 Balancing machine2 Controls and measuring device

Plan view (non-binding example)

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Technical data at a glance		HM 20	HM 3	HM 30
Measuring unit		CAB 700	CAB 700	CAB 700
Roller carriages		•	•	•
Underslung belt drive BU		•	•	•
End drive			•	•
Protective device as per ISO 7475		•	•	•
Rotor				
Weight, max.	[kg]	100	300	700
Diameter, max.	[mm]	1260	1260	1260
Bearing distance, max.	[mm]	1330	1330	1330
Bearing journal diameter	[mm]	9 - 140	9 - 140	10 - 160
Machine				
Width A	[mm]	2250	2250	2250
Depth B	[mm]	1650	2250	2250
Height C	[mm]	2000	2000	2000
Balancing speed, min.	[min -1]	120	120	120
MARU	[gmm]	1,6	2,0	3,0
Air pressure	[kPa]	-	600	600
Power supply	[V]	400	400	400
Drive power	[kW]	1,1	2,2	2,2

	Order-Nr.	R0060400.02	R0060500.02	R0060600.02

	Order-Nr.	R0060401.01	R0060501.01	R0060601.01
Software options		o.r.	o.r.	o.r.
Angular roller bearings		•	•	•
Overslung belt drive BK		•	•	•
Various roller carriages		o.r.	o.r.	o.r.
Report printer	Order-Nr.	R0060405.01	R0060505.01	R0060605.01
Mass correction system	Order-Nr.	o.r.	o.r.	o.r.

2) Other data upon request

3) Mains configuration: 3 / PE AC 500Hz 400 V +6 / -10%

4) Minimum achievable residual anbalance per balancing plane

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5) Up to HM 10 with protection class C, in all other cases protection class B

o.r. On request

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