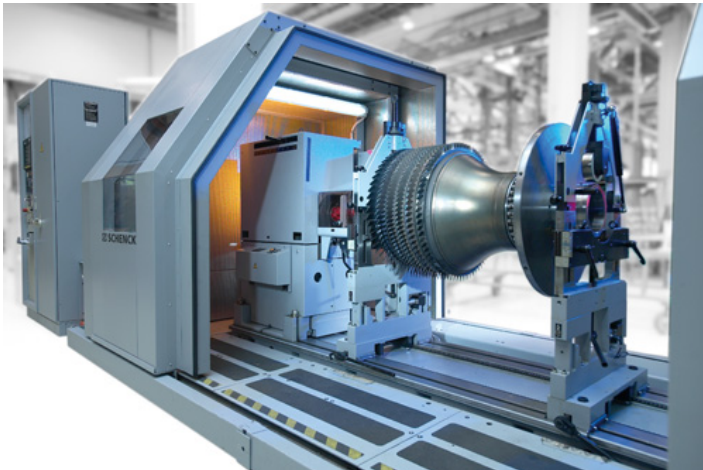


HL 1 - 6 Horizontal Balancing Machine for the Aircraft Industry



- Modular design for various application options and drive systems
- Simple and secure operation
- Extensive protection and safety equipment for operators, machine and environment
- High measurement accuracy through digital measured data processing

Design

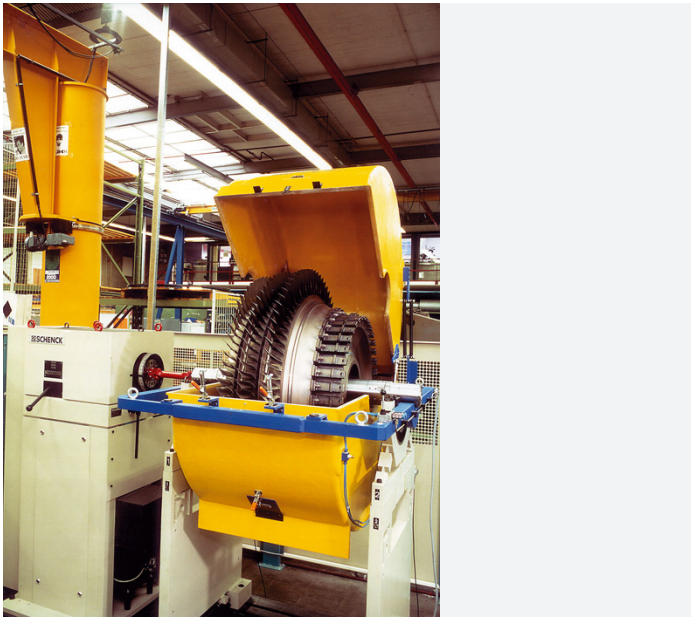
Force-measuring, horizontal balancing machine with permanent calibration and manual operation. The machine corresponds to SAE machine classification according to SAE ARP 4048: Rotor support in saddle bearings, microprocessorcontrolled measuring unit and optional protective enclosure (protection class B or C) are specifically designed for the balancing tasks of the aircraft industry. They are equipped with end and/or belt drive systems. A large range of accessories is available for expanded range of tasks.

Range of application

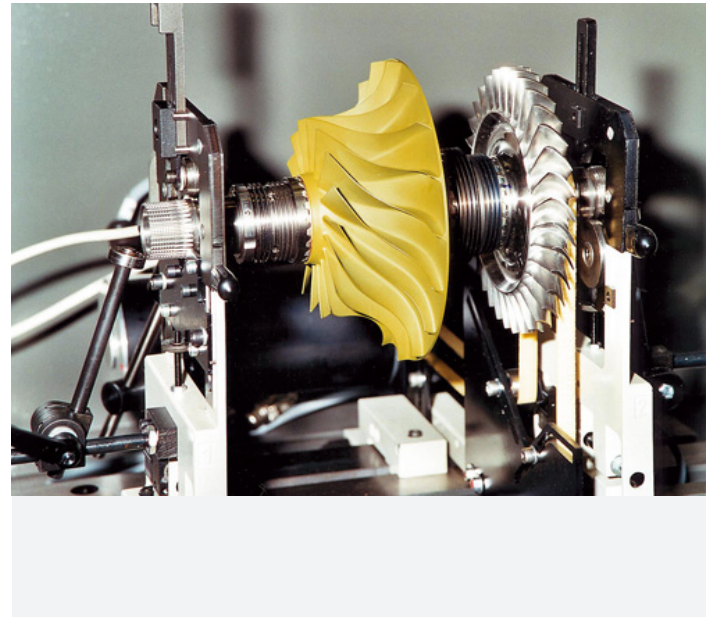
Series HL balancing machines with saddle-bearings are specifically designed for balancing turbines and compressors in manufacturing and overhaul workshops in the aircraft industry. The modular concept allows adaptation to a wide range of balancing tasks through simple exchange of standard components, e.g. by supporting rotors with shaft journals on roller-bearings.

HL 1 - 6

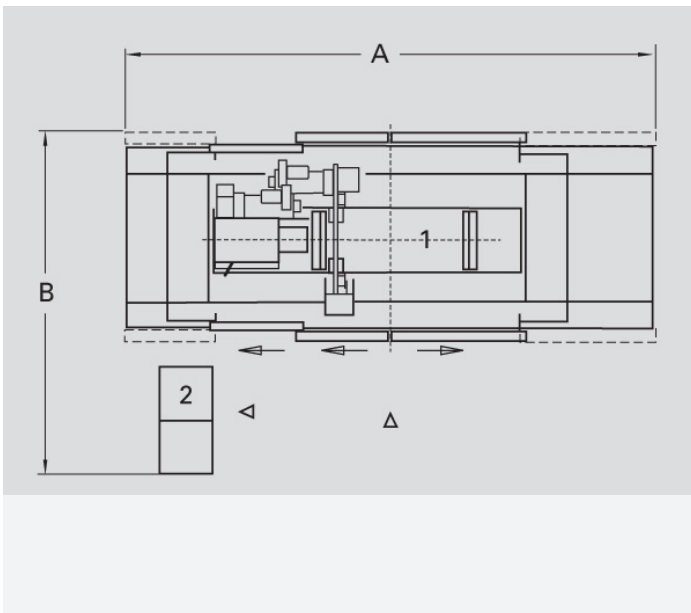
Horizontal Balancing Machine for the Aircraft Industry



A special feature is the dynamometer principle of the support pedestals that accommodate large initial unbalances due to their rugged construction. This allows not only permanent calibration and simple change over of the machine, but also guarantees an especially high balancing accuracy.



The machine series covers a large weight and diameter range. This provides tailor-made solutions for SAE class 30 to 3000 machines. From the smallest APU to the largest fan rotor, Schenck RoTec's HL machines offer the highest quality and maximum safety.



1 Machine 2 Switch cabinet and measuring device
Plan view (non-binding example)

HL 1 - 6

Horizontal Balancing Machine for the Aircraft Industry

Technical data at a glance		HL 1 BU	HL 2 BU	HL 3 UB	HL 4 UB	HL 5 UB	HL 50 UB	HL 6 U
Measuring unit		CAB 925	CAB 925	CAB 925	CAB 925	CAB 925	CAB 925	CAB 925
End drive				•	•	•	•	•
Belt drive		•	•	•	•	•	•	
SAE Mechine class	[lb]	30	100		300	1000	3000	
Rotor								
Weight	[kg]	16	1 - 100	1,5 - 200	1,5 - 700	5 - 1400	20 - 2800	50 - 5000
Diameter, max.	[mm]	360	800	1260	1600	1600	3000	3400
Journal diameter	[mm]	6 - 70	9 - 140	9 - 140	12 - 200	18 - 280	35 - 305	35 - 305
Saddle size	(Zoll)	4	6	6	10	13	20	20
Saddle insert	(Zoll)	-	-	-	10 / 8	-	20 / 13	-
Length, max.	[mm]	450	1380	1540	2170	2435	3860	4000
Machine								
Width A	[mm]	1500	2500	3500	4500	5000	7000	8000
Depth B	[mm]	1000	1500	2000	2500	2500	3000	5500
Height C	[mm]	2000	2000	2000	2000	2000	2000	2500
End-drive								
Variable balancing speed, max.	[min ⁻¹]	-	-	1130	1340	960	960	2180
Drive power	(kW)	-	-	2.2	7.5	37	55	max. 250
Belt drive								
Variable balancing speed, max.	[min ⁻¹]	1140	1600	1900	1600	1350	2520	-
Drive power	(kW)	0.13	2.2	2.2	7.5	22	55	-
Balancing accuracy	(μ inch)	10	10	10	10	15	15	15
SAE test rotor, weight	[lb]	11	50	50	50	150	500	500
Power requirement	[V]	230	400	400	400	400	400	400

	Order No.	R0460100.01	R0460200.01	R0460300.01	R0460400.01	R0460500.01	R0460600.01	R0460700.01
	Order No.	R0460101.01	R0460201.01	R0460301.01	R0460401.01	R0460501.01	R0460601.01	R0460701.01
Drive lock	Order No.	-	-	-	R0460402.01	R0460502.01	R0460602.01	R0460702.01
Protective enclosure, type C	Order No.	R0460103.01	R0460203.01	R0460303.01	R0460403.01	R0460503.01	-	-
Protective fence, type B	Order No.	-	-	-	-	-	R0460604.01	R0460704.01
SAE test rotor ARP 4162	Order No.	R0460105.01	R0460205.01	R0460305.01	R0460405.01	R0460505.01	R0460605.01	R0460705.01
Report printout equipment	Order No.	R0460106.01	R0460206.01	R0460306.01	R0460406.01	R0460506.01	R0460606.01	R0460706.01

A large industrial machine, the HL 1-6 Horizontal Balancing Machine, is shown in a factory setting. It has a large, complex rotating assembly with many teeth or blades. The machine is white and blue, and is mounted on a concrete floor.

HL 1 - 6 Horizontal Balancing Machine for the Aircraft Industry

- 2) Corresponding to SAE ARP 4048
- 3) With drive diameter 100 mm, from model HL5UB with 200 mm
- 4) Various drive variants on request
- 5) Data non-binding, dependent on the respective equipment
- 6) With optional roller bearings
- 7) Option
- 8) Power configuration: 3 / PE AC 50Hz 400 V +6 / -10%