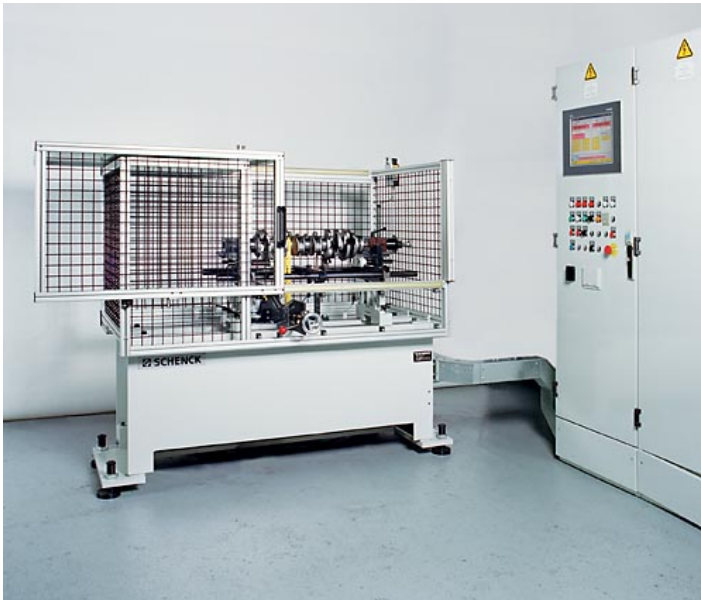


350 MBRK, 550 MBRK, 650 MBRK Checking Machine for Crankshafts



- Quality control of crankshaft castings or forging and finish machined crankshafts
- Manual loading and unloading
- Expandable with a correction unit

Range of application

Unbalance measuring machine for passenger vehicle and commercial vehicle crankshafts of various sizes. Can be used in production for checking production quality of mass-centered castings or forgings and/or of completely machined crankshafts.

Transport of the shafts either manual or by corresponding lifting device.

Special features

Machine concept expandable through modular design. Universal belt-drive or end-driven cage, both require no adapters.

Rotor support between either spindle cones or in a cage with large setting range for crankshaft castings or forgings.

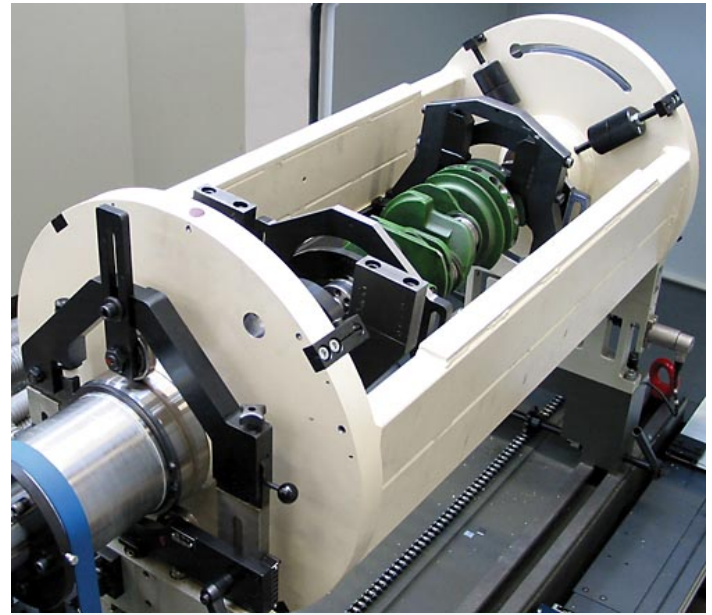
Design

Machines with horizontal rotor axis and rugged sub-critical balancing unit. Belt-drive for the crankshaft and end-drive for the cage. Support of the crankshaft according to requirements and task, between spindle cones or in a cage.

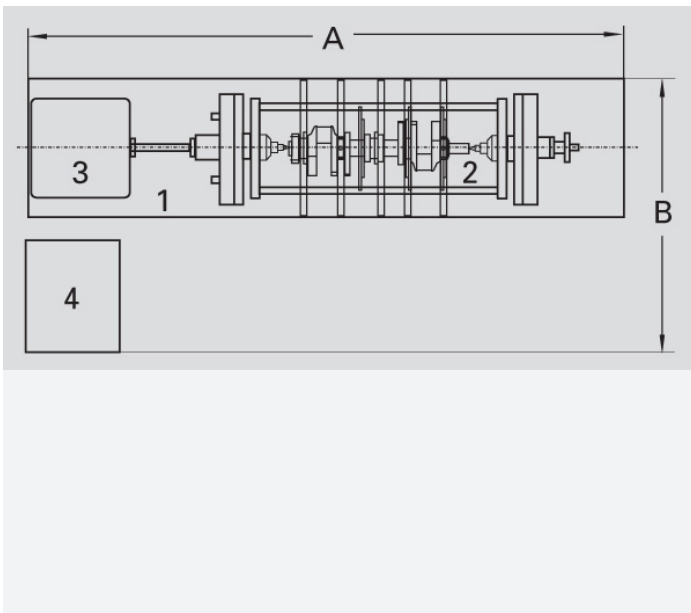
350 MBRK, 550 MBRK, 650 MBRK Checking Machine for Crankshafts



Crankshaft casting supported in rotating spindle cones. Suitable for symmetrical crankshafts. Equipped with belt-drive and angle reference through a single-mark on the rotor. Optional precision roller carriages for directmounting of finish-machined crankshafts.



Balancing cage for all types of crankshafts. Technically correct balancing of asymmetrical crankshafts (e.g. V-shafts) through bias weights. Exact angle position determination by alignment ruler.



1 Balancing machine 2 Balancing cradle 3 Drive 4 Switch cabinet and measuring device

Plan view (non-binding example: dimensions and set-up of the switch cabinet depend on the relevant application)

350 MBRK, 550 MBRK, 650 MBRK Checking Machine for Crankshafts

Technical data at a glance		352 MBRK	354 MBRK	552 MBRK	554 MBRK	555 MBRK	652 MBRK	654 MBRK	655 MBRK	
Measuring unit		CAB 950	CAB 950	CAB 950	CAB 950	CAB 950	CAB 950	CAB 950	CAB 950	
Passenger-vehicle crankshafts		•	•							
Light commercial-vehicle crankshafts		•	•	•	•	•				
Heavy commercial-vehicle crankshafts				•	•	•	•	•	•	
Belt drive BU		•		•			•			
Roller bearings										
...Support between spindle cones		•		•			•			
...Support in a cage between spindle cones			•		•	•		•	•	
Crankshafts										
Weight	[kg]	7 - 75	7 - 30	20 - 150	20 - 190	20 - 190	50 - 300	50 - 250	50 - 250	
Total length	[mm]	max. 1000	310 - 610	max. 1300	430 - 790	630 - 990	max. 2000	630 - 1110	880 - 1360	
Distance between spindle cones	[mm]	-	335 - 590	-	390 - 750	590 - 970	-	580 - 1060	830 - 1340	
Outside diameter	[mm]	-	max. 190	-	max. 260	-	-	-	max. 330	
Main journal diameter, range 1	[mm]	40 - 70	45 - 80	50 - 70	60 - 110	60 - 110	80 - 100	80 - 130	80 - 130	
Main journal diameter, range 2	[mm]	70 - 90	-	70 - 115	-	-	100 - 150	-	-	
Machine										
Width A	[mm]	3600	3600	3800	3800	3800	4100	4100	4100	
Depth B	[mm]	1600	1600	1600	1600	1600	1600	1600	1600	
Height C	[mm]	2200	2200	2200	2200	2200	2200	2200	2200	
Drive power	[kW]	0,65	0,85	1,3	1,75	1,75	2,2	2,2	2,2	
Balancing speed	[min ⁻¹]	400 - 900	550	400 - 800	490	490	390 - 740	400	400	
Measurement uncertainty	[gmm]	30	30	40 - 200	40 - 200	40 - 200	40 - 200	40 - 200	40 - 200	
Cage dimensions										
Clearance between bars	[mm]	-	224	-	290	290	-	360	360	
Spindle sleeve clamping distance	[mm]	-	45	-	50	50	-	60	60	
Length diff. Between cones in the cage	[mm]	-	-	-	80	80	-	100	100	
Distance between cones in the cage										
2 spindle cones, long	[mm]	-	380 - 500	-	440 - 640	640 - 840	-	640 - 920	890 - 1170	
1/1 spindle cone, long/short	[mm]	-	440 - 560	-	520 - 720	720 - 920	-	740 - 1020	990 - 1270	
2 spindle cones, short	[mm]	-	500 - 620	-	600 - 800	800 - 1000	-	840 - 1120	1090 - 1370	
Order No.		R0250200.01	R0250300.01	R0250500.01	R0250600.01	R0250700.01	R0250900.01	R0251000.01	R0251100.01	

350 MBRK, 550 MBRK, 650 MBRK Checking Machine for Crankshafts

	Order No.	R0250202.01	-	R0250502.01	-	-	R0250902.01	-	-
1 x spindle cone, short	Order No.	-	R0250303.01	-	R0250603.01	R0250703.01	-	R0251003.01	R0251103.01
1 x spindle cone, long	Order No.	-	R0250304.01	-	R0250604.01	R0250704.01	-	R0251004.01	R0251104.01

- 2) Centered crankshaft castings or forgings, symmetrical (e.g. straight-four cylinder); support between spindle cones
- 3) Centered crankshaft castings or forgings, symmetrical or asymmetrical (e.g. V-shafts). Support between spindle cones in cage, on request with counter moment
- 4) Data non-binding, depending on the respective equipment
- 5) Acc. to DIN 1319, 95% probability, rotor dependent
- 6) Optional spindle cones, see options