

MAK-BA, MAK-BV Modular Mass Correction System for Universal Balancing Machines



- Time-savings due to correction in the machine
- Universal application range through modular design and infinite setup possibilities
- Simple handling and minimum space requirement
- Manual basic version or optional semi-automation

A complete range of possibilities

Are you thinking of unbalance correction on a universal balancing machine with a horizontal axis?
Now use the MAK system on new machines or as an upgrade to an existing balancing system.

Used in maintenance, repair and overhaul, in one-off and series production of rotating work-pieces as well as complete assemblies.

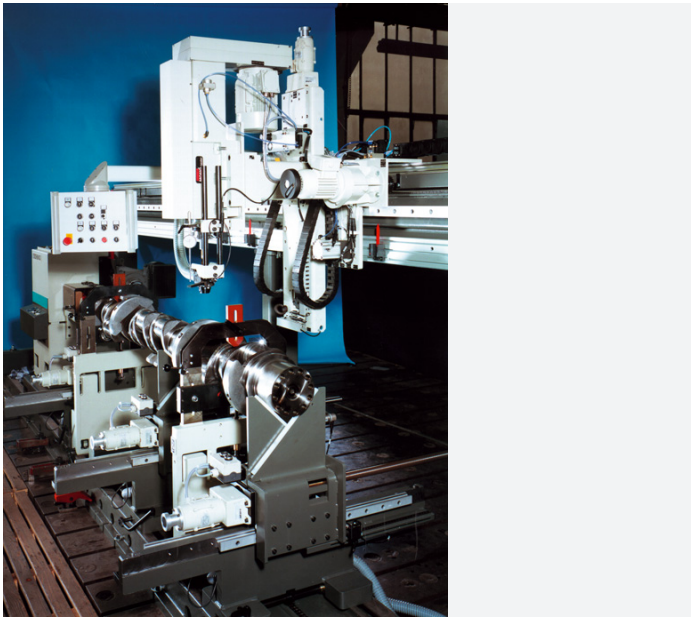
MAK permits direct unbalance correction by drilling at suitable locations on the rotor (material removal) or machining holes for attaching correction weights (weight addition).

- Axial drilling in the end face
- Radial drilling on the outside radius

Modular design

MAK is constructed in modular fashion with many setup options. It can be combined for optimum adaptability to the most diverse rotor types and machine sizes. Further modules can be added at any time.

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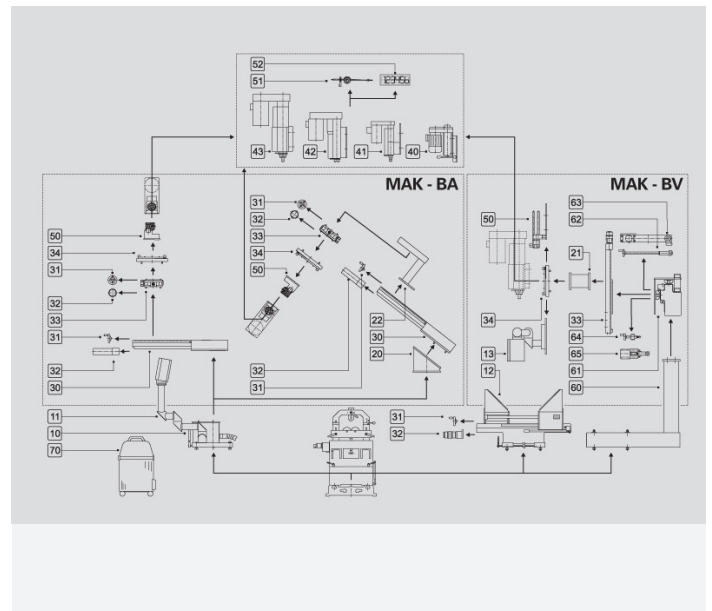
The MAK system gives you the choice between a number of processing units – up to a drilling capacity of 25 mm in ST50. Supporting and counter-holder modules absorb the drilling forces. The chip extractor prevents excessive contamination of the machine.



All modules are ergonomically designed with a view toward simple operation. Valuable time is saved by a motorized feed mechanism for the processing unit, the pneumatic spindle feed or the display unit for the required correction.



In this H10-BK balancing machine for rotors up to 16 kg, vertical correction units were adapted with swivelling drill units. Unbalance correction with radial and inclined drilling directions are no problem with this arrangement.



BA drilling units, arranged axially
BV drilling unit, arranged vertically from above

- Basic modules
 10 Basic unit MAK-BA
 11 Operating panel MAK-BA
 12 Drill counter-pressure holder BV
 13 Operating panel MAK-BV

Adapter

MAK-BA, MAK-BV

Modular Mass Correction System for Universal Balancing Machines

Technical data at a glance	MAK10BV	MAK10BV	MAK15BV	MAK18BV	MAK25BV	MAK10BA	MAK10BA	MAK15BA	MAK18BA	MAK25BA
Drilling radial	•	•	•	•	•					
Drilling, axial						•	•	•	•	•
Manual feed	•		•			•		•		
Automatic feed		•		•	•		•		•	•

Mass correction system

Machine height	[mm]	180	630 / 800 / 1050	630 / 800 / 1050	630 / 800 / 1050	630 / 800 / 1050	180	630 / 800 / 1050	630 / 800 / 1050	630 / 800 / 1050	630 / 800 / 1050
Portal slide, travel	[mm]						-	-	-	-	-
Radial slide, stroke	[mm]	-	-	-	-	-	100	400 / 800 / 1200	400 / 800 / 1200	400 / 800 / 1200	400 / 800 / 1200
Advance slide, stroke	[mm]	160 / 320	400 / 630 / 800	400 / 630 / 800	400 / 630 / 800	400 / 630 / 800	40	400 / 630 / 800	400 / 630 / 800	400 / 630 / 800	400 / 630 / 800
Correction radius	[mm]	180	350	350	350	350	95	350 / 750 / 1150	350 / 750 / 1150	350 / 750 / 1150	350 / 750 / 1150
Drill capacity	[mm]	10	10	15	18	25	10	10	15	18	25
Drill depth max.	[mm]	40	75	75	80	60	40	75	75	80	60
Spindle connection cone		B12 SE25	MK3	ISO30	ISO40	B12 SE25	SE25	MK3	ISO30	ISO40	
Clamping collet, inter-mandrel		- ER25	MK3	MK3	MK3	- ER25	ER25	MK3	MK3	MK3	
Feed force	[N]	-	1450	-	2850	8200	-	1450	-	2850	8200

Order No. R0820100.01 R0820200.01 R0820300.01 R0820400.01 R0820500.01 R0820600.01 R0820700.01 R0820800.01 R0820900.01 R0821000.01

Order No. R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01 R0820101.01

- 2) At 600 kPa
- 3) Dependent on drill depth display
- 4) Determined by bed length
- Other applications on request