

Universal Balancing Machine

UVK



Advantages

- No test runs, permanent calibration.
- Universal application.
- Easy operation.
- Display of unbalance or of correction after first measuring run.
- Very rigid design.
- High service reliability.
- Wear-free measuring system.
- Three-phase drive with frequency inverter
- Adjusting acceleration ramp.
- Variable control cabinet position.
- Modular design.
- Prepared for later on mounting of correction units.
- Special correction units possible.

Applications

- Balancing of any disc-shaped rotors without their own shaft journal.
- Application in small series production in the automotive and supplier industries of
 - Flywheels
 - Clutches
 - Turbine wheels
 - Gear box parts, etc.
- Customized unbalance correction in polar or component format by
 - axial or radial drilling
 - welding of strips
 - pressing of weights or rivets.
- Loading:
 - Manual,
 - Automated with gantry loader,
 - Automated with robot,
 - With lift swivel transport.

Description

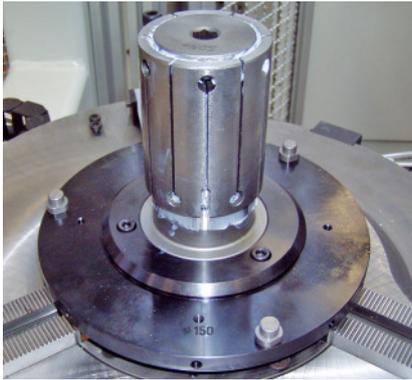
- Vertical hard-bearing balancing machine for measuring and correcting unbalance in one or two planes with manual, semi-automatic or fully automatic operation.
- The workpiece is clamped and centered using a holder with zero-backlash.
- If required unbalance correction can be performed directly on the machine.
- Compensation by vertical drilling can be performed manually using a floating drill unit.



UVK 12.1 with drilling unit



UVK 62.1



Expanding sleeve mandrel



Lamella mandrel



Stepped segment mandrel

Technical data

		UVK4	UVK31	UVK12	UVK62
Rotor:					
Weight ¹⁾	kg	4	30	100	600
Diameter, max. ²⁾	mm	400	400	500	1400
Height, max. ^{1), 2)}	mm	100	300	300	350
Machine:					
Balancing speed	rpm	400 - 1200	250 - 1000	250 - 1000	200 - 500
Min. ach. residual eccentricity	µm	5	5	5	5

¹⁾ With holder, ²⁾ Other dimensions on request, ³⁾ Machine with vertical drilling unit

Options

- Mandrel
- Pneumatic unclamping mechanism for power-operated chuck systems
- Vertical / horizontal drilling unit
- Other correction units on request
- Swarf exhaust unit
- Automated loading:
- Marker system
- Test rotor with calibration weight
- Correction angle indexing aid PosiQuick®
- Automatic indexing
- Statistics software
- Interfacing with master computer

- Report printer
- Label printer

Scope of supply

- Rigid machine housing
- Measuring system
- Hinged guard class C as per ISO 7475
- Sensing device
- Machine control
- Measuring unit with keyboard and monitor in rolling cabinet
- Balancing software with various balancing algorithms