

from development to implementation

Product information

VSTest 6.xx-xV-BASIS

Universal vertical balancing machines with high sensitivity





Machine use

These machines are designed for balancing any shape of a disc without an inner shaft in one or two planes.

Field of use

Balancing in small series and it is possible to balance:

- Flywheels
- Gearboxes parts
- Fans
- Clutch lamellae
- Clutches etc.

Unbalance correction

The basic machine BASIS can be upgraded with a correction by:

- Drilling
- Welding
- Riveting
- Milling etc.

Manipulation

The basic machine BASIS can be upgraded with a manipulation:

- Gantry loader
- Reservoir systems
- Robotic inserting
- Conveyor belts etc.

Parts clamping

Parts can be clamped on the machine:

- Mechanically
- Pneumatically
- Special clamping etc.

Features and functions

- Very rigid machine design
- Detection of operation errors and their displaying in the program
- Centrally located controls ensure easy control and testing
- Digital control unit with a touch LCD screen
- Automatic identification of empty reservoirs
- Automatic disc insertion into the balancing unit
- Very high speed of testing
- Piece rotation into a defined drilling position
- Quick and accurate size identification and the angle of the unbalance
- Safety cover ensures totally safe operation
- High machine frame stiffness and resistance to vibration
- Extremely accurate metering sensors
- Options of data output via Ethernet or USB
- Ideal ergonomic design
- The machine meets all necessary safety regulations as DIN 51 333, EN ISO 13489, and other European standards









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Description of the software BALANCINGTest v.3

This new software allows evaluating of the size and angle of imbalance. BALANCINGTest is intended not only for standard PC and LCD monitors, but also for industrial systems that are controlled by touch LCD monitors. All measured results are stored in a central database. This database contains basic statistical methods and results filtering by order number, date of testing, type of balanced piece etc. BALANCINGTest software is designed for serial dynamic balancing.

Software BALANCINGTest® characteristics

- Balancing in one or two planes
- Unlimited database of balanced pieces
- Results saving to the database
- Measured results filtration
- Drilling, riveting, welding and milling programs
- Testing cycle monitoring including process blocking
- Completed test automatic control
- Identifying by a part number, date and time of measurement
- Automatic evaluation during the balancing
- Adapted for touch LCD monitors
- Service intervals control
- Communication with STEP 7 software
- Export to SQL format or CSV, Excel etc.
- Protocol printing



Technical data	Units	6.05.xV-B	6.10.xV-B	6.30-xV-B	6.100-xV-B	6.600-xV-B
Weight without accessories	kg	5	10	30	100	600
Minimal height of the balanced piece	mm	5	5	10	20	30
Max. diameter of balanced pieces (acc. the fixture)	mm	300(400)	300(400)	300(400)	500	1100
Maximal height of the balanced piece	mm	150	150	300	400	400
Balancing rotations	rev/min	400-2000	400-2000	400-1500	250-1000	100-500
Minimal residual eccentricity	μm	5	5	5	5	5

Base machine set contains:

- 1 balancing machine base VSTest 6.xx-1V-BASIS
- 1 welded modular construction with precise machining
- 1 base plate with a preparation for the grinding shaft
- 1 Precision grinding shaft on a special storing consisting of: speed sensors, AC induction motor, motor brake, special accurate shaft end, a mechanism for drive of the balanced piece - a belt
- 1 optical contactless sensor for angle measuring and revolutions identification
- 1 protective safety cover
- 1 industrial rack Rittal s circulation unit and these components:
- 1 19" touch LCD monitor
- 1 industrial PC with operation system Windows
- 1 measuring and evaluation unit of the EDC 220 series
- 1 power and control unit for AC motors SIEMENS
- 1 terminal blocks, conduits, cables, filters, optical isolation, connectors, cabling etc.
- 1 software BALANCERTest BASIS in EN
- 1 service remote access LABWEBservis
- 1 documentation in language CZ, EN





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