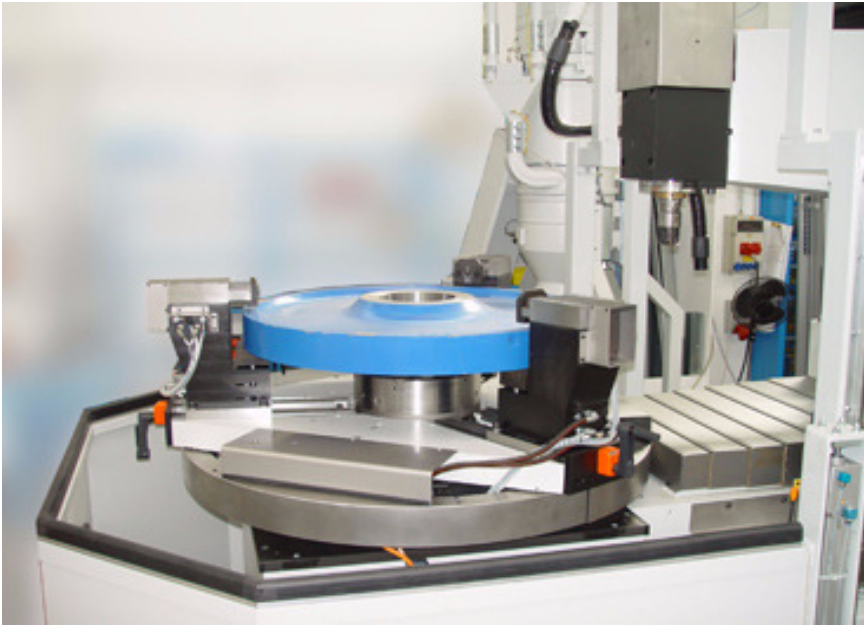


## Balancing Machine for Railway Carriage Wheels

### BVW-F



#### Advantages

- Compact design for minimum floor space requirement
- Manually or automated loading.
- Fully automatic balancing with unbalance correction by milling.
- Permanent calibration.
- Sliding protection opening downwards on 3 sides for optimum loading of workpiece.
- Conforms to UIC 812-3 and EN 13262 technical specification for the supply of solid wheels for traction vehicles and trolleys.
- Simple conversion using workpiece specific adaptor parts.

#### Applications

- Balancing of disc-shaped rotors with large mass and diameter.
- Application in series or single-piece production of:
  - Railway carriage wheels,
  - Wheel brake discs,
  - Friction rings.
- Manual loading and unloading by the operator using a crane with lifting gear or automated with gantry loader.
- Unbalance correction by segment milling on the workpiece circumference with formed cutter.

#### Description

- The workpieces are clamped on the measuring spindle with zero-backlash using a wedge bar chuck for measuring.
- For mass correction the work piece is clamped at the outer diameter by three centring clamps with downholder function.
- The mass-correction is performed per customer specification by segment milling or in accordance with UIC 812-3 and EN 13262 using a formed cutter.
- The resulting swarf is extracted using an exhaust hood and a suction unit.

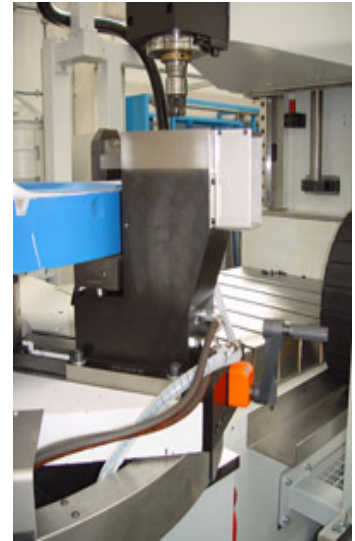
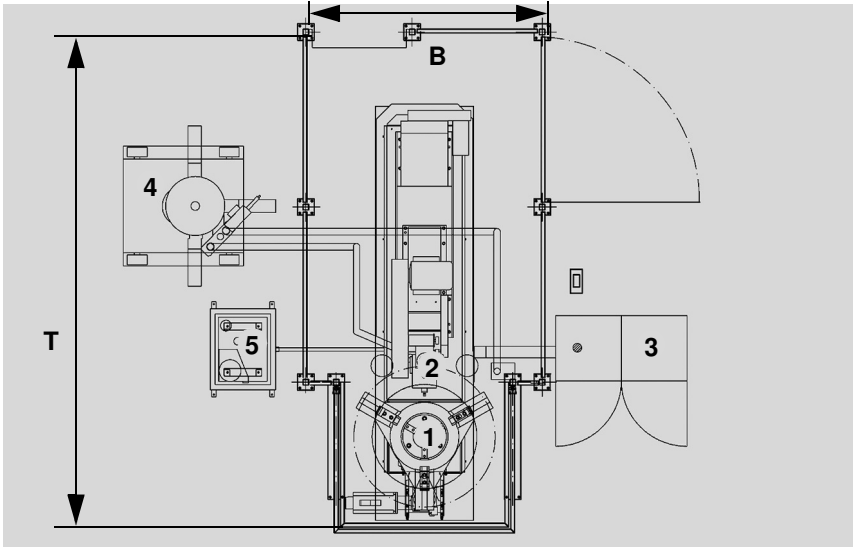


Front view



Side view

**All information without obligation, subject to change without notice**



1 Unbalance measuring, 2 Milling unit, 3 Control cabinet, 4 Swarf extractor, 5 Hydraulics

Clamping block with attachment bracket

### Technical data

		BVW32-FM1	BVW13-FM1
<b>Rotor</b>			
Weight, max.	kg	200	1000
Outer diameter, min.	mm	610	710
Outer diameter, max.	mm	1100	1290
<b>Machine</b>			
Width x depth x height	mm	1550 x 4880 x 3200	2300 x 4670 x 3400
Loading height, approx.	mm	1300	1250
Balancing speed, approx.	rpm	360	250
Measuring uncertainty <sup>1)</sup>	gm	< 0.2	< 0.4
Machining cycles, approx.	min	3 - 4	3 - 4

<sup>1)</sup> Measured with the master rotor, w/o clamping, releasing

### Options

- Cut detection with tool monitoring system
- Gantry loader
- Marker unit (microdot marker)
- Test rotor with calibration weight
- Report printer
- Additional software for statistics and production checking

### Scope of supply

- Rigid machine housing
- Measuring unit with 3-jaw clamping chuck
- NC rotary table with axial clamping chuck
- Milling unit with NC feed
- Swarf extraction unit with exhaust hood
- Protection device class B per ISO 7475 with vertical closing loading door
- Control cabinet with automatic control and measuring unit