

Balancing Machine for Differential Gears

DVW



Advantages

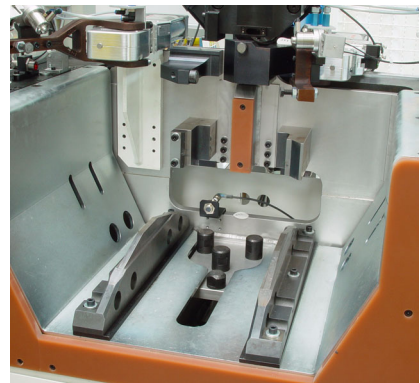
- Simple and safe operation.
- Free access for loading of machine.
- Dual measuring station; i.e. loading and unloading in overlapping cycles (cycle type optimization).
- Compact and clean design.
- Simple switchover from dual to single measuring station.
- Monitoring of loading clearance by light curtain; no opening of loading doors required.

Applications

- Measuring and correcting unbalance in differential gears in one plane, with consideration of the subsequent mounting situation.
- Unbalance correction by radial drilling in polar or component format.
- Alternatively other correction procedures such as milling, welding, riveting, etc. can be provided.
- Loading manually, by crane, by loading gantry or by robots - as required.
- Application in series or single-piece production mainly in the automotive and supplier industries.
- Possible integration into a fully automatic production line.

Description

- Soft-bearing vertical balancing machine for measuring and correction of the unbalance of in one plane (static unbalance).
- The drive unit is attached to a gantry, which enables an alternating and, thus, overlapping loading of the machine.
- The workpiece is clamped by an expanding sleeve mandrel or a membrane mandrel. Other available clamping systems are multi-blade mandrel or segmented mandrel holders.
- Unbalance correction is achieved by drilling in the same station.
- The number of drilling cycles depends on the initial unbalance, on the permitted unbalance removal rate per bore (bore diameter and drilling depth) and on the allowable residual unbalance (unbalance tolerance).

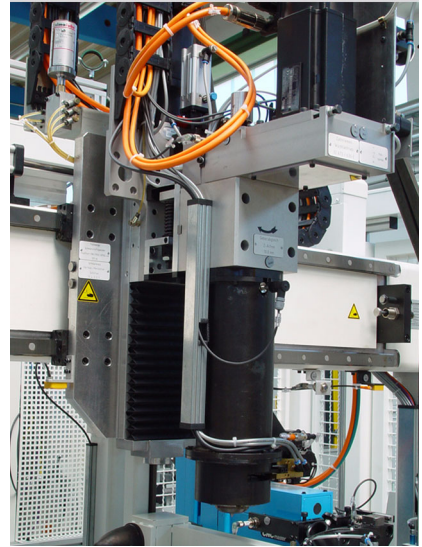
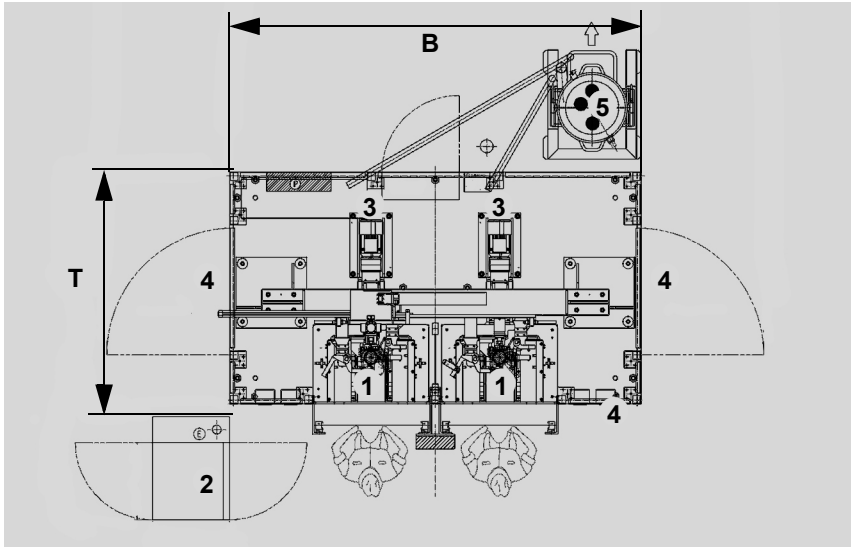


Measuring station



Drilling unit

All information without obligation, subject to change without notice



1 Measuring station, 2 Control panel, 3 Drilling unit, 4 Maintenance door, 5 Chip extractor

Drive unit

Technical data

DVW12B2

Rotor:

Weight, max.	kg	30
Width x depth x height ¹⁾	mm	350 x 300 x 600

Machine:

Width x depth x height	mm	3200 x 1800 x 2400
Balancing speed, approx.	min ⁻¹	800
Measuring uncertainty	gmm	< 10
Drill diameter	mm	7

1) Other dimensions on request

Options

- Hole scanning for identification of forbidden zones, pin scanning and/or simulation unbalances
- Marking device to identify the heavy and/or light side
- Adjustable drill speed
- Simulation unbalance on the drive unit to simulate mounting situation
- Automatic loading
- Test rotor with calibration weights
- Report printer

Scope of supply

- Rigid machine frame
- Measuring system
- Moveable drive
- 2 Drilling units
- Chip extractor
- Protective equipment Class B as per ISO 7475
- Pneumatics
- Machine control
- Measuring unit with keyboard and monitor
- Balancing software with various balancing algorithms