

## Balancing Machine for Turbine Stators

### CVW-B



#### Advantages

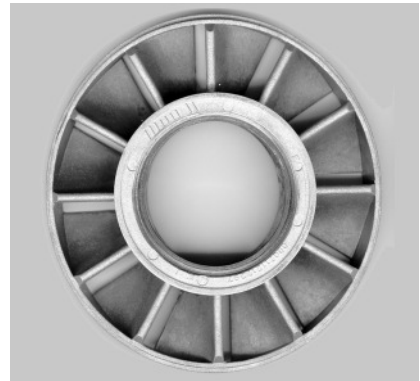
- Compact and clean design.
- Prepared for automation by loading unit.
- Installation of further drilling units for cycle time reduction without modifications to standard unit.

#### Applications

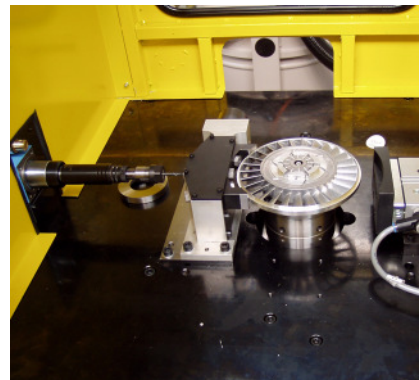
- Measuring and compensation of unbalance in torque converter turbine stators in one plane.
- Application in series or single-piece production mainly in the automotive and supplier industries.
- Unbalance correction by radial drilling in polar or component format.
- Manual loading gantry or robots, as required
- Possible integration into a fully automatic production line.

#### Description

- Soft-bearing vertical balancing machine for disc shaped rotors.
- The workpieces are clamped on the measuring spindle with zero-backlash by an expanding sleeve mandrel.
- For compensation of the unbalance the workpiece is pressed by pressure pad on the external diameter against the drill head.
- The unbalance is corrected by drilling. The number of drilling cycles depends on the initial unbalance, on the dimension of the compensation bore (bore diameter and drilling depth) and on the allowable residual unbalance (unbalance tolerance).
- The resulting chips are extracted using an exhaust hood positioned over the drill head.

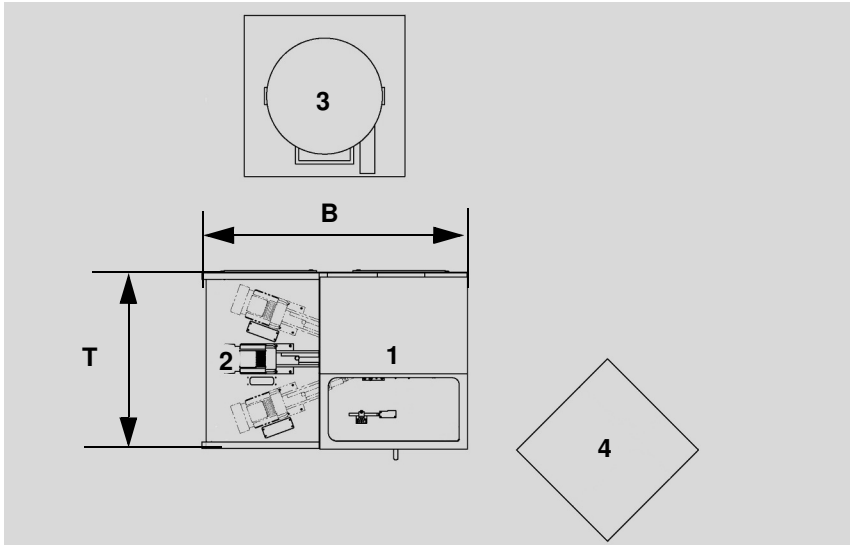


Turbine stator

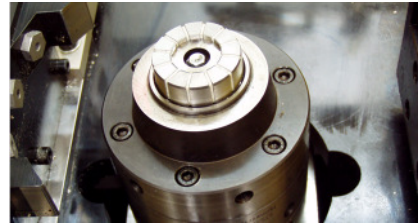


Drilling unit with pressure pad

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



Drilling unit



Expanding sleeve mandrel

1 Measuring station, 2 Drilling unit, 3 Chip extractor, 4 Switch cabinet

## Technical data

<b>Rotor:</b>		
Weight	kg	0.5 to 10
External diameter <sup>1)</sup>	mm	120 to 220
<b>Machine:</b>		
Width x depth x height	mm	1200 x 820 x 1400
Footprint width x depth	mm	2300 x 2450
Balancing speed, approx.	RPM	650
Measuring uncertainty <sup>2)</sup>	gmm	< 2,5
Cycle time <sup>3)</sup>	sec.	25

1) Other dimensions on request

2) W/o balancing holder

3) With one unbalance correction and check run

## Options

- Additional drilling units
- Adjustable drill speed
- Variable drilling depth
- Automatic loading
- Test rotor with calibration weights
- Report printer

## Scope of supply

- Rigid machine frame
- Measuring system
- Spindle with holder and drive
- Drilling unit and pressure pad
- Chip extractor
- Protective equipment Class C as per ISO 7475
- Pneumatics
- Machine control
- Measuring unit with keyboard and monitor
- Balancing software with various balancing algorithms