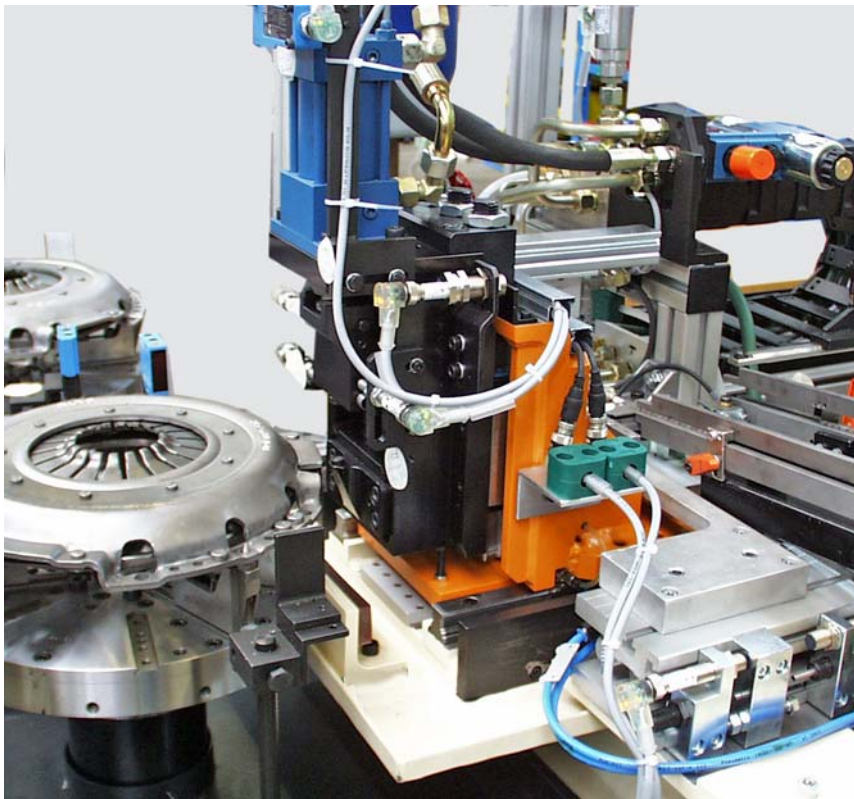


## Balancing Machine for Clutch Pressure Plates

### CVW-N



#### Advantages

- Integration in production line.
- Fully automatic operation.
- Easy and unproblematic changeover with interchangeable parts.



#### Applications

- Balancing of clutch pressure plates in a fully automatic production line in the automotive and automotive supplier industry.
- Unbalance correction by insertion of correction rivets with two different weight ranges.
- Loading as required
  - with gantry
  - with robot
  - manually
- For reduction of cycle time a second servomotorically moveable measuring station, is available as an option.

#### Description

- Displacement measuring, vertical balancing machine for measuring and correction of unbalance of disc shaped rotors in 1 plane.
- The work piece is clamped on the measuring spindle with zero-backlash with a 3-jaw chuck .
- The correction rivets are fed by a oscillating conveyor and transferred to the riveting unit.
- After insertion the rivets are calked with help of a hydraulic press.
- Changeover for other rotor types by changing of type specific interchangeable parts.

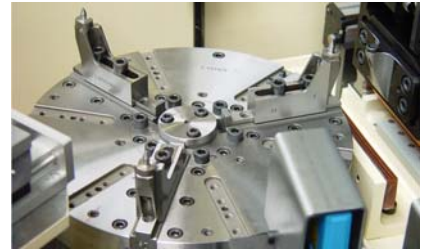
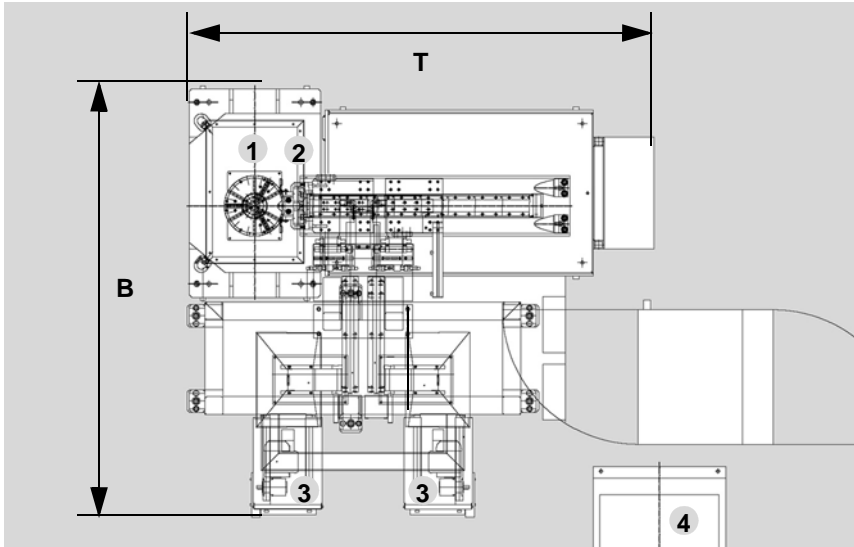


Rivets with different weights, inserted and calked at the top

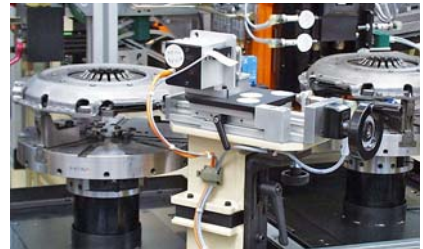


Rivet conveyors

All information without obligation, subject to change without notice



Horn cheek mandrel



1 Measuring of unbalance, 2 Rivet setting unit, 3 Swivelling conveyor, 4 Hydraulic Marking unit

## Technical Data

		CVW11-N1	CVW11-N2
<b>Rotor</b>			
Weight, max.	kg	10	10
Outer diameter, max.	mm	330	330
<b>Machine</b>			
Width x Depth x Height	mm	1950 x 2100 x 2200	2850 x 2200 x 2200
Balancing speed, approx.	min <sup>-1</sup>	600	600
Tolerance <sup>1)</sup>	gmm	< 80	< 80
Cycle time <sup>2)</sup> , approx.	s	30	20
Stations		1	2

1) rotor specific

2) with insertion of correction rivets and control run

## Options

- Second moveable measuring station
- Second oscillating conveyor for different rivet sizes
- Automatic calibration unit (Hofmann patented)
- Loading gantry
- Loading robot
- Marking unit
- Test rotor with calibration weights
- Printer
- Interface to hostcomputer

## Scope of Supply

- Unbalance measuring system with 3-jaw chuck
- Rivet insertion and calking unit
- Feeding of correction rivet by oscillating conveyor
- Measuring electronic with keyboard and monitor
- Machine control unit
- Safety unit class B accord. ISO 7475
- Hydraulic aggregate