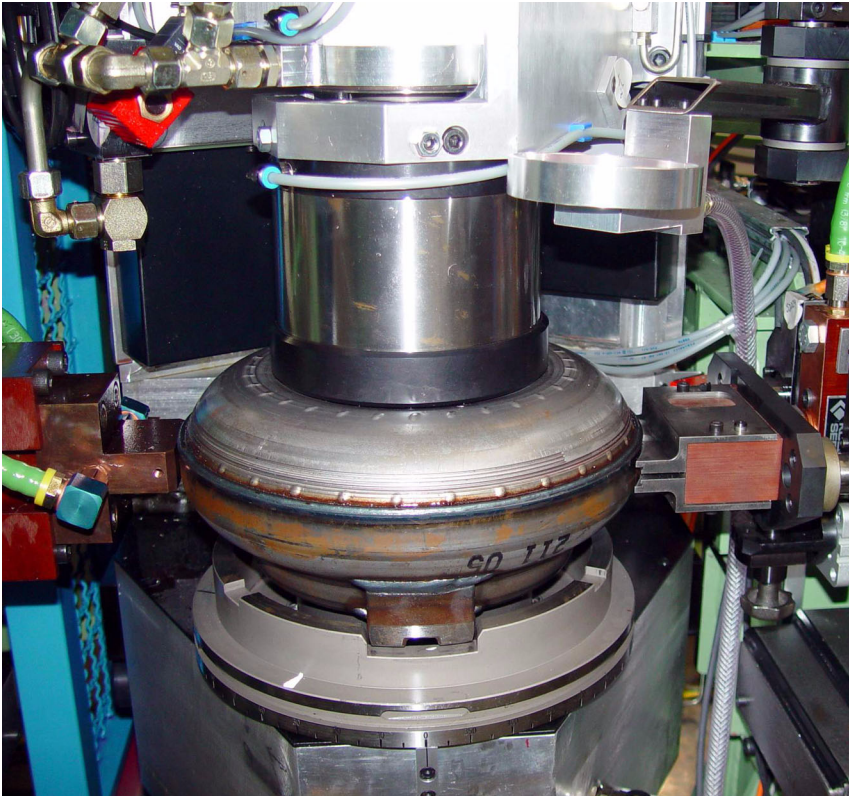


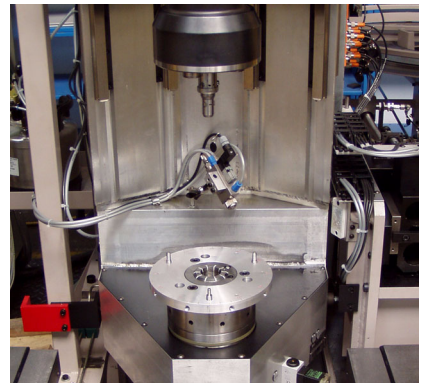
Balancing Machine for Torque Converters

CVW-S



Advantages

- Integration into production line.
- Fully automatic operation.
- Unbalance measurement with synchronous speed or speed differential.
- Adaptor parts for simple and trouble free retooling.



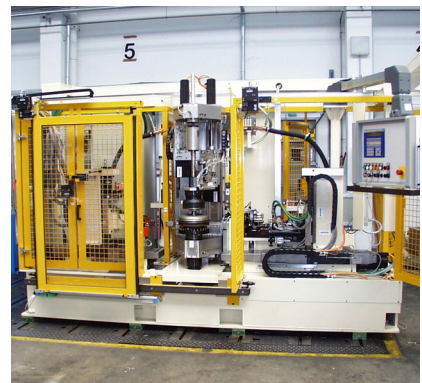
Chucks

Applications

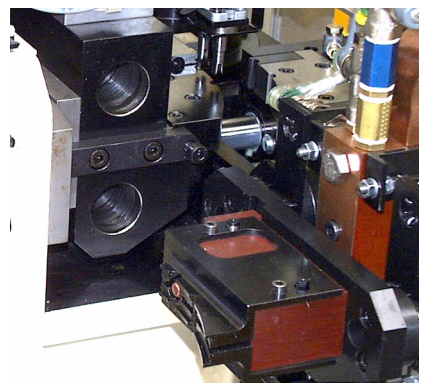
- Balancing of empty or pre-filled torque converters in fully automatic production lines in the automotive and supplier industries.
- Unbalance measurement with synchronous speed or speed differential.
- Addition of required oil quantity for partially filled torque converters.
- Unbalance correction by spot welding of compensation strips of variable size on the outside diameter.
- Loading:
 - Manual,
 - Automated with gantry loader,
 - Automated with robot.

Description

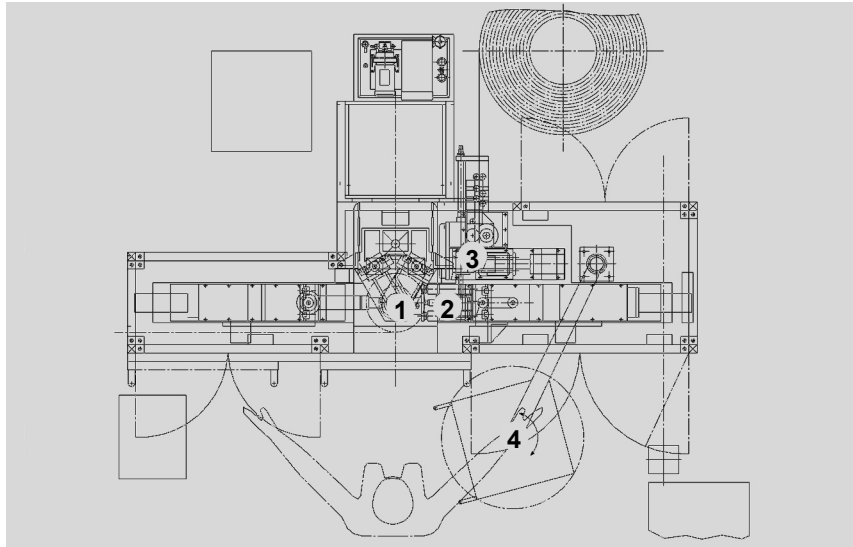
- Soft-bearing vertical balancing machine for measuring the unbalance of torque converters in one or two planes. Unbalance correction in one plane.
- The workpiece is clamped with zero-backlash on the spigot and on the hub. Clamping by chuck or latching roller chuck. The internal converter parts, the turbine and the stator, are centred using a spindle sleeve.
- The compensation strips are fed from the hasp, cut to length hydraulically, shaped and transferred to the welding tongs.
- Once the workpieces have been indexed to the compensation position, the spot welding device advances to the welding location using a servo sliding unit.
- The conversion to other workpiece types is achieved by exchanging type-specific adaptor parts.



General view



Cutting unit, transfer unit and welding rod
All information without obligation, subject to change without notice



Marker unit



Spindle sleeve

1 Holder, 2 Welding tongs, 3 Cutting/shaping unit, 4 Control panel

Technical data

		CVW41-SL	CVW12-SM
Rotor			
Weight (filled), max.	kg	25	80
Diameter	mm	250 - 290	250 - 400
Machine			
Width x depth x height	mm	3200 x 1500 x 2300	1700 x 1700 x 2900
Balancing speed, approx.	min ⁻¹	650	650
Measurement uncertainty ¹⁾ , approx.	gmm	30	
Tooling compensation	gmm	40 - 60	
Cycle time	sec.	50 - 60	

1) Depending on workpiece

Options

- Unbalance measurement with synchronous speed and speed differential
- Unbalance measurement in two planes
- Addition of missing oil quantity in converter in the measuring station
- Latching roller chuck or expanding sleeve mandrel
- Marker unit
- Alignment station
- Loading gantry or robot
- Interfacing with host computer

Scope of supply

- Unbalance measuring system with clamping device
- Welding station
- Hasp
- Cutting and shaping unit for compensation strips
- Medium frequency spot welding unit with cooling system
- Measuring unit with keyboard and monitor
- Machine control
- Protective equipment Class B as per ISO 7475
- Hydraulic unit