

# VSR 400

High speed balancing machine for passenger cars and light commercial vehicle turbocharger CHRA's.



## THE TURBO TECHNICS VSR™, “THE ORIGINAL VSR”.

The VSR™ or **Vibration Sorting Rig** was first launched in 1984 in response to the problem of vibration occurring at high speed in turbochargers fitted to passenger cars.

The VSR™ was designed to measure vibration within the complete rotating assembly at speeds similar to the level seen in the vehicle.

The VSR 400™ series is designed for volume OE and Aftermarket Production and is available with a number of features that suit higher volume turbo production.

In addition to the VSR 400™, three separate models are available to suit the various demands of turbo production (see over).

ENGINEERED & ASSEMBLED  
IN GREAT BRITAIN. EST 1981



# TURBO TECHNICS

[www.turbotechnics.com](http://www.turbotechnics.com)

# SPECIFICATIONS

- Speed capability up to 300,000 rev/min
- Turbo Technics designed computer with touch-screen control
- Customised print-out of balance data
- Internal test data storage
- Internet connection for factory diagnosis
- Low consumption compressed air system
- Integral cutter for balance corrections
- Convenient single phase electrical power connection
- Integral compressed air exhaust silencer
- Large range of Turbo Technics approved quick-change CHRA specific turbine housing adapters (available separately)

## Standard features additional to the VSR 3

- Compact design with safety door (available in a custom colour at extra cost)
- Integral oil tank with and 3-stage filtration system
- Automatic oil purge
- Oil temperature control
- Data Collection software designed to allow multiple Turbo Technics VSR and VTR machines to automatically transfer test data to a PC on the factory network.
- Language selection
- Choice of standard or user-defined operating templates

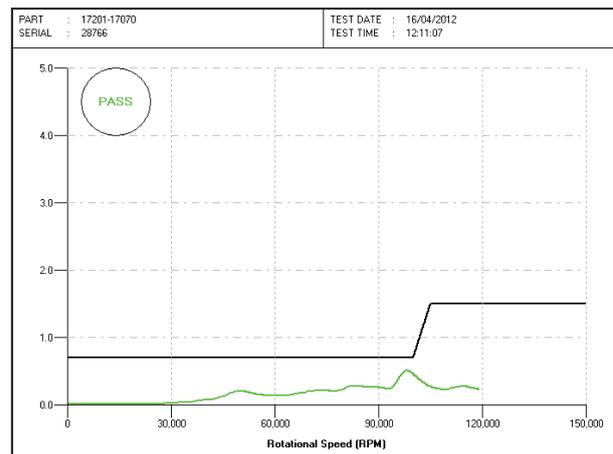


Easy to use computer interface, with visual vibration graph, allowing identification of imbalance.

## OPTIONAL FEATURES

- **Second cutter** - for 2-plane balance correction, used by OE turbo manufactures to allow balance correction to be made on the impeller as well as the nose nut. This enables the CHRA to be balanced to very tight tolerances. The second cutter is operated by the foot pedal and also activates a rotor lock that stops the shaft from turning during balance corrections.
- **Automatic door** - automatically opens when the test is complete.
- **Automatic test cycle** - the test starts when the door is closed, the door automatically opens when the test is complete.
- **Oil mist extraction** - which uses a vacuum to extract oil mist created by the higher volume of tests the VSR4 is capable of.
- **Automatic length set** - a sliding base automatically moves the speed sensor to the correct position, a special cutter is mounted to the base. This hand operated cutter replaces the hand held grinder and allows for very precise cuts to be made to the nose nut that give the appearance of an OE turbocharger. Only available with Automatic test cycle operation.

VSR	410	420	430
Second cutter			
Automatic door			
Automatic test cycle			
Oil mist extraction			
Automatic length set			



Test data can be saved as a report, which can also be printed, to go with the CHRA / Core.

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