

Calorimetric Chargecooler Testing

Young Calibration's Chargecooler Calorimetric Test Facility offers thermal performance characterisation for automotive, marine and industrial heat exchangers worldwide. Although the facility is predominantly aimed at the passenger car market, the wind tunnel and plant can cover charge and intercoolers from small industrial engines to medium-size truck installations and standby compressors.

The facility is one of a few truly independent laboratories offering calorimetric services for OEMs, R&D establishments, motorsport and passenger car manufacturers. The charge cooler facility for air to air and air to water coolers can be adapted to suit varying sizes and design complexity for a host of industries. A continuing upgrade programme ensures the facility remains one of the leading calorimetric test establishments.

Test reports present all the data in tabular and graphical formats, covering air-side pressure drop, charge side pressure drop, heat rejection performance, heat dissipation and thermal efficiency.

Laboratory Facilities

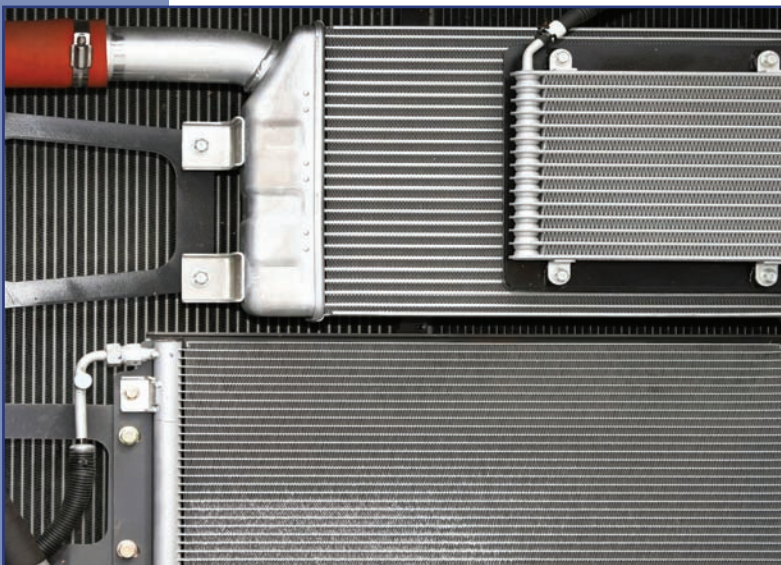
Extensive capabilities exist within the laboratory to cover brick and full-face intercoolers and charge coolers.

Charge Air Specification

- Flow 0.02 - 0.46 kg/s
- Pressure 1.5 - 3.1 barA
- Temperature 100 - 200°C

Cooling Air Specification

- Size 900 x 800 mm
- Flow 30 – 4000 l/s
- Face Velocity 1 - 15 m/s
- Pressure 10 – 1800 Pa
- Temperature 20 - 35 ±1°C



Test Facilities

Other recent testing facilities have included the following:

- Cooler Thermal Imaging
- Race Car duct testing
- Oil and Water Pump Testing
- Fuel Pump / Tank / Line Testing
- Piston Cooling Jet Testing

young

calibration limited