

# Thermal Imaging

As a leading supplier of heat exchanger thermal performance testing, the Thermal Imaging facility provides a user-friendly representation for complex thermal assessments. This quick and easy visual assessment can be taken as a still image or video capture. Post processing of the images can be undertaken to obtain Histograms, 3D views, Isotherms, line, spot and polygon profiles.

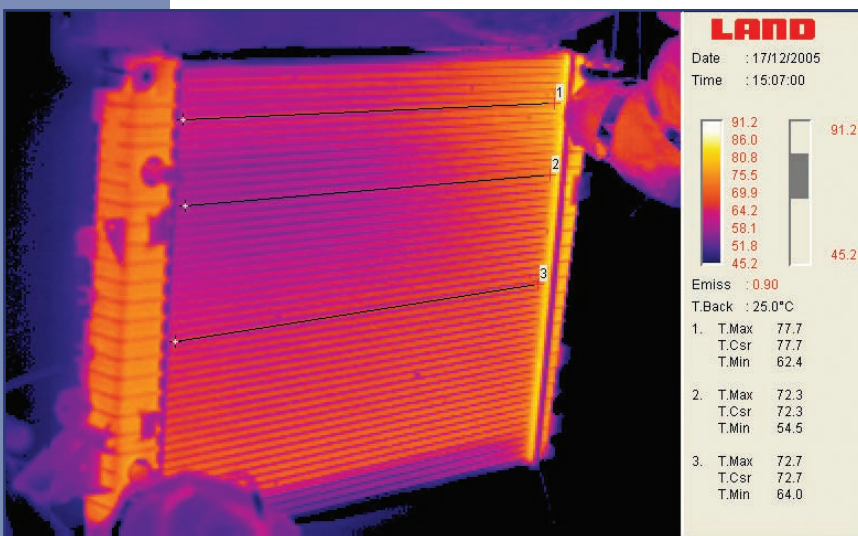
Thermal temperature ranges up to 500°C can be acquired with the standard lens, and optionally up to 1500°C with a replacement lens, covering all the present temperatures observed within automotive heat exchangers and coolers, including EGR coolers.

With over 25 man years of experience in heat exchanger calorimetric testing, thermal imaging facilities and a laser Doppler anemometry system, the Thermal Fluids Laboratory is highly prepared to undertake complex heat exchanger assessments.

Customers looking to undertake thermal imaging assessments should first contact the laboratory to discuss each application in detail and understand the pitfalls and limitations such a system can achieve.

## Applications within the Laboratory

- |  |                         |
|--|-------------------------|
| Flow Profiling Effects                   | Fin Damage              |
| Trapped Air Pockets (Fill Effectiveness) | Tube Coring Issues      |
| Poor Manufacturing                       | Cowling Assessments     |
| Blocked Tubes                            | U Flow End Tank Sealing |



## Camera Specification

- 320 x 240 array
- x2 and x4 Zoom
- Field of View 21°
- Temperature Range -20 to 500°C
- Optional Temp Range to 1500°C
- 8 Colour Palettes
- Detailed Post Processing Software
- Still & Video Output