

Tour of the Hydraulic Research Infrastructure, Department of Engineering, University of Leicester

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The Department of Engineering, University of Leicester, is housed in a purpose-built building, the Engineering Tower, designed by architects James Stirling and James Gowen. Completed in 1963, this is a grade 2* listed building by English Heritage. The vertical layout derives from the original requirement for a large capacity high head water tank, for hydraulic research. This resulted in a water tank with a 100ft (33m) head, of 75,000 litres capacity, discharging in a sump of 200,000 litres through two 12in bore cast iron pipestocks. The water is raised to the high head tank by two 4000 litres/minute centrifugal pumps. The system has been refurbished in 2004 as part of a SRIF2 laboratory re-development initiative. It supplies water to a 12ft long, 3ft wide, 1ft high water channel, coolant water for the microscopy centre and the high-pressure air compressor system, and to other systems.

The tour of the hydraulic research facilities will be an opportunity for looking more closely to this historical and valuable system that is available for both academic and industrially relevant work to interested parties. The tour will be preceded by a short presentation in the Thermodynamics laboratory where the elements of the system not accessible to the public due to safety reasons, such as the header tank and the sump, will be covered.