

Glasgow University 9 x 7 Low Speed Wind Tunnel

LS5

<p>Location: University of Glasgow</p>	<p>Designation: Low Speed Closed Return</p>
<p>Owner(s): Aerospace Sciences Division. School of Engineering University of Glasgow, Glasgow, G12 8QQ United Kingdom</p>	<p>Performance: Mach Number: 0.2 (max) Maximum Flow Speed: 70 m/s Reynolds No: 4×10^6/m (max) Total Pressure: 1 bar Dynamic Pressure: Up to 2.94 kN/m² Total Temperature: Ambient to 300K Turbulence intensity: <0.2% Run Time: Continuous Typical Recharge Time: n/a.</p>
<p>Test Section Size: 2.74m x 2.1m x 5m 5:1 contraction ratio.</p>	
<p>Operational Status: Active</p>	
<p>Number and Type of Staff: Scientific: 2 Technical Support: 5+</p>	<p>Testing Capabilities: Model Support: platform load cell beneath working section, and various capacity load cells Data Acquisition: 192 channel simultaneous data acquisition (16 bit) at up to 500kHz. 64 channel simultaneous data acquisition (24 bit) at up to 128kHz. Outputs: Forces & moments, pressure, velocity (Stereo PIV for high resolution over large area – up to 1m x 1m) Flow visualisation: Smoke, video, surface fluorescent oilflow.</p>
<p>Test support: Workshop for wind tunnel model design, manufacture and modification capability.</p>	
<p>Notes: This is the former British Aerospace/ deHavilland wind tunnel from Hatfield, Herts. It was moved to Glasgow in the early 1990s.</p> <p>Specialist Rigs:</p> <ul style="list-style-type: none"> • Dynamic stall; • Rotor rigs have been developed and used in this tunnel. • Sting support system 	