

# Cranfield University Icing Tunnel

LS4

<b>Location:</b> Cranfield, Bedfordshire	<b>Designation:</b> Low Speed Open Return
<b>Owner(s):</b> School of Engineering Cranfield University Bedfordshire, MK43 0AL United Kingdom	<b>Performance</b> <b>Mach Number:</b> 0.1 – 0.5 <b>Maximum Flow Speed:</b> 35m/s - 170m/s <b>Reynolds No:</b> $2.5 \times 10^6 / \text{m}$ – $12.4 \times 10^6 / \text{m}$ . <b>Total Pressure:</b> Ambient <b>Dynamic Pressure:</b> up to 18.3 kN/m <sup>2</sup> <b>Total Temperature:</b> Ambient <b>Turbulence intensity:</b> < 1% <b>Run Time:</b> Continuous. <b>Typical Recharge Time:</b> n/a.
<b>Test Section Size:</b> Section 1: 0.76m x 0.76m. Section 2: 0.81m octagonal Section 3: 0.4m x 0.4m	<b>Testing Capabilities:</b> <b>Model Support:</b> n/k. <b>Data Acquisition:</b> multiple channel high speed data acquisition system. <b>Outputs:</b> Forces and Moments, pressure and temperature. <b>Flow visualisation:</b> Thermography.
<b>Operational Status:</b> Operational	
<b>Number and Type of Staff:</b> <b>Scientific:</b> n/k <b>Technical Support:</b> 1 – 2 technicians	