



Climatic Wind Tunnel (CWT Two)

We have the UK's only large vehicle full-scale climatic wind tunnel. The facility provides state-of-the-art simulation of environmental conditions for product development across all world markets.

Using our experience and facilities, customers are able to compress their development lead times and minimise their costs to deliver right-first-time products to market ahead of their competitors.

The facility is specifically designed with a large test chamber to accommodate vehicles and products from the automotive, off-highway, military and aerospace sectors.

It can simulate a wide range of environmental conditions from -30°C to +50°C with the added advantages of solar simulation, humidity control and a two wheel drive chassis dynamometer.

The facility allows our customers to do everything they could do with in-territory testing but with the added advantages of guaranteed, repeatable conditions and lower overall costs.

Chamber dimensions:	Width: 8.0m, Height: 6.0m, Length: 19.5m
Gross vehicle weight:	62 tonnes
Air speeds:	1.4m ² nozzle = 180kph 2.5m ² nozzle = 120kph 5.0m ² nozzle = 70kph
Air temperature:	Max/min = +50°C/-30°C
Humidity range:	5% to 95% Relative Humidity
Chassis dynamometer:	Single-axle (600kW total power, 55kN tractive effort), 48" dia. rollers
Solar simulation:	Quartz halogen, visible and IR Range: 0.6 to 1.2kW/m ² Target area: 2.5m x 6.0m
Data acquisition:	124 channels, up to 10Hz scan rates
Circuit type:	Horizontal, fully enclosed within support building
Fan type:	Axial flow, 310kW
Cooling systems:	1.1MW capacity at 20°C