

Product Name :
Educational Wind Tunnel

Product Code :
FMF002



Description :

Educational Wind Tunnel

Technical Specification :

Educational Wind Tunnel

Technical Description The educational wind tunnel is a so-called "Eiffel type" of open subsonic wind tunnel. With this type of tunnel the air is taken from the atmosphere and returned to the atmosphere. A carefully designed nozzle shape guarantees the constant distribution of velocity within the closed measurement section. Velocities of around 100km/h are reached. A flow rectifier at the inlet ensures a low degree of turbulence. The wind tunnel consists of the following components: inlet hopper with flow rectifier, nozzle, measurement section, diffuser and fan. The nozzle, inlet hopper and the measurement section are mounted on a guide rail and can be moved in order to access the measurement section. An axial fan with guide wheel is used which is characterised by its low noise level and high efficiency. The fan is mounted on rubber elements to minimise vibration during operation. It is driven by a speed-controlled motor with frequency converter. The fan is connected permanently with the diffuser. An electronic 2-component force transducer permits the measurement of resistance and buoyant forces at various objects. The measured values are displayed on a measuring amplifier. It is also possible to process the data via PC-data acquisition (available as an accessory). A slanted tube manometer is used to display the current air velocity at the inlet into the measurement section.

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