

Cavitation Tunnel (TUDelft)

Cavitation Tests



Test section dimensions: L x B x H = 600 x 300 x 300 mm³;

Max water velocity: 7 m/s

Manufacturer: Brand Kempf und Remmers;

Type: Closed recirculation tunnel

Drive system: 4-bladed axial flow propeller with Ward Leonard control

Engine power: 15 Kw; Engine: 2920 rpm;

Pressures: 102 kPa (max) - 11 kPa (min)

Instrumentation: Propeller dynamometer, 5-hole pitot-tube, various pressure sensors, Laser Doppler Anemometry; Torque and thrust dynamometer; Balance type at the end of propeller shaft, T_{max} 400 N, Q_{max} 10 Nm; Propeller or model size range: Propeller diameters from 50 - 160 mm

Tests performed: Propeller tests in uniform flows, Forces and pressure distributions on rudder, fins etcetera