Towing tank

The towing tank has many applications, primarily concerning hull and propeller form optimisation for all kinds of ships or energy saving devices with respect to resistance/propulsion. A database containing over 8,000 ship hull forms provides the basis for the result analysis.

The tank dimensions and the high carriage speed facilitate the use of large, self-propelled displacement models and testing of high-speed vessels (mono- and multihulls, semi-planing and planing craft, surface effect ships, etc.).

The flap type wave generators provide regular as well as irregular waves for the determination of seakeeping characteristics and ride comfort. By combining the results with a SEAMAN Simulation [1] behavior in oblique seas can be estimated. Arrangements and techniques for testing submersibles (submarines and other underwater vehicles), sailing boats, and fishing gear are available, and various unconventional objects can also be investigated.

A database containing over 8,000 ship hull forms provides the basis for result analysis and guidance for hull form optimisation of merchant ships, as well as high-speed and planing crafts. In-house research activities ensure enhanced knowledge and the continuous development of methods within the field of ship hydrodynamics.

**Technical data**

| Basin | L x B x D | 260 x 10 x 5 m |
Speed

Speed accuracy 0 - 11 m/sec

Carriage

± 0.001 m/sec

Wave length 0.4 < lambda < inf. m

Waves

Wave height 0 < H < 0.3 m

Frequencies 0 < f < 2 Hz