V.O. CHIDAMBARNAR PORT, TAMIL NADU

Background

V.O. Chidambarnar Port (erstwhile Tuticorin Port) at Tuticorin in Tamilnadu state is an artificial deep-sea harbour formed with rubble mound type parallel breakwaters projecting into the sea for about 4 km. The harbour basin extends to about 400 hectares of protected water area and is served by an approach channel of 2400 m length and 183 m width.

Studies Conducted

- Physical model studies for wave tranquility for the development of Outer Harbour and Mathematical model studies were undertaken at CWPRS to study,
- Wave tranquility at different berths for the development of Port and also to assess the effect of reclamation
- Tidal hydrodynamics and estimation of siltation for the development of Port
- Desk studies for safe ship navigation and optimization of channel
- Desk studies for ship mooring analysis for proposed development of Port
- Desk and wave flume studies for the design of breakwaters.
- Desk studies for storm wave hindcasting.

Outcome and Benefits

- Layout of port structure for desired wave tranquility conditions
- Optimization of breakwater length and alignment
- Prediction of mooring configuration and selection of optimum fenders
- Assessment of ship motions and estimation of downtime at berth
Physical Model for Tuticorin