Effective tools to make informed decisions

MetOcean Solutions has developed innovative tools to assist port operators, pilots, tug boat masters and marine managers to make informed decisions at sea or in port.

Increase safety and efficiency
Our solutions are designed to increase safety and efficiency for all marine operations – from open-ocean and port entrance transits, to harbour dredging operations and safe vessel mooring within surge-affected ports.

Accurate port-scale marine weather forecasts
Our forecasts are customised to each port, and provide high resolution 7-day ahead marine weather guidance for all harbour operations. The MetOceanView web platform delivers site-specific guidance. Measured weather data can be displayed, along with the forecast values – allowing a direct comparison and monitoring of short range trends.

Wave climate studies
MetOcean Solutions uses numerical models, calibrated with measured data, to characterise the wave climate both inside and outside harbours. Applications are under-keel clearance, design assessments, tranquillity improvements, and operational downtime analysis for dredging or navigation.
Long wave surge
Long wave surge causes problems in harbours all around the world. Analytical and predictive tools to manage vessel surging and long wave agitation inside harbours are provided at numerous locations, in a range of ocean basins.

Consultancy studies
We offer the numerical simulation of waves, currents, sediment transport and morphological evolution to assess channel infilling, sediment bypassing and dredge plumes. Our scientists develop practical, cost effective sediment management programs for ports and harbours of any size.

Berth safety and harbour transit forecasts
Through our Strategic Alliance with OMC International, we offer specialist guidance on the under-keel clearance and depth availability, based on the dynamic response of specific vessels during transit. OMC’s Berth Safety application translates the forecast surge conditions at the berth into mooring line tensions. The system is customised for specific vessels at individual berths, and provides guidance on the maximum predicted mooring line tensions at hourly increments out to the 7-day horizon.

Try out MetOceanView:
www.metoceanview.com

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