

MIKE 21/3 Mud Transport

Advanced mud transport modelling

Why MIKE 21/3 Mud Transport?

This unique mud transport software provides dredging, port and coastal engineering professionals with powerful insight to study the impact of siltation on coastal morphology and water quality. Use this combined multi-fraction and multi-layer software to simulate erosion, transport, settling and deposition of mud or sand/mud mixtures to support planning and operations.

Use the knowledge gained from your models to investigate changes in sedimentation patterns or to analyse the impact of siltation in harbours and access channels. With MIKE 21/3 Mud Transport, you can study the spreading, dispersion and fate of dredged material to optimise dredging operations and better understand the impact of contaminated sediments on local flora and fauna in ecologically sensitive areas.

- **Model the transport of mud and the interaction between mud and the bed considering forcing by waves, salt-flocculation, the settling process, consolidation and more**
- **Simulate all stages of the dredging process for the most comprehensive support**
- **Model suspended transport of fine grained non-cohesive sediment by activating sand transport formulations**
- **Estimate siltation rates to optimise the design of port channels and reduce the need for maintenance dredging**

Additional features & capabilities

- Analyse the effect of sedimentation on vegetation, biology and sediment inhomogeneity
- Calculate the influence of waves on erosion deposition patterns
- Consider morphological changes to the bed when assessing dredging / dumping sites and other shallow areas
- Account for the consolidation of deposited material during long-term simulations
- Account for bed shear stresses due to waves using the multi-bed layered approach
- Perform fast morphological modelling calculations thanks to special techniques developed for this software

