



## Onboard-NAPA Software for Safe Ship Operations



# Innovative Software Solutions for Ship

The Onboard-NAPA software is designed for onboard loading calculations, ship stability analysis, and emergency response. Originally developed as a loading computer, Onboard-NAPA incorporates a wide range of calculations related to the ship's:

- **Hydrostatics**
- **Intact stability**
- **Damage stability**  
(Direct damage is type approved by Lloyds Register)
- **Longitudinal strength**
- **Cargo planning**

Onboard-NAPA's customised tools for cargo planning meet the everyday needs of officers on board and help shorten the hours needed daily for planning the loading of the ship.

The software's strength lies in its advanced and unrivalled features for damage stability and decision support – features that make the system ideal for fast analysis of ship stability in emergency conditions, including grounding.

“This program really understands what a parcel is...”

Ken H. Hepsø, Captain of Bow Chain

# Owners and Operators

## Benefits of Using Onboard-NAPA

- Improved ship performance and marine safety
- Support for decision-making
- Dynamic graphical user interface
- All calculations based on 3D product model

## Customer Support

- An extensive international network provides on-location service at short notice
- Tailor-made training courses are provided on-site
- Onboard-NAPA is developed continuously, a process leading to new system versions and features
- Possibility for a maintenance agreement



# Loading Computer for Effective Planning

**Covers a wide range of calculations related to hydrostatics, ship stability and strength, such as:**

- Calculation of deadweight and displacement
- Free surface moments
- Calculation of floating position
- GZ-curve, including heeling moments
- Bending moment and shear force
- Weight and buoyancy distribution

The ship-specific versions of Onboard-NAPA encompass special functions relevant for each ship type.

## Plan Operations Efficiently

Onboard-NAPA is easy to use: user operations, such as defining and editing loads, can be done simply by clicking on the tank plans on the graphics area or by using tables. Compliance with the relevant intact and damage stability regulations for the actual loading conditions can be checked automatically. All changes in the loading conditions can be simulated quickly in order to provide sufficient trim and stability during the operation of the ship.

## Reporting

Onboard-NAPA comes with a wide variety of graphical and numerical printouts and reports:

- Loading plans and loading condition reports
- Tank volume reports
- Stability reports
- Damage stability calculation results
- Ullage reports and strength reports

Marine safety  
and  
performance through  
green values.

# Damage Stability for Fast Calculations

Onboard-NAPA can be relied on to produce accurate and reliable calculation results, as in all calculations it utilises a real 3D model of the ship, the existence of which is a basic requirement for fast and accurate damage stability calculations.

## Features

- Direct damage stability according to MARPOL IBC, IGC (L5 type 3 for tanker-type vessels)
- Free definition and calculation of any arbitrary damage case based on the ship's active loading condition
- Calculation of intermediate stages of flooding
- Display of floating position and critical openings
- Calculation of longitudinal strength in damaged and/or grounded condition
- Alternative scenarios for re-floating the ship can be simulated easily



# Decision Support for Flooding Control

The Onboard-NAPA Decision Support for Flooding Control (DFC) concept goes beyond the mandatory requirements of the IMO regulations on decision support systems.

DFC provides a fully computerised approach to the handling of emergency situations by integrating the various aspects influencing the ship's watertight integrity, and helps to evaluate which counter-measures should be taken in a distress situation, such as in the event of flooding.

## Features

- Time-based damage stability
- Flooding simulations
- Advisory cards

# Emergency Response for Quick Decisions

**NAPA Emergency Response (NAPA ER) is a powerful tool used by major classification societies when providing Emergency Response. NAPA ER helps them to make quick decisions on the best recovery action when a ship is in a hazardous situation.**

NAPA ER allows the operator both to prepare proactively for damage scenarios, and quickly to test recovery strategies in salvage operations. Onboard-NAPA is also fully compatible with Lloyd's Register and DNV Emergency Response Services.

“... First we check with Onboard-NAPA whether the crane can do the lift...”

Karl Nordheim, Captain of Seven Seas

Photo courtesy of Subsea 7



# Onboard-NAPA Installations

## Onboard-NAPA is Used by:

- Ship owners
- Operators
- Authorities
- Marine organisations

At present, Onboard-NAPA is installed on board nearly 1 000 ships and offshore structures.

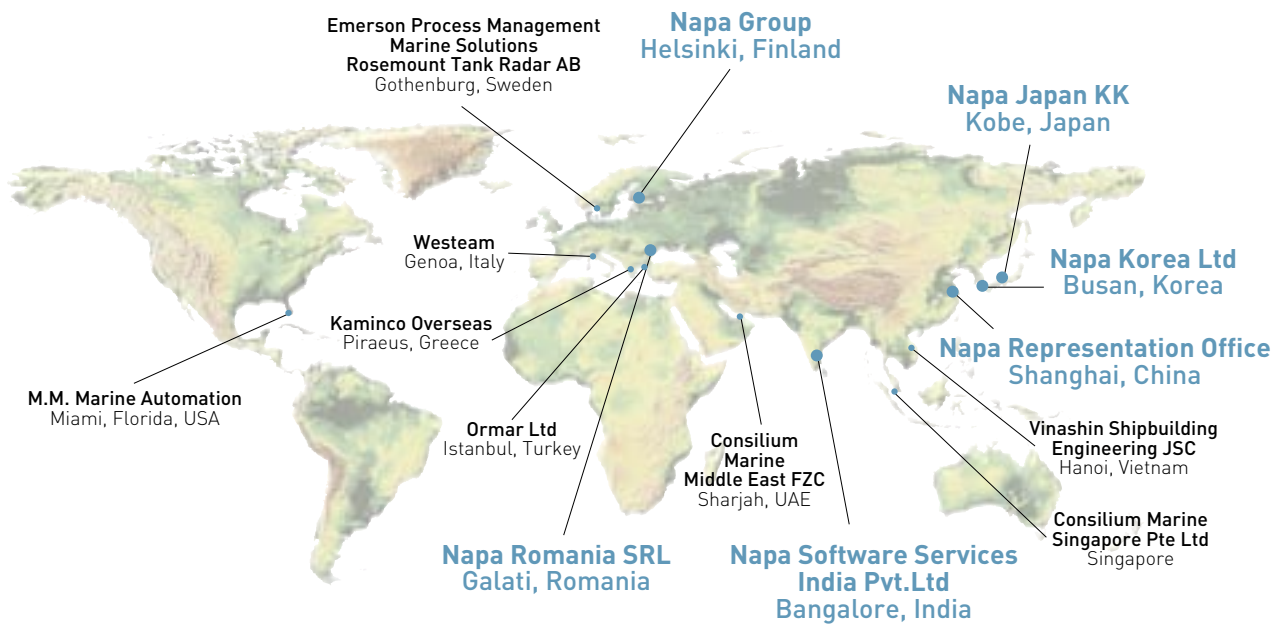
Onboard-NAPA can be tailored for virtually any ship type. Today, the system is available for:

- Bulk Carriers
- Crude and Gas Carriers
- Cruise Ships and Yachts
- Drilling Ships
- Ferries
- FSOs and FPSOs
- Naval Ships
- Offshore and Supply Vessels
- Product and Chemical Tankers
- Pure Car and Truck Carriers
- Roro Ships
- Semi-submersible Rigs



Whether you need training, maintenance or life cycle service, our global network is always willing to provide support.

### Onboard-NAPA Worldwide Support



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