VSTEP’s NAUTIS Simulators are DNV certified integrated simulator solutions in compliance with the latest IMO requirements. With a full range of simulators, from desktop trainer to full mission bridge, NAUTIS simulators fulfil the training requirements of watch officers, captains, chief officers, pilots, DP operators, nautical colleges, naval academies, maritime training centres and individual ship owners worldwide.

YOUR CERTIFIED TRAINING, OUR MISSION

NAUTIS Simulators allow training in full compliance with international standards and regulations:

- The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (or STCW)
- IMO Model Courses
- IMCA Guidance on the use of simulators (IMCA C 014 Rev. 4 – March 2015)
- Approved and Certified by DNV - with class notation for Integrated Simulator System, Tug, HSC - to be compliant with the Class A standard for certification of Maritime Simulators No.2.14 January 2011 and compliant with the requirements of the STCW Convention, Regulation I/12.
- Nautical Institute Accreditation for DP Training Centres running VSTEP NAUTIS Dynamic Positioning Simulators
- DNV-GL Class A Certification for Dynamic Positioning Simulators

OUR KEY VALUES FOR YOUR SUCCESSFUL SIMULATOR SOLUTION

**Quality** - We strive to exceed our customers’ expectations at every point of service delivery, including superior product quality, excellent services and efficient, personal support. VSTEP is an *ISO9001:2008* certified company.

**Innovation** - We continuously push the boundaries of innovation to improve the effectiveness and economic value of our simulators.

**Value** - We create training simulators for any size of budget to help our customers maximise the value they generate from our products.

**Ease of Use** - Our simulator products are easy to operate and require low maintenance.
SIMULATOR CATEGORIES

- **NAUTIS Desktop Trainers** - Portable simulators for navigation, ECDIS/Radar, Radio comms training.
- **NAUTIS Console Trainers** - Integrating NAUTIS simulation software with a console set-up offers additional realism to the training experience.
- **NAUTIS Full Mission Bridge Simulators** - A DNV Class A or Class B certified simulator, based on the latest IMO STCW requirements. The FMBS integrates advanced bridge consoles with a full 240° or 360° simulator experience using either projection or high-end flat screen visualisation technology.

- **NAUTIS Desktop OSV & DP Trainers** - Portable simulators to train Dynamic Positioning and handling of OSVs with different types of propulsion systems during offshore operations.
- **NAUTIS Full Mission OSV & DP Simulators** - Train Dynamic Positioning and handling of OSVs with different types of propulsion systems during offshore operations on board an actual offshore vessel bridge replica.

- **NAUTIS Desktop Tug Trainers** - Portable simulators to train the handling of tugs with different propulsion systems during tug operations. Various types of tugs are available with different kinds of propulsion systems, from conventional shaft propellers to ASD and tractor tugs.
- **NAUTIS Full Mission Tug Simulators** - Train advanced handling of tugs with different propulsion systems during tug operations on board an actual Tug bridge replica.

REQUIRED TYPE OF TRAINING

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“ENHANCE YOUR TRAINING CURRICULUM WITH A FULLY COMPLIANT SIMULATOR SOLUTION!”
DYNAMIC POSITIONING
NAUTIS Class A Dynamic Positioning Simulator
THE VERSATILE SOLUTION FOR CERTIFIED DYNAMIC POSITIONING TRAINING

VSTEP has created the NAUTIS Dynamic Positioning Simulators in full compliance with the DNV-GL and the Nautical Institute DP equipment/simulator specifications, guaranteeing optimal training value and realism. They adhere to and even exceed the functional requirements and accreditation standards as described by the DNV and the Nautical Institute.

At the heart of every NAUTIS Dynamic Positioning simulator is the award-winning NAUTIS software, which takes care of a fully realistic Dynamic Positioning experience. Our Dynamic Positioning Simulators are integrated with acclaimed DP systems created by Praxis Automation. Integration with other DP systems is possible as well.

A range of NAUTIS DP simulator configurations are possible, including Nautical Institute Class A and B setups. The different configurations for the NAUTIS Dynamic Positioning Simulators are described on the following pages.

“IMMACULATE QUALITY, HIGH REALISM, EXCELLENT TRAINING VALUE!”
A DNV-GL Certified full mission simulator capable of simulating Dynamic Positioning (DP) operations in a realistic and fully equipped ship’s bridge environment, including the capability for realistic visual representation near offshore installations.

Training Type
Scope of use of the simulator as referred to in the Nautical Institute’s DP Operator’s Certificate:

- Sea time reduction training in phase 4 of the certification process
- Phase 3, Advanced/ Simulator course
- DP refresher training
- Training in special operations

Software Included
- NAUTIS Trainee Station
- NAUTIS Advanced Hydrodynamics Trainee Module
- NAUTIS Offshore Vessels & Objects Module
- NAUTIS Radar Interface Module
- NAUTIS Instruments
- NAUTIS Control Panels
- NAUTIS PRS
- NAUTIS GMDSS TS
- MARIS Radar/ARPA
- MARIS ECDIS
- NAUTIS Offshore Field Chart
- DP Overhead panel

Hardware Included
- PCs
- Professional metal offshore vessel bridge consoles with built-in ship controls
- 5 x 65” LED displays for a 240° outside view
- Praxis Mega-Guard DP2 system

“A DNV CERTIFIED SIMULATOR COMPLYING TO ALL YOUR DP TRAINING NEEDS!”
NAUTIS DYNAMIC POSITIONING SIMULATOR CONFIGURATIONS

NAUTICAL INSTITUTE CLASS B

A multitask simulator capable of simulating Dynamic Positioning operations in a realistic and fully DP equipped ship’s bridge environment and including visual representation near offshore installations.

Training Type
Scope of use of the simulator:
- Phase 3, Advanced/ Simulator course
- DP refresher training
- Concept familiarisation

Software Included
- NAUTIS Trainee Station
- NAUTIS Offshore Vessels & Objects Module
- NAUTIS Comms Trainer
- MARIS ECDIS
- NAUTIS Offshore Field Chart

Hardware Included
- PCs
- 4x24” Navigation displays
- 27” Outside View display
- Praxis Mega-Guard DP2 system

NAUTICAL INSTITUTE CLASS C+

A limited task simulator with DP control and monitor for instrumentation or blind manoeuvring & position keeping.

Training Type
Scope of use of the simulator:
- Phase 1, DP Basic/Induction course
- Concept familiarisation
- Basic training

Software Included
- NAUTIS Trainee Station
- NAUTIS Offshore Vessels & Objects Module
- NAUTIS Offshore Field Chart

Hardware Included
- PCs
- 24” Outside View display
- Praxis Mega-Guard DP1 system
With its compatibility and multi-layer integration, the NAUTIS Dynamic Positioning Simulators can be easily added to any existing NAUTIS simulator. With a simple flick of a switch the ship control is transferred from the hardware controls of the existing NAUTIS simulator to the Dynamic Positioning system.

Without need to further upgrade the instructor station, a limited number of faults and failures can be introduced during an exercise for training purposes.

With a further upgrade of the instructor station and the trainee station, any existing NAUTIS simulator can be upgraded to a full NAUTIS NI Class A or B level Dynamic Positioning Simulator and a dedicated account manager will guide you through the upgrade process.

**DYNAMIC POSITIONING UPGRADE/INTEGRATION IS AVAILABLE FOR THE FOLLOWING NAUTIS SIMULATORS:**

- NAUTIS FMB Simulators - All Types
- NAUTIS Console Trainers - All Types
- NAUTIS Desktop Trainers - All Types

“ADD DYNAMIC POSITIONING TO YOUR CURRENT NAUTIS SIMULATOR!”
NAUTIS INSTRUCTOR STATION

TOTAL CONTROL AT YOUR FINGERTIPS

An Instructor Station is a mandatory element of STCW compliant simulators. The Instructor Station allows the instructor to follow the trainee’s decisions and actions in detail during each simulator training session and includes after action review and assessment. The NAUTIS Instructor Station interfaces seamlessly with all NAUTIS Simulators. The NAUTIS Instructor Station for DP Simulators provides simulation instructors a set of tools enabling them full control of scenarios, vessels, environments and exercises. It contains:

- The NAUTIS Exercise Manager, which is used to both create and control exercises, introduce faults and failures to equipment and sensors and perform replays of recorded exercises.
- The NAUTIS DP Simulator Control Station simulates positioning reference systems, such as dgps, laser, radar, hydro-acoustics. Use it to introduce faults and failures on all sensors, propulsion and the power management system or control the rov.
- The Ship Dynamics Editor, which has subparts for modifying the ship hydrodynamics characteristics, the placement of navigation and morse lights, mooring points, navigation and ship control instruments, flag lines, and the lay-out of the conning screen.
- The Chart Data Editor, to add and change buoy locations and characteristics on the charts of the simulation environments.
- The Ocean Editor to modify the ocean wave characteristics.
- The Trainee Assessment & Analysis Module (optional module). With this module, the instructor can set monitoring and assessment parameters on the chart, like the maximum speed in a certain area of the port, the correct position of anchoring, the correct distance kept to other vessels etc. This tool also shows and records snapshots of the ECDIS, Radar/ARPA and other screens.
- The GMDSS Instructor Station, which allows the instructor to play the role of a VTS operator or other vessel during exercises.
- The Video monitor & recorder, which allows the instructor to watch the trainees in the simulator. The video can be recorded for playback during debriefing sessions.
Excellent training and support are an important part of operating a simulator. As part of simulator delivery, VSTEP provides basic and advanced training courses for each customer.

**SIMULATOR TECHNICAL SUPPORT AND MAINTENANCE TRAINING:**
- Simulator Start up/Shut down
- Connections and calibration of controls
- Interfaces check & finetuning for Radar, ECDIS and GMDSS simulator.
- How to detect / remedy hardware issues
- Back-up/restoring of configuration files
- Remote log-in facilities and simulator optimisation

**SIMULATOR AND INSTRUCTOR STATION TRAINING:**
- Creation of exercises
- Exercise Recording and playback / debriefing
- Initiate/restart an exercise
- Controlling target vessels during an exercise
- Introduce ship equipment or sensor faults and failures
- Change the operating environment during an exercise.
- Communication with the trainees on relevant comms channels.
- Visual tracking of an exercise in both 3D screen and chart
- Setting up a scoring or grading system to assess student performance.

Training is hands-on and provided by experienced VSTEP engineers. After successful training, an official Instructor & Maintenance Certificate is issued to the customer.

“TRAINING OUR CUSTOMERS FOR OPTIMAL SIMULATOR USE
AND EXERCISE CONTROL!”
NAUTIS SIMULATORS - EXCEEDING THE STANDARD

NAUTIS Simulators are unique in many ways. With its focus on Quality, Innovation, Maximising customer value and Ease of use, we guarantee a simulator solution that is fully compliant to today's demanding standards and is fully tailored to meet your specific training requirements. There are many things that set apart NAUTIS from the legacy simulators currently in the market. Here are a few:

LESS HARDWARE ALLOWS LOWER COSTS

NAUTIS Simulators are optimised to deliver high quality, certified simulator power, but without the need for lots of expensive pc’s. A complete NAUTIS FMB Simulator needs only a few PC’s to run on, saving hardware costs and making installation and support easier.

HIGH QUALITY SUPPORT, ALWAYS NEAR YOU

VSTEP customer support is supervised from our world headquarters in The Netherlands and coordinated with our strategic partners around the globe, always near you. We provide high-quality support and different service agreements according to your level of support needs. VSTEP customer support makes sure you always receive the help you need, when you need it, quickly and efficiently.

AN OPEN INTERFACE FOR EASY SOFTWARE CUSTOMIZATION

NAUTIS supports an open interface, which allows customers to add their own customised software-developed navigation panels and nautical instruments to a Full Mission Bridge Simulator to make it look and behave exactly like a specific ship. This is a lot more cost effective than buying the real equipment of that ship and making hardware interfaces, which is of course also possible with NAUTIS.

COMPREHENSIVE, USER-FRIENDLY INSTRUCTOR TOOLS

The NAUTIS Instructor Stations are the most comprehensive and user-friendly in maritime simulation, with a complete graphical interface in both 2D and 3D. Whether you like an ECDIS chart view as the main view of the Exercise Manager and a 3D view as a secondary view, the NAUTIS Instructor Station offers it all. Easily drag and drop ships in the environment, connect towing/mooring/replenishment lines, drop anchors, change the dynamics and behaviour of every vessel and view the force vectors acting on a ship...all from the comfort of the actual 3D or 2D view.

“HIGH QUALITY”  “VALUE FOR MONEY”  “INNOVATION”  “EASE OF USE”