

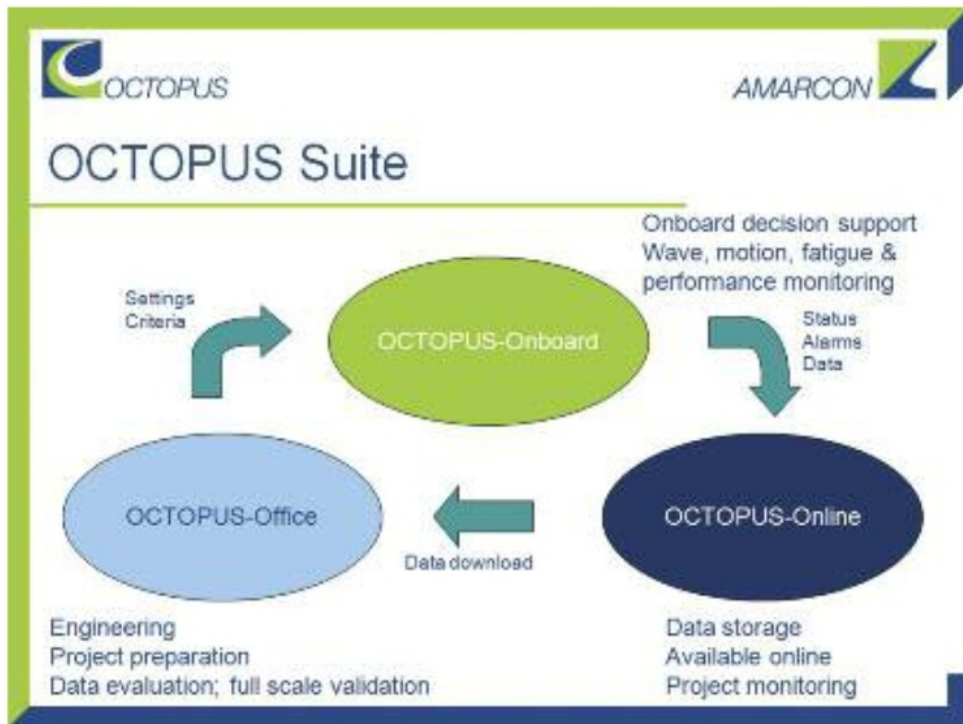
AMARCON BV

Amarcon BV, located in Dalfsen, Netherlands is a key player involved in state of the art technology and software development of many industries. Amarcon's highly experienced software development team with expertise in ship motion and performance analysis co-operates with leading players in the maritime industry. Amarcon bridges the gap between fundamental research and daily operational practice of ships and other floating offshore structures. Amarcon's strategic partners include Classification Societies, system integrators, radar suppliers, and weather forecast providers. Amarcon's applications have been supplied to many renowned ship operators with multiple ship specific configurations. Amarcon services cover a wide range of sectors including owners and operators of ships, offshore operators and contractors, yards, oil companies, dredging companies, engineering companies and consultants, Classification Societies, Navies, system integrators and Universities.

Amarcon proposes three interrelated solutions, OCTOPUS-Office, OCTOPUS-Onboard and OCTOPUS-Online, see picture below.

OCTOPUS-Office is a hydrodynamic analysis program for calculation of sea-keeping characteristics of ships and other floating structures, with or without forward speed. OCTOPUS-Office 6 has an intuitive user interface that provides the most advanced technical solutions for perceiving and analysing ship hydrodynamics and thus allows improving the efficiency of engineers. The hydro dynamical analysis is carried out using 3D-radiation/diffraction theory and 2D-strip theory for calculating the frequency of dependent added mass, damping and wave forces. With 2D or 3D ship hydrodynamics, site or voyage dependent response statistics can be calculated within a few mouse clicks. The advanced Graphical User Interface immediately gives detailed output of the calculated results and significantly improves the usefulness of calculations. Today OCTOPUS-Office has over 90 company users.

OCTOPUS-Onboard is an advanced decision support system for operation of ships and other floating structures in wave conditions. Information



obtained from the ships hydrodynamics, weather forecasts, measured wave conditions, loading condition, speed and course is used for immediate decision support (heading and speed control), midterm decision support (response based route planning) and for scenario simulation. By combining measured and forecasted weather conditions with a computational model and the actual loading condition it becomes possible to calculate ship responses in the form of motions and hull loads. While the hardware and core software used by OCTOPUS is basically the same for all

forecasted vessels responses, the route plan, ETA and fuel consumption. The integration of Google Maps provides an accurate viewing of routes and ship positions. The benefits of easy access to information are that the vessel owner can view the status and performance of the vessel at any moment. He can also sub-licence the information to third parties, such as cargo owners and instantly obtain management reports. Established in 2000 by Managing Director Leon Adegeest, Amarcon has rapidly built a reputation for expertise in the field of ship behaviour in waves.

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implementations, the OCTOPUS databases and end configurations are ship-specific and based on state-of-the art 3D radiation/diffraction codes. The profitability of vessels can be improved due to a higher schedule accuracy and increased safety. OCTOPUS has been installed in LNG, offshore construction vessels, shuttle tankers, RoRo and naval vessels and container and heavy lift vessels. On LNG Tankers the OCTOPUS system is used to minimize the risk of sloshing.

OCTOPUS-Online, Amarcon's secured web portal, is complementing OCTOPUS-Office and OCTOPUS-Onboard. OCTOPUS-Online receives daily reports and other required information from vessels equipped with OCTOPUS-Onboard to store it and make it available for display and download by authorised users on their own part of a protected website, thus providing them with detailed information on the ship, the measured and

The OCTOPUS solution continues to grow and clearly gives Amarcon an exciting future.

