

Naval Architects & Marine Engineers since 1935



80 years engineering experience

*"Good men learn from experience.
Wise men learn from the experience of others."
Otto von Bismarck*

Nevesbu

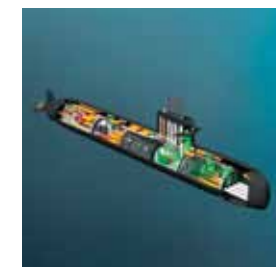
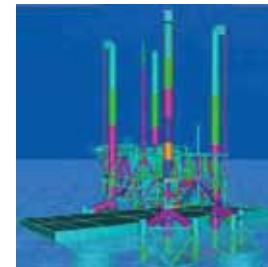
Established in 1935, Nevesbu is a Naval Architecture and Marine Engineering company based in the Netherlands.

Nevesbu offers design and engineering to the maritime, naval and offshore industries worldwide. Our technical experience, in-house knowledge and ability to think 'outside the box' provide added value to our Clients. We are fully equipped to manage and execute design processes with an aim towards exceeding the expectations of our Clients.

We focus on three main markets:

- Engineering for Offshore Projects,
- Engineering for Submarines & Naval Vessels and
- Engineering for Special Ships & Projects, whereby we provide added value through application of the know-how and skills attained from working in first two markets.

Nevesbu aims to provide added value to its Clients' projects through a structured engineering approach encompassing design, organisation and communication and supported by expert Naval Architecture & Marine Engineering. We aim to exceed the expectations of our Clients which is an approach that has led to many long-lasting relationships. Our enthusiastic professionals are driven and highly motivated engineers, who are abreast of the latest developments in their respective fields.





Alblasserdam, the Netherlands

Nevesbu

Management

QA & HSE

Office Management

Projects

Disciplines

Offshore

Naval Architecture

Naval

Structural

Special Projects

Marine Engineering

History

Let's go back in time to where it all began in the mid thirties. The age old dilemma of inadequate and excess capacity for companies was evident at this time for foreign navies. The need to tighten the belt meant downsizing, which inadvertently led to difficulty in landing large projects when they came onto the market. However, having a larger staff along with an insufficient workload could have meant the end was near. Facing this dilemma, representatives of yards met to discuss the possibility of collaboration. Besides the obvious advantage of combining strengths for the Dutch naval shipbuilding market, an important motivation for working together was landing contracts with foreign naval Clients and therefore promoting the export of naval vessels.

This collaboration led to Nevesbu's foundation. Where did we go from here?

Shortly after its establishment in 1935, Nevesbu's first export contract became a reality. Two, 1000- ton submarines, the Sep and Orzel, were designed for the Polish navy. Thereafter came the Design 1047 battlecruisers, for which Nevesbu completed the preliminary design; a design that was later incorporated into one of two design studies. In the 1940s, the Second World War caused a disturbance in the flow of Nevesbu's history.

After the war, things picked up quickly and Nevesbu got involved with the innovative, three cylinder submarines. The concept was devised in the war by Nevesbu's director at the time for the transport of troops by submarine into the Mediterranean via the Strait of Gibraltar. The most unique feature on this boat was that it contained not one but three pressure hulls within its streamlined outer shell. The advantage was that each hull, which was necessary to keep the crew and supplies dry, had a relatively small diameter enabling it to withstand water pressure at great depths.

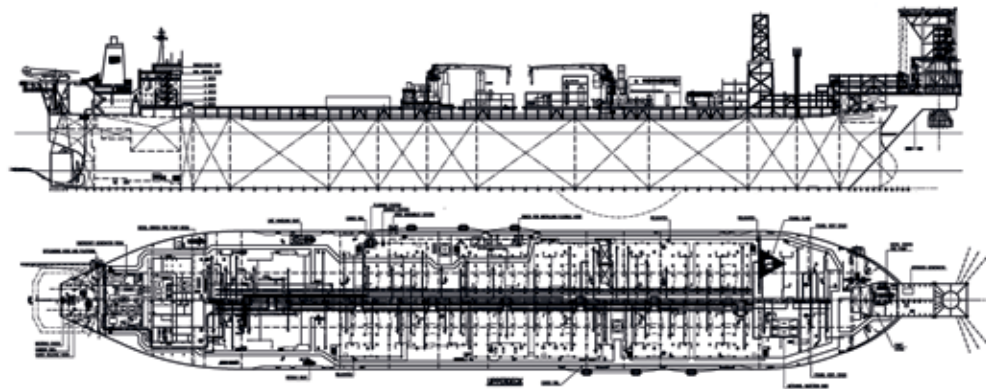
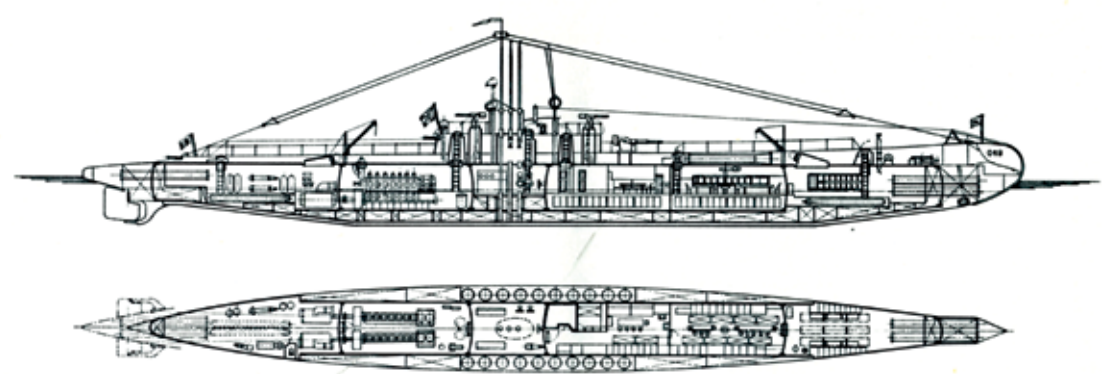
Subsequently, the Swordfish class was designed for the Dutch navy and the Hai Lung class for Taiwan. With steady growth, Nevesbu increased its pace designing a number of combatants including the Karel Doorman Frigate, KRI Fatahillah Corvette and the S-frigates. Before the end of the 1970s, work commenced on the Walrus submarines.

Towards the end of the century, two notable naval auxiliary ships were designed, the Auxiliary Oil Replenishing ship, Hr. Ms. Amsterdam and the LPD Rotterdam. This decade also included two hydrographic survey vessels, the M.S. Zirfaea and the Arca. Some of Nevesbu's latest design work includes the SD Victoria and the complete design of MV Sigrid, a special vessel for the carriage of nuclear cargo.

In the early 1990s, Nevesbu made her inroads into offshore design.

The first conversion of a tanker into a Floating Production Storage and Offloading vessel (FPSO) led to participation in many other such projects. Since then, Nevesbu has worked with all major Offshore Operators in the Netherlands as well as some abroad. A major, recent project was our involvement in the conversion of the former Bluewater FPSO Uisge Gorm into the present EnQuest Producer for its redeployment for production in the Alma-Galia Field in the UK sector of the North Sea.

Our in-house knowledge and years of experience are assets that we want to pass on and expand over the next generations to ensure all of our engineers are highly qualified for your project.



Innovative Naval & Marine engineering
since 1935



Offshore Projects

Nevesbu is well-versed in the engineering process related to floating offshore units such as FPSOs, pipelay vessels, semi-submersibles, et cetera, and is open-minded to and supportive of the requirements of its Clients special systems. Nevesbu integrates these special systems into the unit to create an optimum working combination. We bring innovative design and understanding of the offshore operating environment to the field of marine engineering and design in order to benefit our Clients.

Internal and external mooring turret integration and accommodation modules are among the many processes that you can bring to sea. We offer support in dealing with class requirements, analysis, stability assessment & inclination test support, transport (motion) analysis, reliability & safety assessment, et cetera.

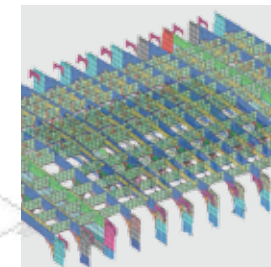
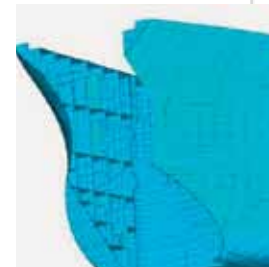
Nevesbu's capabilities cover the complete hull and marine systems to provide a platform on which oil and gas processes take place. Nevesbu has been active in the offshore industry for many years now.

We have substantial knowledge and experience in these challenging projects.

Engineering for life extension of FPSO's is often driven by considerations of structural fatigue.

Recurring loads have an effect on structures. Over time these structures experience fatigue. Structures at sea endure heavy and continuous forces from waves but must remain structurally sound. It cannot be ignored that at a certain point in time, when a structure is cyclically loaded, a risk for fatigue-related complications arises. Nevesbu analyses these risks and takes them into account in the life extension design. This requires the use of advanced calculation techniques as well as the application of organic forms and creative solutions that limit the effects of fatigue.

Offshore engineering to bring your process to sea





EnQuest
Producer

WILLEMSTAD

1994-C-1445



Submarines

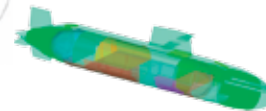
Observing without being observed; gathering intelligence without being discovered. This is the main purpose of a submarine. To remain as inconspicuous as possible, the vessel must be compact. The design of a submarine is a challenging task; a vast amount of equipment, systems, working and living space all put into a small volume, that also has to be able to withstand harsh and difficult conditions. Submarines are originally designed for a long service life, with planned maintenance administered periodically as well as halfway through their life cycle.

To ensure overall operational availability, an upgrade is sometimes necessary.

The objective of a submarine's Life Extension Programme (LEP) is to prolong their service and to increase their operability in the current operational environment. Performance and safety modifications need to be made to accomplish this. The LEP integrates all the work needed to upgrade existing systems. Nevesbu acts as a platform system integrator for upkeep and Life Extension Programmes. As the platform engineering partner, Nevesbu is tasked to carry out the engineering necessary to allow embedding of all modifications (including new systems) on board the submarines.

Nevesbu executed design and engineering to ensure that all systems are able to operate as an integrated whole, as well as making an inventory of systems to be decommissioned.

With a multidisciplinary approach and expert team Nevesbu is capable of designing multiple platform concepts. For example, providing submarines with the capability to withstand high water pressures and shock (e.g. from explosions), satisfying all other requirements in areas like electromagnetic separation and radiated noise, or drawing a transport plan to find out how all components (structural elements as well as equipment) can be brought on board. It is a complex puzzle to find room for all systems and to ensure that they work according to plan. With Nevesbu as a partner, this can be accomplished. Due to the specific kind of knowledge required for submarines, we aim to bring together knowledge and expertise in the field of submarines and achieve synergy through cooperation with other parties. Combining these strengths gives our Clients added value.





Approaching Safety from every angle

reliable and safe solutions are of immense importance



Special Ships and Projects

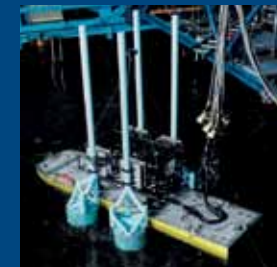
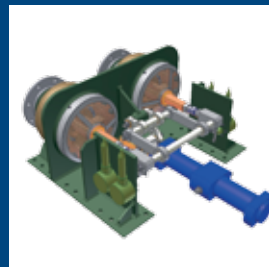
Nevesbu brings added value to special projects with a practical and structured design process. We manage meeting pre-set requirements and, more-over, to achieve and maintain the target mission philosophy of the project. Special projects of Nevesbu range from designing mechanical equipment for marine environments to integrated special ships with unique capabilities.

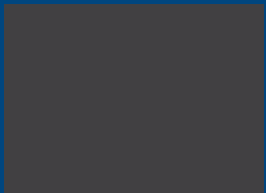
Ever since its establishment, Nevesbu has designed special mechanical equipment for submarines and more recently, for offshore applications. Such design projects extend from definition of requirements to concept and basic design and from fabrication design and design documentation to design of tests and witnessing thereof. Similarly, special ships require 'out of the box' thinking. These ships are one of a kind. For example, a nuclear cargo vessel that has specific requirements regarding safety and sustainability.

Looking for a trusted advisor to assist your organisation in making the right decisions? The highly qualified engineers of Nevesbu possess extensive experience in the field, and approach every challenge with professionalism and creativity.

Nevesbu brings more than 80 years of company experience to your project for an ensured result.

Reliable results through specialist know-how
in a structured design approach





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