



MARINTEK - our identity

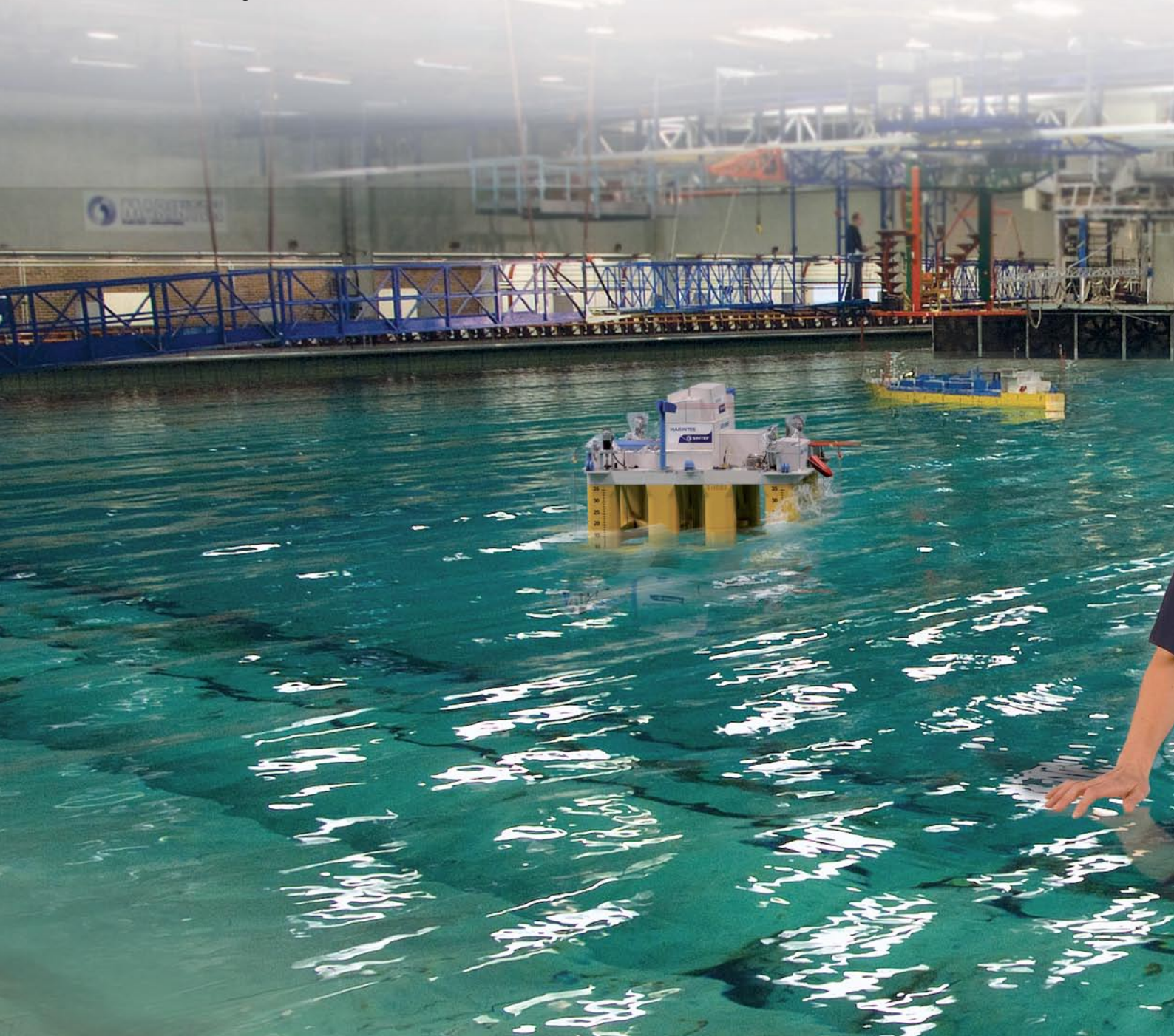
*MARINTEK aims to be a natural winner in meeting the challenges involved in human occupation of the marine environment. Although the oceans cover most of this world, they are the least studied part of it, and MARINTEK has long been a driving force behind efforts to place the sea on the international research agenda. We intend to achieve our aims by being open and cooperative, and by delivering precisely what we are asked for. We intend to take seriously the roles of **innovator**, **knowledge manager** and **verifier of results**.*

We wish to be perceived by our clients as having an open company culture that invites them to collaborate closely in our projects in such a way that our deliveries will be of unique quality in terms of our clients' challenges.

We aim to open our systems and laboratories to close interaction, so that our clients will feel that they are part of our own team.

We attempt to perform our analyses and studies using the best available tools and methods. Some of these have been developed within our own organisation, and thus include much of the knowhow that we have accumulated in the course of several decades. In this way, we strive to offer our customers particularly accurate and well-documented results of the interaction of theoretical modelling and calibration – obtained in part through physical tests in our laboratories.

As we see it, our use of research-based methodology makes our research testable post hoc, and we try to collaborate with other research centres within our own



field in order to raise the level of knowledge throughout the maritime and offshore-based sector.

We attempt to guarantee the scientific quality of our work by collaborating closely with leading university groups, particularly the Department of Marine Technology at NTNU. This combination of strengths means that we are the largest centre of research-based maritime knowledge for civil applications in the western world.

We cooperate closely with the Norwegian authorities in maintaining long Norwegian traditions of operating a global leading-edge research infrastructure in the shape of advanced laboratories that attract leading international maritime companies. This is the source of the knowledge we generate.

An important goal for us is to work closely with industry. Only in this way can our knowledge be adopted immediately to add value to industrial processes and resource management, for the benefit of humanity and the environment.

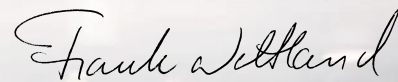
We wish to have a presence in the world's most important maritime and offshore-based industrial clusters, and we will maintain close contact with relevant end-users in order to be able to identify their latent needs.

We recruit our highly competent colleagues from many countries, a strategy that we believe will strengthen our long-term ability to operate across national borders and create a global but inclusive organisation.

We look forward to a healthy spirit of cooperation in developing the potential of our oceans.



President of MARINTEK 1997-2007



President



We aim to open our systems and laboratories to close interaction, so that our clients will feel that they are part of our own team.



With 60 years of experience of testing concepts and developing methods for studying the behaviour of marine structures, we play an invaluable role as a knowledge manager for the maritime industry.

MARINTEK performs research and development for industry and public-sector bodies involved in marine activities. We operate in an international market, developing new technologies in the fields of floating petroleum production, subsea pipelines for oil and gas transportation, vessel development, the shipbuilding and maritime equipment industries, shipping and logistics. In the following you will find some examples of our projects:

Theoretical and numerical hydrodynamics

In 2007, MARINTEK launched a three-year strategic research programme which is being funded by the Research Council of Norway. Numerical tools for determining the hydrodynamic properties and structural response of ships and marine structures are used in all aspects of engineering for the marine environment. There is a need both for practical methods to be used in the early design phase and more complex methods for final verification. The objective of this programme is to meet the need for more advanced methods for predicting hydrodynamic forces on ships and marine structures. The project will provide the foundations of the next generation of computational tools for hydrodynamic analysis at MARINTEK. Research will focus on the development of robust methods and tools for hydroelastic seakeeping analyses of wave/current interaction, forward speed and multibody hydrodynamics.

Offshore floating wind turbines

Offshore floating wind turbines have been an area of focus in 2007. MARINTEK has continued to collaborate with the StatoilHydro in the Hywind project.



StatoilHydro's Hywind design for offshore wind renewable energy. Photo: Solberg Production/StatoilHydro.

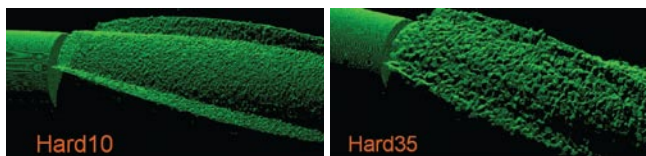
MARINTEK is a partner in the "Deep sea offshore wind turbine technology" research programme funded by the Research Council of Norway and Norwegian industry. Other partners are SINTEF Energy Research

and the Institute for Energy Technology (IFE). MARINTEK heads the subtask "Progress of design tools", whose aim is to improve design tools - numerical methods and experiments - for the design of offshore wind energy concepts. The research programme will continue for two more years.

Risers and moorings - VIV

Observations of marine riser responses show that vortex-induced vibrations (VIV) are a widely-occurring phenomenon, with the potential to cause costly and environmentally damaging fatigue failures. In the deep waters of the Gulf of Mexico, West of Africa and Brazil, for example, where oil and gas exploration and production continue apace, VIV may be responsible for the largest single contribution to riser fatigue damage. In 2007 MARINTEK also performed several studies for the Risers and Moorings project of the Norwegian Deepwater Programme (NDP). Two of these concerned experimental studies of ways of mitigating VIV in marine risers.

A parametric study of marine growth on circular cylinders fitted with helical stakes has been performed in order to improve our understanding of the effects of marine growth on the dynamic response of a riser, which could be helpful when designing strategies for cleaning risers.



Examples from 3D scanning of barnacled riser models.

Riser fairings are designed to rotate freely around the axis of the riser and to passively align with the direction of incident flow so that they streamline the flow and eliminate VIV. This rotational degree of freedom introduces the possibility of a complex dynamic phenomenon involving coupling between the hydrodynamic forces and the fairing/riser motions (e.g. cross-flow translation and rotation).

As part of the study the dynamic behaviour of various fairing geometries with respect to transverse and rotational motion, a series of model tests were performed in 2007, focusing on potential vortex-induced vibrations and onset of instability motion of individual fairing profiles. Model tests were performed in two of MARINTEK's towing tanks, as well as tests in the Cavitation Laboratory.

Third-party verification of the Agbami Field

A substantial part of the activity of the Department of Marine Structures in 2007 was devoted to third-party verification of the Agbami field on behalf of Star Deep Water Petroleum Limited, an affiliate of Chevron Corporation.

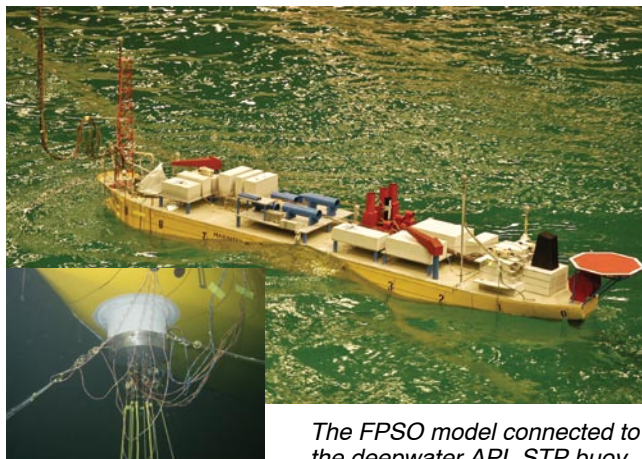
Nigeria's deepwater Agbami field is located offshore Nigeria in the Central Niger Delta. Water depths range from 1280 to 1646 m. The Agbami development is composed of a spread-moored Floating Production Storage and Offloading unit (FPSO) and subsea production, water injection and gas injection systems. Stored oil is offloaded through a moored offloading buoy onto tankers of opportunity. Produced gas is re-injected into the reservoir.

The project was complex and covered many different specialized fields. The aim of our work was to examine the extreme response and service life of the Agbami water, gas and production risers. The service life of the riser took the effects of wave directionality, currents, vessel offset and changing vessel positions into account. In addition vortex-induced fatigue, VIV, fatigue and installation-crushing capacity of the risers were also investigated.

STP buoy operation, APL concept

In 2007, Advanced Production and Loading Pte Ltd (APL) was one of MARINTEK's largest clients. MARINTEK carried out model testing of APL's Montara FPSO, the Peregrino field FPSO connected to a Submerged Turret Production (STP) buoy, and shallow-water testing of a Submerged Turret Loading system. Model testing was also performed on a deep-water STP buoy system for use on an FPSO that will operate on the Chinook/Cascade Oil Fields in the Gulf of Mexico operated by Petrobras.

APL has a renowned history of STP buoy operation, and with a water depth of 2500m, this is the deepest application to date for the STP system and the first APL turret and swivel delivery to a Petrobras-operated field. Based on MARINTEK's experience in modelling truncated mooring systems, a shortened anchor and riser system was produced so as to be able to perform the model tests in our Ocean Basin Laboratory facility.



Underwater photo showing the deepwater APL STP buoy connected to the FPSO during testing.

The FPSO model connected to the deepwater APL STP buoy to be operated in the GoM Cascade/Chinook fields undergoing tests in the MARINTEK Ocean Basin.



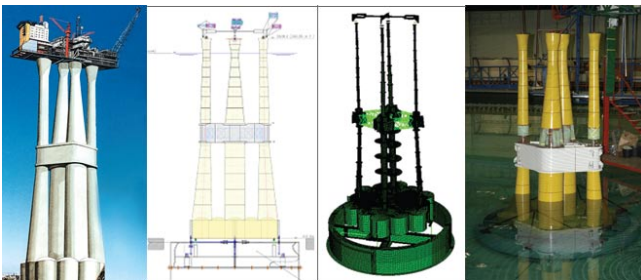
150 DWT export tanker moored to Sevan 1000 FPSO for offloading.

Cylindrical FPSO hull from Sevan

The Norwegian company Sevan Marine has continued work on the development of its cylindrical FPSO hull. Two concepts were studied at MARINTEK in 2007; the Sevan 300 which is planned for the Central North Sea at 81 m water depth and the 50% larger dimensioned Sevan 1000 which is planned for hurricane/ cyclone prone areas such as the US GOM or NW Shelf of Australia permanently moored through the most extreme storms.

The primary objectives of the model tests were to verify and calibrate numerical predictions of system global responses, maximum offsets and mooring-line tensions and to estimate slamming and green water effects in extreme conditions. The motion behavior and mooring forces under maximum offloading conditions was also focused on.

The Troll project



From real structure to model testing.

Ring loads and their associated non-linear responses may be important in connection with the design of fixed installations. In 2007, MARINTEK carried out a comprehensive series of tests to determine the extent of ringing on the Troll A platform in connection with plans to increase its deck load. Tests of this kind require an elastic model with appropriately scaled stiffness and mass. The soil stiffness under the foundation of the platform is also of great importance for the platform's dynamic response, and the model must therefore be set up on an elastic foundation.

Troll A has four concrete shafts that are linked by a

concrete "riegel" about half-way between their base and the still-water level. This connection makes the load-bearing characteristics of the structure rather complex, and for the connection itself torsional stiffness, bending stiffness and shear stiffness must be scaled correctly if the load-bearing characteristics are to be correctly represented. The point of departure for the design of the physical model was a numerical finite element model that best represents the platform as it exists today. Based on studies of the dynamic properties of the numerical model, a scale test model with equivalent properties was designed. With support provided by a detailed ABAQUS model, the properties of the individual components were identified and a complete model built.

As well as responses in the foundation, the physical model was instrumented in order to measure moments at ten sections, and shear forces at four sections for all four shafts. Axial forces in the shafts under the riegel and where the shafts meet the deck, accelerations at various levels and wave elevation in the area around the deck were also measured. The total number of channels measured was about 200.

In order to validate the stiffness, dynamic properties and instrumentation of the physical model, the individual components and the complete model were tested both numerically and in the laboratory, using static and dynamic tests.

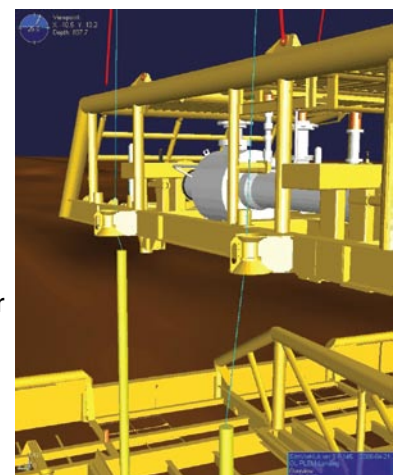
A great deal of effort has later on been put into analysing the test data and models in order to establish design loads for the structure.

Marine operations

MARINTEK performed numerical simulations ahead of various challenging heavy lift and subsea installation operations. The work was performed on behalf of operator companies and contractors, either as third-party verification or as a part of their normal planning preparations. MARINTEK also contributed through simulations and model tests to the design of a concept for platform decommissioning and removal.

The simulation software was improved in order to facilitate a greater variety of operational actions during a simulator session, and to better handle operations under particularly challenging conditions.

The extremely high offshore activity in



Simulation of challenging subsea installation.

Norway during the last few years has resulted in a high demand for experienced engineers. The contractor companies therefore need to engage personnel without a marine technology background. MARINTEK and NTNU have given lectures covering the most relevant topics of marine technology, both in internal company courses and in seminars.

Ship-to-ship interaction studies

A large proportion of the oil imported by the USA comes ashore through lightering operations. In other locations too, lightering and reversed lightering are used to reduce the total transportation costs of oil and gas. There is a rising interest in ship-to-ship cargo transfer operations. In collaboration with shipping companies, training institutions and research organisations MARINTEK is coordinating an international research study of hydrodynamic ship-to-ship interactions and nautical aspects of such operations. Experienced mooring masters have taken part in workshops and shared their operational experience with the researchers. This project has identified several challenges related to these operations and used them to focus research. The project combines computational fluid dynamics, laser-based particle measurements and two-vessel model tests to generate new knowledge of interaction forces between two full-bodied ships. One of the project outcomes will be improved ship models for use in shiphandling simulators.

H₂S laboratory



Test rig for corrosion fatigue testing of armour wire for flexible pipes.

Since the mid 1990's a large number of oil and gas fields on the Norwegian Shelf and elsewhere have been developed using floating production systems. Due to the large motions of the floater, flexible risers are generally required for transport of oil and gas from the sea bed to the surface. Flexible risers are essentially polymer hoses that are heavily reinforced with several layers of high-strength armour wire throughout the pipe wall.

Fatigue of the armour wire is often a limiting factor in the design life of flexible risers. Until recently, armour wire for flexible risers was in general fatigue designed for "in air" conditions. Operational experience has proved that the assumption of a benign environment for armour wire is optimistic. There may be water ingress in the event of damage to the outer sheath or by permeation from the well flow. In combination with permeated CO₂ or H₂S from the well flow, the aqueous environment may significantly affect fatigue

Many people visit us in order to be stimulated into innovative thinking and ideas in a milieu that is rich in professional expertise.



strength. A consistent design methodology needs to take these effects into account. MARINTEK/SINTEF has developed test facilities and methodology for fatigue testing of armour wire in aqueous environments with controlled concentrations of CO₂, H₂S and O₂. A Joint Industry Project has been running since 2001 (Phase I, II and III), - participants are oil companies, suppliers of flexible pipes and operators.



Scientific methodology and thoroughness enable us to verify whether our clients' ideas and structures meet their intended specifications.

Condition monitoring of subsea oil and gas installations

Subsea hydrocarbon production has been increasing in recent years. Thanks to subsea installation, marginal satellite fields can be developed around existing field developments, or fields can be completely developed without any surface infrastructure. The best-known subsea fields in the Norwegian sector are Snøhvit and Ormen Lange. Traditional platforms have all their technical equipment accessible for inspection, maintenance and repair. Equipment standing on the seabed is not accessible in the same way. Subsea installations have traditionally been designed to be maintenance-free for 20 – 30 years, but damage and deviations can also occur on the seabed.

Subsea interventions are expensive for operators, as they may require partial or full production shutdown, as well as time spent waiting for the delivery of spare parts and for bad weather to improve.

MARINTEK has performed a pilot study for the Norwegian Centre of Expertise, NCE Subsea, where the challenges we face in condition monitoring of subsea installations are surveyed.

Maintenance practice in the Gassled transport system

In 2007, MARINTEK completed an analysis project for Gassco, - operator of the Norwegian gas transportation and processing system, - Gassled. Gassco wished to place greater focus on availability and the contribution of maintenance to potential increase in delivery capacity. There is an ambition to increase the delivery capacity of the system. In this respect, the gas processing plants are of special interest. This project addressed the following aspects: Macro-mechanisms and dependencies within Gassled, Applicable techniques for planning and execution of maintenance, Potential for increased Gassled availability (focus on processing plants), Challenge existing maintenance practice (focus on shut-downs), Proposed activities to realise potential availability.

It was anticipated that changes to the turnaround intervals for the gas processing plants could perhaps quickly yield the targeted improvements in system



The Kårstø gas processing plant is a part of Gassled.

availability. A model was developed to include all the necessary elements of a maintenance management system, as well as techniques and tools for the execution of maintenance. A Gassled processing plant and a best-in-class facility outside Norway were benchmarked against this model.

The report identified recommendations for improvement in key maintenance management elements and execution techniques, and assessed their potential. It was demonstrated that improvements to three areas of the maintenance management system itself would have quicker and/or greater effect on system availability than would the anticipated changes to plant turnaround interval.

Environmentally friendly shipping



Although seaborne transportation is already environmentally friendly and energy efficient, ships must improve.

The need to reduce the negative impacts of shipping and offshore activities on the climate and environment is increasing as activity in these sectors grows. Awareness of this necessity on the part of the general public and the authorities is also growing, and has led to the emergence of international frame conditions and agreements that are potentially capable of controlling and reducing emissions. As an adviser to the Norwegian authorities, MARINTEK has made contributions to drawing up such regulations.

One important contribution to the reduction of environmental impact is to make vessels more energy-efficient, which has been an important goal for MARINTEK ever since it was established. This was also the reason for building the first ship model tank. MARINTEK was also among the first institutions to attempt to survey and reduce other environmental impacts and has been working for a more environmentally friendly shipping industry for many years.

In 2007, MARINTEK launched a process aimed at making environmentally friendly shipping a strategic area of effort for the company. This process will place relevant work done by MARINTEK and SINTEF in a wider context, and identify core areas in which it will be of strategic interest for us to operate. To date, these efforts have led to the development of a major interdisciplinary project that aims to upgrade Norway's ageing coastal freight transport fleet. MARINTEK has the leadership of a project for the IMO that has ten participants from eight different countries, and which has the aim of surveying emissions of greenhouse gases from vessels, identifying their negative effects and the potential for reducing such emissions.

MARINTEK participates in technology demonstrator programme for more innovative hullforms

One of the US Navy's technology demonstrators is the Transformable Craft or T-Craft, (also known as the 'Seabase Connector'). The Office of Naval Research (ONR) describes the T-Craft as a 'fuel-efficient vessel capable of self-deployment and high-speed transit'. The T-Craft is a hybrid between an SES (Surface Effect Ship) and an ACV (Air Cushion Vehicle); in the SES mode the vessel will have a speed of 40 knots in seastate 4, while in the ACV mode the craft is fully amphibious, meaning that it is beachable. Besides meeting strict requirements for the three modes of operation; long range/good seakeeping, high speed/shallow draught and amphibious/dry transfer, its payload capacity is also very high.

MARINTEK participates in the T-Craft programme supplying engineering services, hydrodynamic tests and theoretical calculations.

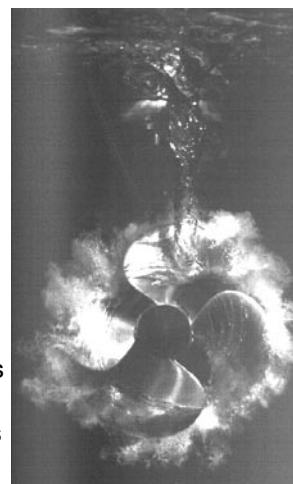


T-Craft in ACV mode – shallow water. Courtesy of Umoe Mandal AS

Phase 1 contracts running in 2007 were awarded to four different companies. Two companies were selected for the phase 2 contracts which will run from 2008 to the end of 2009. MARINTEK will also participate in the Phase 2 programme.

Ship Propulsion in extreme seas - SeaPro

MARINTEK and Department of Marine Technology, NTNU, are jointly performing the Ship Propulsion in Extreme Seas (SeaPro) research project. SeaPro is sponsored by the Research Council of Norway (75%) and Rolls-Royce Marine (25%). The project started in January 2007, and will run until the end of 2010. The total budget is NOK 15.2 million, which will be shared approximately equally by NTNU and MARINTEK. The project aims to develop knowledge and tools for optimisation of ships and ship propulsion systems for operation in heavy seas, with respect to safety, reliability and efficiency.



Aeration test and blade force measurements of a deeply submerged propeller.

SeaPro focuses on propulsion dynamics in waves, propellers operating under extreme off-design conditions and added resistance and loss of speed of vessels in heavy seas. A series of advanced and unique tests with thrusters were performed at MARINTEK in 2007 to study dynamics when the thruster is under turning (azimuthing) operation. The tests were performed at different turning speeds.

Motorways of the seas - MOSES

MARINTEK is the Coordinator of MOSES (Motorways of the Sea European Style) which is a big research project co-funded by The European Commission. MOSES has 41 partners from 17 European countries and a total budget of 14 Million Euros.

MOSES' main goal is to develop a blue print for developing an innovative European network of Motorways of the Sea (MoS). The MOSES blue print will target, through the development of Motorways of the Sea, an increase in the share of Short Sea Shipping in the European Union transport market from 43% to 56% by 2020.

A main focus of the project will be to efficiently link sea transport with all other surface transport modes by transforming port terminals into seamless motorway junctions. The challenge will be to remove the barriers that make existing Intermodal door-to-door solutions more like an endless row of crossroads with red lights, instead of motorways with seamless junctions (similar to the nearly seamless logistics for truck-only solutions). The demonstration activities will be an essential part of the MOSES project. It is here that the concepts developed will be tested for their practicability, albeit with a restricted set of business participants.

Broadband at sea

The MarCom project, "Broadband at Sea – Internet to coastal waters, offshore and aquaculture installations, as well in the High North", focuses on communications and application challenges in maritime operations. Norway has one of the longest coasts in the world in addition to being in charge of managing a vast ocean region with about five times the area of its mainland. Efficient solutions developed by the industry will thus have a great impact on the services available to maritime operations.



The MarCom WiCAN© concept (Wireless Coastal Area Network).

The project has 29 participants in addition to MARINTEK, which is responsible for technical coordination. Mobikom AS is the administrative manager with contractual responsibility to the Research Council of Norway and the other partners.

The project will study the applicability of existing wireless communication technologies in various scenarios. The goal is to supply higher quality and lower cost communication services to the shipping community, with emphasis on coastal areas.

With our world-class laboratories, high level of professional expertise and close relationships with the academic community, we attract competent people from all over the world who wish to extend their range of knowledge of maritime technology.



Income statement 2007

Operating revenues and expenses

Revenues	270 682
- Direct project expenses	42 726
Net operating revenues	227 956
Salaries, social security and other sec. costs	150 085
Other operating expenses	62 865
Net operating expenses	212 950
Operating result	15 006
Financial result and taxes	298
Annual result	15 305

Extract of MARINTEK's accounts (KNOK).
Current exchange rate: 1 USD = NOK 5.50 - 1 EUR = NOK 8.01

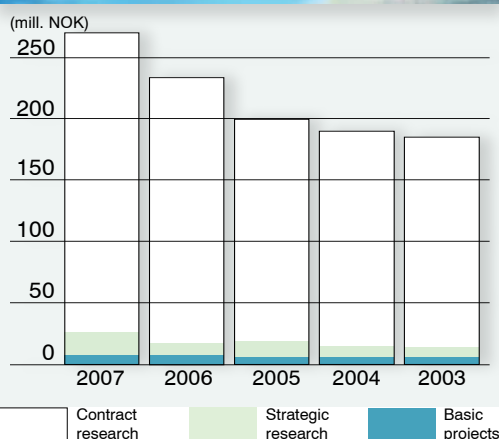
Balance sheet 2007

Assets	257 204
Fixed assets	38 367
Fixed operating assets	35 132
Financial long-term assets	235
Current assets	218 837
Other current assets	133 475
Cash, bank accounts	85 362
Equity and liabilities	257 204
Equity	115 578
Paid-up equity	11 600
Earned equity	119 846
Liabilities	125 758
Long term liabilities	9 619
Current liabilities	116 139

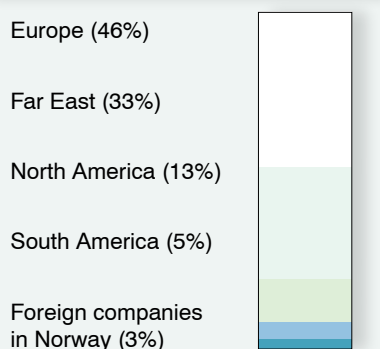
Key figures (MARINTEK concern main financial figures)

KNOK	2007	2006	2005	2004	2003
Result					
Gross operating revenue	270 682	232 113	199 282	188 950	184 169
Net operating revenue	227 956	194 049	164 844	152 446	154 021
Operating result	15 006	12 278	7 352	-330	3 070
Annual result	18 321	12 270	7 795	18	3 247
Balance					
Operating assets	38 367	35 757	27 994	27 365	32 280
Liquid assets	218 837	169 075	173 186	149 217	140 634
Total assets	257 204	204 832	201 180	176 582	172 914
Equity capital	131 446	115 578	103 483	95 218	95 200
Liabilities	125 758	89 254	97 697	81 364	77 714
Total equity and liabilities	257 204	204 832	201 180	176 582	172 914
Profitability					
Operating margin %	6.6	6.3	4.5	-0.2	2.0
Total profitability %	3.2	3.0	1.9	-0.1	0.9
Profitability on equity %	7.4	5.6	3.9	0.0	1.7
Liquidity					
Cash flow from operations (KNOK)	25 670	4 810	4 185	9 862	-10 203
Degree of liquidity	1.7	1.9	1.8	1.8	1.8
Solidity					
Equity capital %	51	56.4	51.4	53.9	55.1

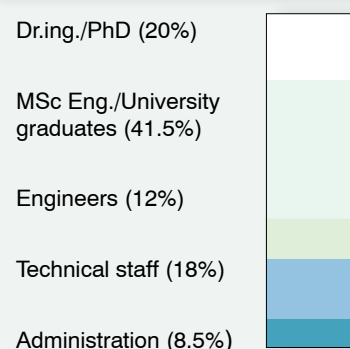
Turnover Project-related specification of turnover



Foreign trade 28% of total turnover



Personnel Total staff: 193



Auditors: Deloitte

Activities

MARINTEK performs research and development for industry and public-sector bodies involved in marine activities. The headquarters of the company are in Trondheim, and it has a subsidiary in Houston, Texas: MARINTEK (USA), Inc., which was set up as an element of our strategy of focusing on the international market, in collaboration with other Norwegian companies that wish to export Norwegian petroleum technology. In 2007, we also opened a sales office in Rio de Janeiro; MARINTEK do Brasil Ltda.

An important aspect of our work is operating the marine technology laboratories at Tyholt in Trondheim, of which the Ocean Basin Laboratory, the Ship Model Tank and the Marine Structures Laboratory are the major units. These laboratories are also utilised by NTNU's Department of Marine Technology, in a fruitful collaboration with our own groups. Most of our research scientists are recruited from this milieu.

The development of mathematical models and the integration of these into simulators for the study of physical phenomena and marine structures are responsible for a growing proportion of our contracts. We use our laboratories to calibrate the mathematical models in order to ensure that these form the optimal point of departure for more detailed studies of the complex structures and constructions that will be built by our clients. During the past few years, in conjunction with NTNU, MARINTEK has developed a unique range of expertise in carrying out integrated laboratory-supported studies of this sort. This has enabled us to increase our international involvement, and today, we are a strategic technology partner for major international companies operating in the shipping and offshore sectors.

Markets and technology

The international market is displaying very positive tendencies in both the shipping and offshore sectors, and we have experienced a growing demand for our laboratory capacity. As a consequence of the positive market situation there has been a growth in activity in most of our market segments. The testing of new types of offshore supply vessel, where our contribution lies in the optimisation of hull forms and propulsion systems, is particularly worthy of mention.

Testing lifeboats for offshore installations has been a major activity, which we have performed on behalf of companies operating on the Norwegian continental shelf.

Our hydrodynamic laboratories are an important input factor in our experimental activities, and we perform strategic research projects with the aim of developing theoretical models for estimating hydrodynamic loads.

We have tested various types of floater for use in offshore oil and gas installations and have carried out

a major project in which we analysed the greater deck loads that would result from increasing gas recovery from the Troll field.

In marine operations, we have carried out projects that provide a basis for accurate simulations of heavy crane lifts, subsea installation interventions and ship-to-ship operations.

Once again, the testing of risers and cables for offshore installations has been a significant market. This area of activity includes tests and simulations of how deepwater currents affect risers, pipelines and the cables that supply control units installed on the seabed with power and control signals. Our marine structures laboratory is highly suitable for work of this sort, and we are well known as the only neutral test laboratory in the world within this market segment. Our H₂S laboratory also enables us to study the technical requirements for risers in fields in which the presence of CO₂ and H₂S makes for an extremely corrosive environment.

In the field of operation and maintenance, we observe a growing market for servicing Norwegian subsea installations. We have participated in a pilot study, in collaboration with the recently established Norwegian Centre of Expertise, NCE Subsea, on surveying the challenges that will face future condition monitoring of subsea installations.

Environmentally friendly shipping is at the focus of increasing national and international attention. The Norwegian Shipowners' Association's strategy and the government's maritime strategy both address the need for solutions that will produce zero hazardous emissions. In 2007, we drew up a strategy for this area that would involve several disciplines in this company, ranging from logistics and shipping fleet management to efficient vessel design and the use of environmentally friendly fuels.

Profit and loss accounts and balance sheet

The company's result is in line with the expectations of the Board. With a gross turnover of MNOK 266.2 and net operating income of MNOK 222.0, we made an operating profit of MNOK 15.5. A positive financial result of MNOK 0.3 left a profit after financial items of MNOK 15.8. The result after tax came to MNOK 18.8, which the Board proposes to transfer to the company's other equity capital.

Of a total capital of MNOK 257.2, our equity capital comes to MNOK 131.3, equivalent to an equity capital ratio of 51.1%. Working capital is MNOK 100.5, which represents a rise of MNOK 12.2. Our most liquid assets amount to MNOK 67.9, an increase of MNOK 24.4.

The Board is pleased to note that the Institute has invested a total of MNOK 10.9 in infrastructure in order to maintain the quality of our laboratories, and that in its 2008 Budget the government has earmarked MNOK 25 for new investments in the marine technology laboratories at Tyholt. The Board has resolved to follow up with a further MNOK 20 from our own resources for upgrading of infrastructure. All of these investments will benefit the whole of the maritime sector and thus Norwegian society in general.

The company's order reserve stands at MNOK 86.6, compared with MNOK 72.9 at the same point in time last year.

Prospects for the future

In the course of 2007 we have seen a general improvement in our shipping and offshore markets, thanks to high oil prices and a large demand for freight services.

We also see a certain improvement in the market for applied research through larger allocations to applied research in those industrial segments in which Norway has traditionally been at a competitive advantage, including the maritime and offshore sectors. Grants to maritime research via the Research Council of Norway and Innovation Norway have further risen to MNOK 200, of which MNOK 25 have been earmarked for upgrading of the laboratories at Tyholt. Our project portfolio under the EU's Framework programme has also increased, thanks to major successes in the final phases of the 6th Programme.

The maritime cluster has been Norway's largest service-based creator of value focusing on the international market. We are currently observing a greater readiness on the part of the Norwegian authorities to ensure that the maritime cluster is capable of maintaining its strength. Not least, it is now realised that the efforts now under way in the Arctic are dependent on a viable maritime industry.

The development of Arctic resources is in sharp focus among all sectors of Norwegian industry. However, the challenge here involves developing these resources in ways that take account of demands for a sustainable environment in such a vulnerable region. This will require significant efforts in research and international cooperation by all parties involved. MARINTEK is making active efforts to position itself as an important player that can make a contribution to meeting these challenges.

At international level, demands for more environmentally friendly shipping will be a driving force for the development of new vessels and ways of operating them. Requirements regarding reduced emissions of CO₂ and hazardous particles (NO_x, SO_x) are already being focused on by industry, the IMO and EU.

In the oil and gas industry, we need to focus on increasing our exports, and MARINTEK is currently

positioning itself as a knowledge partner for the major Norwegian companies which are currently entering the international market.

Recruiting young Norwegians to the maritime sector will be a key factor in our ability to maintain and strengthen Norway's maritime advantages. MARINTEK is in the process of drawing up a visionary project that will be capable of laying a foundation that will encourage young Norwegians to enter the marine and maritime industries, and attract foreign students and researchers who wish to study maritime disciplines in Norway.

As far as MARINTEK's specific areas of special effort are concerned, the situation is as follows:

The order situation is good in offshore structure technology, which is involved in technology development of risers, cables and pipelines.

There is a high level of demand for our services in the hydrodynamic laboratories, both within the vessel segment, where there is a sharp focus on offshore vessels, and the offshore segment, on which new floater concepts are being launched.

The area of operation and maintenance is showing good signs of growth since positioning itself vis-à-vis the oil companies and the challenges they offer in the field of offshore field operation.

Our logistics segment has a large order reserve in comparison with the situation as it was two years ago.

Our order reserve in maritime energy systems also improved towards the end of the year, as a result of the sharp focus on environmentally friendly shipping due to the growing environmental demands that are being made of the shipping industry.

Maritime ICT services is an area that has managed to build up a portfolio of extremely interesting and profitable projects in specialised segments of maritime research.

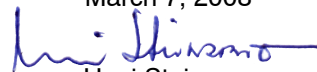
In view of these prospects for the market, the Board anticipates another good operating year in 2008, even though stock market unease at the start of the year may delay the launching of innovative projects, which in turn may cause a degree of uncertainty as regards our order reserve in the second half of 2008.

Thanks to our employees

The Board extends its thanks to our management and employees for their excellent work in 2007. We also thank both the NTNU staff who are involved in MARINTEK's activities and our clients for their collaboration.

Trondheim, December 31, 2007

March 7, 2008



Unni Steinsmo
Chair of the Board

Ownership

MARINTEK's shareholders:

SINTEF	6.5 MNOK	56%
Norwegian Shipowners' Assoc.	3.0 MNOK	26%
Det Norske Veritas	1.0 MNOK	9%
Foundation of Shipbuilders' Fund for Research and Education	0.5 MNOK	4%
Norwegian Maritime Directorate	0.5 MNOK	4%
Fed. of Norw. Coastal Shipping	0.1 MNOK	1%
Total share capital	11.6 MNOK	100%

Board of directors

President (CEO) Unni Steinsmo, Chair of the Board
Executive vice president Yngvil E. Åsheim
Technical director Jan-Kristian Haukeland
Director Jon Rysst
Assistant director general Sigurd Gude
Professor Odd Faltinsen
Dr.ing. Gro Sagli Baarholm
Dr.ing. Karl Erik Kaasen
Principal research engineer Halvor Lie

Management

President Oddvar Aam (2007)
President Frank Wettland (2008)
Finance manager Birger Åldstedt
QHSE manager Karl Andreas Haugen
Personnel manager Anne Jørgensen
Vice president - business development, Helle Moen
Div. director Terje Nedrelid, Ship and ocean laboratory
Laboratory manager, Ship & ocean lab., Audun Øydvin

Our research directors:

- Oddvar Eide, Structural engineering
- Ørnulf Rødseth, eMaritime
- Roar Bye, Maintenance technology (2007)
- Andrew Gibson, Maintenance technology (2008)
- Eivind Dale, Strategy and logistics
- Per Magne Einang, Energy and environment
- Hans Jørgen Rambech, Ship technology (2007)
- Kourosh Koushan, Ship technology (2008)
- Frode Meling, Marine operations and simulation
- Rolf Baarholm, Offshore hydrodynamics

MARINTEK - a certified institute

MARINTEK has chosen to certify the whole company to the ISO-9001:2000 standard. We have mapped out all of our work processes, including laboratory activities, theoretical studies and analytical work. This is intended to ensure that our customers enjoy quality in all the work that we do for them.

MARINTEK (USA), Inc.

MARINTEK is dependent on being close to its key customers, some of whom operate in the offshore industry. Every day, Houston and Texas are becoming more and more obviously the global centre of gravity in offshore structure design, and these centres are active vis-à-vis deepwater field developers in Brazil and West Africa as well as field developments in the Mexico Gulf. MARINTEK also operates a subsidiary in Houston and is involved in studies aimed at taking up the challenges of ultra-deep water.

MARINTEK do Brasil Ltda.

Following several years of positive cooperation with Petrobras and other Brazilian companies, MARINTEK has decided to open an office in Rio de Janeiro. The office will promote areas of expertise for the whole SINTEF Group vis-à-vis Brazil's petroleum sector, and we wish to become a part of the country's research community. In conjunction with SINTEF, therefore, we have signed cooperative agreements with a number of Brazilian universities and research institutes.



Change of leader in January 2008

After 11 years in charge of MARINTEK, Oddvar Aam has retired as president at his own request at the age of 60, handing over to Frank Wettland.

During Aam's time as its head, the company's increased its equity capital from MNOK 47 to MNOK 131, with the result that MARINTEK currently enjoys excellent liquidity and is ready to make new efforts for the benefit of the maritime sector.

The Board thanks Oddvar Aam for his first-class efforts, particularly in developing an integrated scientific milieu at Tyholt, where NTNU's Department of Marine Technology and MARINTEK have successfully collaborated in the generation of new knowledge for Norway's maritime sector. Aam will continue his links with the company in a new position as senior advisor.

Frank Wettland joined MARINTEK as president on January 21, 2008. Wettland's background is in the offshore industry, most recently as managing director of Aker Reinertsen AS in Trondheim. He graduated with an engineering M.Sc. from the university in Trondheim, NTNU, in 1983.


Cooperation with NTNU and other SINTEF units

NTNU including their Department of Marine Technology and MARINTEK actively coordinate their strategic programmes so that there is a high degree of interaction between the work of NTNU's Centre of Excellence (CoE) at the Marine Technology Centre at Tyholt and MARINTEK's research programmes. Cooperation takes place in areas such as hydrodynamics and sea loads, marine structures including risers and pipelines, and marine cybernetics. These efforts are coordinated vis-à-vis both industry and the Research Council of Norway, with the result that the combination of MARINTEK and NTNU is one of the strongest civil centres of maritime R&D in the western world. MARINTEK participates in the financing of the CoE, and some of our scientists are involved in the Centre's research programmes. We have recently recruited four scientists from this organisation.

We have established a Gemini Centre in the field of construction technology, and this is a model promoted by the SINTEF Group and NTNU when they wish to emphasise their cooperative relationship.

We also cooperate extensively with other SINTEF units, and we participate in SINTEF Group efforts in offshore applications of pipelines, marine logistics and integrated offshore operations.

The SINTEF Group consists of approx. 2000 employees, and MARINTEK is the group's principal source of expertise in the maritime sector.



Employing advanced methods and accurate instrumentation, we produce project results that can be relied on, i.e. that have the degree of accuracy that our clients expect of a world-class research institute



MARINTEK



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