

# KONGSBERG THE TECHNOLOGY GROUP



KONGSBERG

# WORLD CLASS

– THROUGH PEOPLE, TECHNOLOGY AND DEDICATION

# EXTREME PERFORMANCE FOR EXTREME CONDITIONS

"The common denominator for many of our solutions is advanced systems for situational awareness, control and decision-making support. By integrating high-precision sensor technology into our total solutions and applying our advanced simulation and training systems, we enable the operator to take the right decisions, control the processes and complete the assignment – under the most extreme conditions"

Walter Qvam  
*President and CEO*

KONGSBERG is one of Norway's leading technological environments. The company possesses both the ability and the determination to take the challenging route from an initial concept to a finished industrialised solution.

KONGSBERG has a long tradition of developing world class high-technology products and solutions. We have world leading market positions in both maritime and

oil & gas activities as well as in defence and aerospace.

KONGSBERG's core expertise is totality. Our strength lies in putting a wide-ranging group of competences together for products, technologies, solutions and market needs. We place great emphasis on listening to our clients and understanding their needs. This gives us valuable insight into the situations that our systems must resolve.



# KONGSBERG

## KONGSBERG MARITIME

Kongsberg Maritime supplies systems for positioning, monitoring, navigation and automation to merchant shipping, subsea and the offshore industry. Kongsberg Maritime is among the world leaders in dynamic positioning, automation and monitoring systems, process automation, satellite navigation and hydro-acoustics.

## KONGSBERG OIL & GAS TECHNOLOGIES

Kongsberg Oil & Gas Technologies supplies innovative technological subsea products and solutions, as well as information systems for drilling operations, production and the subsea environment. This business area optimises oil and gas operations by means of data management, simulation, subsea engineering, integration and analysis tools, as well as through engineering projects and consultancy services.

## KONGSBERG DEFENCE SYSTEMS

Kongsberg Defence Systems is Norway's leading supplier of defence and aerospace-related systems. The portfolio includes products and systems for command and control, weapons guidance, surveillance, communication solutions and missiles. This business area also develops and produces composite and mechanical products for the aircraft, offshore and helicopter markets.

## KONGSBERG PROTECH SYSTEMS

Kongsberg Protech Systems is a world leading supplier of remotely controlled weapons systems. This business area's product portfolio is centered around the PROTECTOR family of Remote Weapon Stations. These systems increase the safety of personnel in military vehicles and are also used to protect fixed sites.



"Our focus on continuous improvements is an important contribution to innovation and competence development for KONGSBERG and for Norwegian and international industry. Various partnerships and projects contribute to our overall value creation and international positioning"

Hilde Øygarden  
Executive Vice President

The technology cluster that exists in KONGSBERG began to grow in the 1950s, after the Norwegian Parliament approved a comprehensive modernisation of Kongsberg Våpenfabrikk. As new technology was developed and became industrialised, a set of industrial partners, large and small,

began to flourish in and around Kongsberg and Horten.

KONGSBERG now has approximately 2,500 industrial partners all over the world. A large portion of our extensive product development is done in close cooperation with these partners as well as our demanding customers.

## FROM AN IDEA TO AN INDUSTRY WORTH BILLIONS

The PROTECTOR weapon station history has developed into an industrial fairy tale for KONGSBERG. The success of this system and the rapid advancement from a concept to a world-leading product is a credit to the innovative and forward learning spirit in KONGSBERG.

KONGSBERG has supplied thousands of weapon stations to several nations. These include Norway and Sweden, which are now using a technologically advanced version called RWS Nordic.

The Nordic version consists of components from 35 Norwegian and 12 international sub-contractors. For many of them, this collaboration has opened the doors to the global market.





"KONGSBERG is working constantly to stay at the forefront of development. Doing so enables us to continuously supply solutions that gives our demanding customers greater efficiency and safety"

Geir Håøy  
*President Kongsberg Maritime*

KONGSBERG is helping to make the sea a safer workplace. We supply technology that increases the safety of operations and to make better use of resources.

Throughout its long shipping history, Norway has built up a significant group of competitive maritime industries, in which KONGSBERG is a natural member. KONGSBERG

is a recognised quality supplier of navigation, automation, positioning, seabed mapping and surveillance.

Technology developed for the North Sea has proven its value all over the world. The same is true of KONGSBERG's technology for the fishing industry, where the Simrad brand represents the very forefront in echo sounders.

# ROBOTS IN THE OCEAN DEPTHS

Every single deep-sea oil field in the world has been surveyed by HUGIN.

HUGIN is an autonomous subsea vessel. It is sent to the sea floor where it maps specific areas of the seabed and returns to the surface when its job is finished.

Among other things, HUGIN is used to inspect pipelines on the seabed. The vessel also has a military function where it is used for mine sweeping.



## STEADY POSITION WITH NO ANCHOR

Dynamic positioning means that a vessel is held steady on a single position with the use of propellers instead of anchors on the seabed.

The system calculates how the wind and ocean currents are trying to move the vessel and compensates for these forces via the vessel's propellers.

Dynamic positioning is used, for example, on drilling rigs where a floating rig can be held securely in position while drilling into the seabed.



## MORE EFFECTIVE OPERATION

Well Advisor is a monitoring tool that oversees drilling operations down to the smallest detail.

Statistics indicates that up to 30 % of the time used in drilling operations is spent solving problems that have created delays in the drilling process.

Well Advisor gives operators a better, more complete picture of what is happening during the operation. Having this oversight not only reduces delays but saves costs for the users.



# PROUD SUPPLIER TO THE DEFENCE MARKET

"The fact that we develop and deliver advanced defence systems makes us a reliable and attractive partner for international customers. This also gives Norway greater influence in the standards that are set for defence materiel in NATO"

Harald Ånnestad  
*President Kongsberg Defence Systems*

The Norwegian climate and terrain present tough challenges for military materiel and personnel.

KONGSBERG has spent decades developing customised solutions for the Norwegian defence forces. This has strengthened Norway's defence capability and ensured that Norway has one of the highest technology defence forces in the world. The Norwegian defence market alone is not large enough

to sustain a competitive national defence industry.

The export of defence materiel to nations approved by the Norwegian authorities is therefore essential for securing an international competitive national defence industry.

KONGSBERG's role as an international player on the defence market opens doors to strategic alliances with major international defence suppliers.



## F-35 JOINT STRIKE FIGHTER

KONGSBERG produces several parts of the fuselage and the rudder for the F-35 Joint Strike Fighter aircraft.

In addition, KONGSBERG is also developing the highly advanced Joint Strike Missile, which is integrated into and carried within the aircraft. This opens opportunities for a new Norwegian industrial adventure.





## PROTECTING STRATEGIC AREAS

The NASAMS air defence system is one of the most advanced and modern of its kind in the world.

Since 2005, NASAMS has been deployed in continuous operation in Washington D.C, where the system protects the airspace surrounding the US. Capital.



"If you want to be in the forefront of advanced technology, KONGSBERG is the place to be. You also have very good international opportunities. And there is no doubt you can look forward to a challenging and exciting working day"

Katrine Mygland  
*Recently employed graduated engineer*

Working for KONGSBERG means working internationally. KONGSBERG has around 7,500 employees in more than 25 countries. That means that as an employee you can cooperate with colleagues from different cultures and experience the world through your job.

One of the unique things about KONGSBERG is that the same engineers often support projects from the drawing board through to the final tests. This enables our employees leverage a wide spectrum of knowledge and technologies in their work for KONGSBERG.

## YOUR EXTREME

Through our student competition "Your Extreme", KONGSBERG demonstrates social responsibility in an area that is of great significance for Norway's future growth and competitiveness.

The purpose of Your Extreme is to increase the number of students interested in a science degree, prevent drop-outs and inspire engineering students to do more.

The task is demanding but clear: Define a future extreme challenge and solve it!





"By using our expertise and putting together existing solutions from our different business areas, KONGSBERG is already developing services that are environmentally unique"

Sverre Gotaas  
Vice President Innovation

# TECHNOLOGY FOR THE FUTURE

Technological development is the very definition of what carries mankind forward. Technology is our way of overcoming the challenges that we see in the world around us.

In the future, challenges relating to climate change, exploitation of resources, energy and the

environment create serious problems for the earth's population. For this reason, KONGSBERG is working closely with a number of partners with the intention of overcoming the challenges of the future with existing and new technology.



## FLOATING ICEBERGS

Drift ice and icebergs are a real safety threat to oil activity in the sea near the poles.

Through its Sensis innovation project KONGSBERG is developing a system that measures the size, speed and direction of icebergs.

The aim is to develop a system in which ice and ocean currents around oil and gas installations can be monitored via sensors on the seabed.

Sensis is one of many innovation projects that KONGSBERG is currently working on.

# CREDITS

## PHOTOS

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