The Pioneers of Offshore Engineering
Meeting the demands of tomorrow today

As a reputable offshore design and engineering consultancy company, GustoMSC is aware of the complexity of the various offshore markets. We stand for safe and efficient operations at sea and for a sustainable future. That is why innovative developments in technology such as digitalization and the energy transition play an important role for us. GustoMSC’s history shows that flexibility and the ability to meet the demands of the future today ensure that GustoMSC is and remains relevant. For our customers, for society and for our people.

The Energy of Synergy

GustoMSC is part of the NOV Marine & Construction group that offers a large range of products, engineering, design services, and support for maritime installations and vessels. The combined power of NOV leading equipment suites and GustoMSC advanced engineering capabilities and innovative designs leads to exciting integrated solutions, creating competitive advantages for our clients and for the NOV family.

Engineers don’t write stories, they write history

GustoMSC, started in the 1860’s, is an experienced company in the business with a long and wide-ranging history in the maritime industry. Decades of experience in the design of mobile offshore units and the supply of our equipment are ingrained in GustoMSC’s culture.
Meeting the demands of tomorrow today

World primary energy consumption
Million tons of oil equivalent, 1950 to 2050

925,000 million barrels of reserves
The proven and recoverable reserves of the ten biggest Oil & Gas Companies would suffice for the coming 50 years.
Sources: Oliver Wyman, Wood Mackenzie, Bloomberg

420,000 TWh offshore wind potential per year
Offshore wind has the potential to generate more than 420,000 TWh per year worldwide. This is more than 18 times the global electricity demand today.
Source: IEA Offshore Wind Outlook 2019

Meeting the demands of tomorrow today

Sources: Ron Patterson, World Energy 2017-2050, seekingalpha.com
22.1 GW of offshore wind capacity

At the end of 2019 Europe has a total installed offshore wind capacity of 22,072 MW from 5,047 grid-connected wind turbines across 12 countries, enough for 16 million households.
Source: windeurope.org

75% of all wind turbines in the North Sea are installed with units designed by GustoMSC

Our portfolio
Since the 1970s, GustoMSC has been developing technical tools and insights to take the design, analysis, and optimization of offshore units a step further. This continuous pioneering has resulted in a very successful state-of-the-art portfolio with proven designs. GustoMSC is a dedicated partner for the challenges that your company faces by providing highly integrated total solutions.

Advanced solutions for innovating the offshore world
As the offshore wind industry is maturing, wind farm development companies have to operate in the most economical way possible. At the same time, mobile offshore units must comply with strict safety and reliability requirements. GustoMSC is proud to be a market leader in the offshore wind segment. We are ready to take the next steps and look forward to partnering with you for the challenges that your company faces by providing safe, efficient and highly innovative solutions.

Engineers don’t write stories, they write history
The Pioneers of Offshore Engineering

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The Pioneers of Offshore Engineering

Digitalization

Working today with the solutions of tomorrow
Energy transition

Reinventing the art of energy
Milestones
From yesterday to today

1862
A.F. Smulders sets up his machine factory and iron foundry in 's-Hertogenbosch.

1905
Smulders sets up a new large shipyard in Schiedam under the name Gusto.

1907
Gusto designs, builds, and delivers the Pelican, the first fully Dynamic Positioned, anchorless oil and gas deep water drilling vessel in the world.

1959
Gusto enters the offshore industry by delivering the first jack-up drilling platform designed and built in Europe – to its own patented design and named SeaShell – to the Shell Group.

1972
Gusto designs, builds, and delivers the Pelican, the first fully Dynamic Positioned, anchorless oil and gas deep water drilling vessel in the world.

1975
Delivery of the Gusto designed semi-submersible pipe-lay barge Viking Piper (later named Castoro 7).

1977
A number of the project/design team and R&D engineers leave Gusto and form the independent design and engineering company Marine Structure Consultants (MSC).

1978
Gusto shipyard closes and is succeeded by Gusto Engineering. Its designs are built by shipyards worldwide.

1981
Delivery of the first MSC designed C.J. cantilever drilling jack-up, the Duyi Epsilon (now called Clivana).

1987
Delivery of the first MSC designed compact semi-submersible, SEMI 1, for accommodation, maintenance and construction support.

1992
Gusto Engineering and MSC merge into one company named GustoMSC, concentrating on design and engineering for the global offshore market.

2003
Gusto Engineering and MSC form an alliance, GustoMSC, for joint marketing activities with offices in Schiedam and Houston.

2006
Delivery of the first MSC designed CJ cantilever drilling jack-up, the Duyi Epsilon (now called Clivana).

2011
Noble Lloyd Noble in operation. This largest jack-up rig in the world is based on the GustoMSC CJ70 design as well as Statoil’s “Category J” specifications.

2015
Delivery of the world’s largest wind turbine installation jack-up NG-16000XL, Seajacks Scylla.

2016
National Oilwell Varco acquires GustoMSC, increasing operational efficiency and offering unique and optimized total solutions for a shared client base.

2018
National Oilwell Varco acquires GustoMSC.

2019
Delivery of Penta CP-8001, an important milestone for the Japanese offshore wind development, as this is the first and largest DP2 jack-up built in Japan for offshore wind and civil construction projects off the coast.
Innovative ideas and realistic solutions

We started as shipbuilders and evolved into offshore solution developers and designers. Without forgetting our history as builders. As no matter how innovative our ideas may be, they have to remain realistic. Our customers have to be able to work more efficiently and safer with our designs. Thanks to our background, we know what it is like to do what you have to do with gale-force winds and high waves.

Our perspective is one of evaluating risks: safety issues, financial risks, technical challenges, environmental requirements and sustainability issues.

We offer a diverse product and services portfolio consisting of basic designs of jack-ups, semi-submersibles and vessels for offshore exploration, construction and production. With integrated associated equipment, GustoMSC offers its customers unique advantages of customized solutions for their unique needs. A pole position we are proud of.

But we continue to see it as a challenge to stay ahead. In a rapidly changing world, in a field in which competition is fierce and in which a digital technological transition is taking place we have to be innovative. Because simply keeping up with changes means falling behind on new developments.

Passion is another word for progress
Making the future of offshore energy together

Sharing knowledge, multiplying results

The relationship with our customers is one of solving problems together and capitalizing on opportunities. Collaboration forms the basis for this and has made GustoMSC into the company that it is today.

GustoMSC is an organization of more than 150 professionals with ambition, commitment and extensive knowledge of various fields in the offshore sector. Our company culture is one in which openness, common sense, appreciation and engagement are self-evident and where people treat each other with respect. We stimulate initiatives and innovations. These innovations are necessary to maintain our leading position and to keep ahead of the competition. Consequently, in addition to their own knowledge and expertise, GustoMSC employees have another quality: the ability to collaborate. With colleagues, knowledge institutes and customers. Innovations are hardly ever realized by one individual genius who devises solutions. Collaboration and communication are indispensable to be able to deal with the challenges that we are facing.
Unlocking massive energy potential

Contributing to a Sustainable Future

We strive to be highly significant in the field of future challenges such as the energy transition and sustainability. As engineers we truly are the developers of purposeful innovations. We are able to set aside old truths and capitalize on new technologies. Not rashly, but well considered. As indispensable resources for various processes oil and gas will continue to play an important role in the coming decades.

Awareness of the risks we face and learning how to respond to these risks are essential. We firmly believe that by responsibly conducting our operations, we contribute to a sustainable future. With the introduction of the United Nations Sustainable Development Goals (SDG’s) in 2015, the members of the United Nations introduced a framework which defines a collective goal balancing the three dimensions of sustainable development: economic, social and environmental. This will be a success when these 17 SDGs are achieved towards 2030.

As pioneering engineers, GustoMSC contributes to several goals and intends to increase a positive impact. We sponsor several educational programs and are enabling the offshore green energy market to become mature. We are consistently investing in innovative solutions for the offshore market, and naturally, we make sure all of our employees work in the safest way possible.

Levelized cost of electricity (LCoE) for floating offshore wind in Europe

Source: Floating offshore wind energy – A policy blueprint for Europe

Projected worldwide development of floating offshore wind

Short and medium term market potential GW in US, Europe and Far East.
75 projects have been identified, of which:
40 projects with known capacity
35 projects with unknown capacity
All projects are at concept/early planning or development stage.
Source: 4C Offshore, https://www.4coffshore.com/

2,600
Global cumulative number of units in 2030

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Our vision and value

Smart ideas – global impact

People are searching for natural resources at sea in support of growing populations and increasing standards of living. To obtain access to these resources our technology is needed to work safely at sea, from benign coastal waters to extreme and harsh environments far offshore. GustoMSC wants to be the preferred technology provider by creating core technology that enables construction of safe and highly efficient mobile offshore units while supporting end-users to make the best use of these units.

Pioneering is in GustoMSC’s DNA. Exploring new technological fields that are still unchartered. Devising solutions that are not obvious, off the beaten path, taking the lead in new developments and technology. We put our energy into staying ahead of the market’s demands. A strategy that ensures that GustoMSC remains successful. We do so with three crucial pillars; Advanced Technology, Close Cooperation, and Purposeful Innovation. These pillars provide GustoMSC a solid basis for developments in the offshore sector now and in the future.

Advanced technology
In a world that is changing rapidly, in a field where competition is fierce, and with a digital technology transition, we have to be progressive. Because keeping up with the changes means that you are only following technical developments.

Close cooperation
The relationship with our customers is one of solving problems together, taking advantage of opportunities together. Collaboration is the basis for this and makes GustoMSC the company it is today.

Purposeful innovation
As engineers, we are pre-eminently the developers of applicable innovations. We are always focused on practical solutions with useful meaning for our business partners and clients. We create purposeful solutions that have meaning for the world in general.
We know what it is like to work with gale-force winds and high waves

Advanced technology

The main focus of our work related to safety is to design our mobile offshore units and equipment in such a manner that they are inherently safe. Following our company’s mission, we aim to eliminate hazards and reduce risks over the whole life cycle of our designs and equipment. To do so, we are continually developing the required know-how and overall understanding of our clients’ offshore operations. We are always up for the mutual challenge of bringing safety levels to new records in the near future.
We do not stop challenging ourselves, our clients and our partners

Close cooperation

In an ever-changing world in which subjects such as climate change, the energy transition, digitalization, and globalization are on top of everyone’s mind, we continue to invest in our proprietary designs as well as in developing solutions together with our clients and business partners. We aim to create the ideas and innovations that our clients need to move forward as the global energy transition takes hold.
Purposeful innovation

Our company’s future is based on continuous innovation, central to which must be the development and implementation of digital technologies. To do this successfully requires the significant critical mass and effort that only a large company like NOV can deliver. By combining GustoMSC’s advanced engineering and designs with NOV’s leading equipment suites, we aim to provide the industry with optimized and integrated solutions tailored to their specific needs.

 Scaling up and expanding worldwide together with NOV offer us a major chance to conquer new territories and establish a bigger impact with our services. This creates decisive competitive advantage and real added value. International expansion will also help us acquire access to new technologies and build a distinctive industry ecosystem, which may significantly improve our engineering consultancy and services. Being part of a major global player like NOV makes us a very credible and reliable business partner.
The best solutions for a complex environment

Supporting all lifetime phases

GustoMSC develops the right solutions for the safe and efficient execution of projects at sea. The most efficient solution possible needs to be found for our existing operations at sea, while new challenges call for innovative ideas.

Our designs of Mobile Offshore Units (MOUs) and equipment are based on decades-long experience and in-depth knowledge of all the technical and operational aspects involved. Our experience and knowledge also enable us to provide engineering services during the operational support phase of our designs and equipment. These real-world engineering jobs increase our understanding of the practical and operational aspects of MOUs and their equipment, allowing us to further improve our own designs and equipment and create value with advanced technology.

More than 220 units in operation
Our solutions

We thrive on our client’s ambition

Basic design & equipment
We are continuously working with shipyards to guide and assist them with the translation of our basic designs into detailed and fabrication drawings, as well as with the integration and commissioning of the provided equipment. As an independent designer, we facilitate a competitive bidding process, with a design incorporating all client specific requirements and solutions. Contractors and owners can tender without any constraints on the construction facilities, and yards can quote. Once the decision to build is made, GustoMSC provides both the basic design package and the equipment to the selected yard.

Operational support
Our involvement in a MOU does not end after the delivery of our design or the equipment. In more than 200 projects per year, GustoMSC provides services for units and equipment in operation, ranging from day to day project support like Site Specific Assessments to upgrading and conversions. Our team of dedicated, multi-disciplinary, and experienced engineers apply their skills, experience, and dedicated tools to ensure effective operational support.

Engineering consultancy
GustoMSC provides engineering consultancy services to offshore contractors, oil companies, and yards, as well as supporting services in the renewable energy sector. These services range from concept review to one-off designs, fleet enhancement, or field development studies. They may comprise studies to obtain strategic insights and business scenarios, translating market analysis results into design requirements and practical solutions.

Customized designs
Based on our existing proprietary technologies, concepts, and designs, GustoMSC delivers customized solutions adapted to meet the challenges of the specific client’s requirements. Safety, efficiency, workability, and effective uptime are key in all our design solutions.
Unique advantages that enlarge the competitive edge

Gearing up for the future

With a multi-faceted product and services portfolio consisting of basic designs of jack-ups, semi-submersibles and vessels for offshore exploration, construction and production, and by matching design and equipment, GustoMSC offers its clients unique advantages.

Freedom of choice
Customers of GustoMSC are unrestricted when it comes to choosing a yard for the construction of the unit. In this way, we enable our customers to develop their optimal design solution and consecutively tender for construction.

Reliability through proven design
GustoMSC has provided more than 250 designs for units in operation or under construction. We have our roots in the challenging North Sea environment, which requires us to stay at the very front of technologies. This technology lead allows us to develop more capable optimized solutions for milder environments.

Distinctiveness by customization
We deliver customized solutions based on existing proprietary technologies and concepts, adapted to meet the challenges of the specific client’s requirements. The starting point is always the survey for the right solution for the envisaged conditions. Our senior specialists, with a wide range of knowledge and skills, are your sparring partners during the design process.

By matching design and associated equipment, GustoMSC offers its clients the best-performing designs in terms of operational efficiency, uptime, workability, and safety. This way, our solutions contribute to further differentiation in the market.

Choice from largest portfolio MOU designs
GustoMSC has developed different designs for different markets, which has provided us with an unrivaled portfolio and IP stock. We continuously work on the improvement of these existing solutions by working with our clients and suppliers.

Integration ability
The basis for our designs is the primary functionality of the MOU. Often this needs to be translated into the most efficient layout of equipment while balancing with the constructability of the design. To understand and meet the requirements of our clients, GustoMSC has its in-house senior specialists. They are the link between the practical needs of our customers, the equipment suppliers, and the technological realization on the drawing board.
Teaming up for the future

Scaling up and expanding worldwide

As a reputable offshore design and engineering consultancy company, GustoMSC is aware of the complexity of the various offshore markets. Especially given the future technological developments, such as digitalization and energy transition.

As part of the global NOV family, we work as one team to create a lasting impact for our customers, ourselves, and the world in which we live and work. We take responsibility for the future, for our company and the society at large.
The Pioneers of Offshore Engineering

GustoMSC is recognized for providing design & engineering consultancy for mobile offshore units and equipment. In close cooperation with our clients, we translate experience, science and technical knowledge into realistic & innovative ideas. In this way, GustoMSC enables and supports safe and efficient operations at sea, contributing to a sustainable future.

GustoMSC

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