Our offshore services include conceptual design, engineering, procurement, project management and EPC turnkey deliveries for offshore hydrocarbon production.

We specialize in arctic offshore with an emphasis on the Russian Federation and the Caspian Sea region. We have developed a unique fixed-ice resistant offshore platform for arctic and Caspian Sea shallow water developments.

We combine traditional offshore EPC services and our shallow water arctic platform concept with hydrocarbon production and well service applications for new or mature offshore fields.
Offshore Full range of offshore design disciplines

Elomatic is a leading designer of ship and platform structures and systems. We are strong in the area of HVAC, electrical, deck outfitting and interior design of accommodation areas (LQ), and we also have vast experience in hull structure design as well as machinery and piping system and workshop design.

- Structural design and engineering
- Architectural and interior design
- Machinery and piping
- Deck outfitting
- Electrical and automation
- HVAC
- Transportation analysis

Specialised EIA & IT know-how

Elomatic’s EIA & IT know-how covers all the electrical, instrumentation and automation requirements of demanding offshore projects. This is complemented by our expert IT know-how, which enables us to provide our customers with comprehensive offshore EIA & IT solutions.

- ATEX-classified areas
- Risk analysis and safety integrity specifications
- Engineering supervising and coordination services
- Design, commission and start-up services of automation (DCS) and programmable logic controller (PLC) systems
Offshore safety expertise and analyses

We have a solid understanding of the safety issues in the offshore business and produce safety plans, fire control plans, emergency exit plans for our offshore industry customers.

Our technical analysis experts use simulations to investigate possible explosions and fires. This significantly improves personnel safety by reducing accident risk and minimises injuries sustained in accidents. If a device malfunctions the damage to other devices is minimised.

- Rescue plan services
- Validation services

Environmental considerations

Offshore projects are by nature exposed to environmental risks. Elomatic has extensive expertise in analysing these risks and providing contingency plans. Our core goal is to take care of environmental issues while at the same time producing significant savings for our customers.

Our emissions experts analyse emissions in accidents with computational fluid dynamics (CFD) technologies that allow the dispersion of harmful materials to be predicted accurately and the treatment thereof optimised.
Elomatic has gained extensive experience over the years in both offshore and onshore processes and we are able to cover the full range of process services required on offshore vessels and installations as well as for oil and gas industry investments. We identify, select and install the best alternatives without bias towards particular technology providers.

- Process simulations, energy and mass balances and dimensioning
- Equipment/unit operation dimensioning and material selections
- Process flow sheets and P&I Diagrams
- Utility requirements and systems
- Risk evaluations, Hazop analyses

Elomatic’s know-how covers various types of energy generation. We have completed over 130 diesel power plant projects in over 40 countries around the world in the past 30 years. Our energy and machinery related design references include the following:

- New buildings; basic design, diagrams, calculations, 3D modelling, workshop-drawings, spools
- Conversions from feasibility studies to shop drawings: LNG retrofits, scrubber conversions
- Energy efficiency audits

Please visit www.elomatic.com for more information.
Selected References

Europlan Engineering Oy
Oil drilling rig, Cosco Platform Labin
- Accommodation plans
- Ceiling plans, floor covering and window scheme
- Fire protection plan, emergency exit plan
- HVAC diagrams, HVAC coordination drawings
- AC room layouts

Gazprom
- Conceptual and detailed engineering review and approval
- Vendor coordination
- Quality assurance support
- Project monitoring support
- Work inspection support
Jack-Up Amazone
- Various modernisation turnkey supplies
- E.g. 2007 mast & drilling package

Lukoil, BKE Shelf
Jack-Up Astra
- Various modernization turnkey supplies

ArktikmorNeftegazRazvedka
Project design for modernization of BOP systems for drillship “Deep Venture”
- Conceptual engineering
- Specification, sourcing and evaluation of 15k BOP system both new and second hand alternatives
- Refurbishment specifications for turnkey modernization

Technip Offshore Finland Oy
SPAR-type Oil Rigs
- Steel structural design
- Outfitting design
Pipe laying vessel conversion
- Detailed hull design
Elomatic concept design vessel
Offshore construction Vessel ELO WM 120
- Multi-task capabilities with varying mixes of heavy lift, ROV deployment, pipe laying and diving
- Shallow water ice-class PSV

STX Vietnam Offshore, Vietnam
AH08 Anchor Handling Support vessel
- Extensive design update including basic and detail design using Nupas-Cadmatic

Ulstein Engineering
SX130 – Platform Supply Vessel
- 3D piping coordination
- Piping system and ISO drawings
- Hull workshop documentation

Azerbaijan International Operating Company (AIOC), Kvaerner Masa-Yards, Norway
Israfil Guseinov – pipe laying barge in Baku, Azerbaijan
- Supervising of refurbishment work
- Supervision and commissioning of machinery areas, safety plans and instructions for safety equipment on board.

Kvaerner Oil & Gas / Esso
Jotun Field FPSO hull
- Hull classification, interior layouts, schemes and workshop drawings, detail design of service hatches

Offshore R&D
Conceptual design of shallow water ice resistant fixed platform for Arctic shelf areas (Patent applied)

Aker Offshore Oy
Offshore installation barge in Krasnye Barrikady shipyard in Astrakhan, Russia
- Hull detail design, piping design of ballast and sounding piping and instrumentation design
- Mechanical design of anchor windlass, stairs, platforms and hand-rails, installation supervising and commissioning of piping systems and ventilation
- Commissioning of diesel generators, documentation of operation manuals and testing procedures

COS
Volgograd Wipimorneft
- Filanowski LQP-2 platform, helideck and connecting bridge
Elomatic is a leading European consulting and engineering company. Our close to 1000 professionals work in machinery and equipment manufacturing, pharmaceutical, process, energy, offshore and marine industry projects.

We offer consulting, engineering, product development and project management services as well as products and turnkey solutions to industrial and public sector customers.

The cornerstones of our success are customers that are leaders in their respective fields and professional, customer-oriented and motivated personnel.

- Technical Consulting
- Engineering
- Project Management
- Product and Service Development
- Products & Turnkey Solutions
- Software Development
- Design Software Solutions

**Key customer segments**

- Marine & Offshore
- Oil & Gas
- Pharmaceuticals
- Process Industries
- Energy
- Foodstuffs industry
- Starch and Potato Processing
- Machinery and Equipment Manufacturing

**Contact information**

We operate globally and have clients in over 80 countries. Our offices are located in Finland, China, India, Italy, Kazakhstan, the Netherlands, Poland, Russia and the UAE.

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