

FPSO SAMPLING PANELS

Topside Production Facilities

Floating Production Storage and Offloading (FPSO) units in the oil & gas industry produce and store a huge quantity of hydrocarbons from offshore deep-water wells. Specific for the FPSO industry we designed a complete range of sampling solutions to collect all kinds of production fluids like crude, hydrocarbon liquid and gas samples, bunkering fuels, process waters, steam, seawater, and cooling medium.

CERTIFIED INDUSTRIAL
SAMPLING SYSTEM
MANUFACTURER WITH UNIQUE
SAMPLING KNOWLEDGE



FPSO SAMPLING FOR TOPSIDE PRODUCTION FACILITIES

In the offshore industry, the equipment (meaning the systems and their components) must be able to withstand the most severe conditions, such as temperature variations, the saltiness of seawater resulting in corrosion and often a hefty number of vibrations on top of that. In this FPSO oil and gas industry it has become very important to design high-end but also cost-saving sampling solutions for **extreme process** and **environmental conditions**.

STANDARDISATION IN CUSTOMIZATION

By bundling clients / projects and using **standardized designs** we **avoid reinventing the wheel** and optimize our expertise, cut project costs, improve productivity, and maintain lower operating overheads. To maximize these sampling opportunities, project execution and development are optimized to be fast-tracked as much as possible.

- ▼ We help and share sampling knowledge in your pre-FEED process
- ▼ "standard" FPSO sample solutions create **massive cost savings** and shorten delivery times
- ▼ Our independency creates for you **"best" solution**, both in technical and economic terms



IN THE LEAD WITH OUR OWN SAMPLING PRODUCTS

Mechatest and Doedijns part of the Vydraulics group has a long history with thousands of oil & gas sample application references, **we designed** our own **unique liquid sampler products** for closed sampling who are **best innovative** on the market compared to our competitors, gives us independency, better prices, and delivery times.



INDEPENDENCY MAKES BEST SOLUTION

The FPSO industry ask for more than only SS316 material requirements, Super Duplex (SDSS), 6MO or Inconel materials are more common, challenges but it means a longer production lifetime for those FPSO vessels, maximizing their capacity and their operator safety.

As an independent manufacturer our main activities are the complete design, pre-FEED process advises, detail engineering, procurement, assembly, commissioning, and service activities, with **our 30+ years** of sampling experience **we are a useful supplier** for your sampling needs.

Co-operation with major suppliers and international well-known fabricates of components, our know-how acquired in sampling designing and manufacturing make us **unique and capable** of providing its clients with the **"best"** solution, both in technical and economic terms.



USEFUL SUPPLIER EXPERIENCE

With our long-term experience, we can provide our clients with optimized solutions for all FPSO sampling applications such as high operating pressures, high temperatures, corrosive fluids, and environments.

To design the best on the market sampling solutions in extreme high Alloy materials you must be able to select "independent" the highest quality components from the world, choose for the best technical solution, availability and prevent limitations from one valve & fitting supplier. We have considerable experience in handling a wide range of materials, not only Stainless Steel but Super Duplex (SDSS), 6MO, Hastelloy C-276, Inconel 625 / 825, Monel, and other exotics as well.

Compared to our competitors

- ✔ Practical by simplicity, easy to operate & maintenance
- ✔ Most modular and with a dozen of interchangeable options
- ✔ Widest range of materials like, Stainless Steel, **Super Duplex**, Inconel, **6MO**, Hastelloy, Monel, and chemical resistance Plastics
- ✔ Top quality European materials and fabrication work
- ✔ Designed for flexibility, for changing markets and wishes
- ✔ In-house design and manufacturing in our own machine shops give competitive delivery times and prices



Your business benefits

- ✔ Maximizing long run FPSO capacity and their operator safety!
- ✔ Taking representative samples and get better results
- ✔ Product quality control, reducing costs by process optimization
- ✔ Preventing production loss
- ✔ Closed loop sampling, zero emission, safe for operator health & environment
- ✔ Safe, high pressure sampling up to 689 barg (10.000 PSI)

More application notes



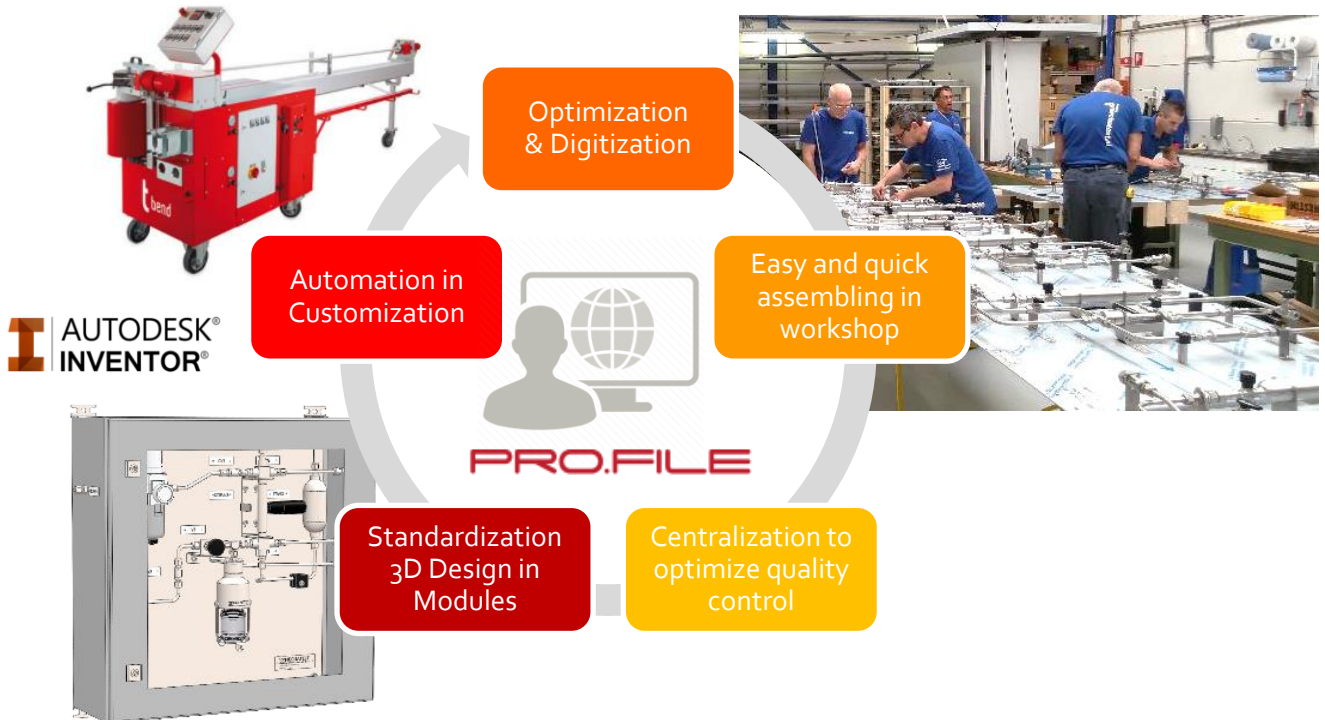


CONTINUE TO DRIVE INNOVATIONS FORWARD

Standardization has gained popularity as a solution to lower costs and reduce the delivery schedule in the current volatile oil price environment. Mechatest designs helped initiate this approach with the creation of **identically designed FPSO sampling** systems that create massive cost savings and shorten delivery times.

AMBITIONS, YES WE HAVE

We are continuously pushing our boundaries, looking for improvements, automating processes, workshop activities and document tasks, with PRO.FILE we pave the way for efficiency, product, and document lifecycle management plays an important role in this and will increase straightforward collaboration, quality, reproducibility and make complex products and processes repeatable and scalable, we are ready for the future. To automate the operating processes from 3D design to laser cutting and tube bending machines we get an unequalled high-quality end-product.



CPO AND CATALOGUE MODULES

Sampling systems look simply but are complex have complex material configurations and complex pricing. The use of modern configuration and quotation (CPO) software has revolutionized the way we can offer configurable products. CPO automates our quoting process and help produce efficient quotes for vendors that have customizable requests, always looking forward to increase customer satisfaction.

INTERNATIONAL SAMPLING STANDARDS

Standard Practice for Manual Sampling of Petroleum and Petroleum Products API MPMS 8.1 and API MPMS 14.1

ASTM D1265-05, D4057, D4177, D3370, D1066

ISO 3170, 3171, 10715, 19230 & 15156

IMO Marpol 73/78 Annex VI bunker fuel sampling

VYDRAULICS

50

technical advisors and sales engineers

35

specialized engineers, dedicated to your business

35

on-site service engineers

230

highly skilled co-workers in operations & logistics

**there is nothing wrong
with showing ambition**



For sampling Crude
Hydrocarbons
MGO, Bunkering fuel
Seawater, Produced water

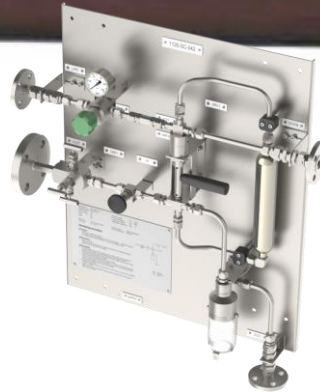
Manual Sampling Solutions

FPSO TOPSIDE

Production Facilities



Flashing liquids (condensate)
Glycol, Steam, Cooling medium



Flare gas, Hydrocarbon or
Fuel gas, Blanketing gas
Scrubber or Compressor gas

MECHATEST SAMPLING SOLUTIONS

Mechatest® is a certified industrial sampling systems division with 30 years of experience in design and manufacturing of manual and automatic sampling systems for gas and liquid applications. Mechatest® become part of the Vydraulics Group, is merged into Doedijns BV, and relocated to Doedijns' premises in Zoetermeer.

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FPSO MANUAL SAMPLERS FOR LIQUIDS AND GASSES - FPSO AUTOMATIC SAMPLING SYSTEMS

**Boosting your
motion & control**

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