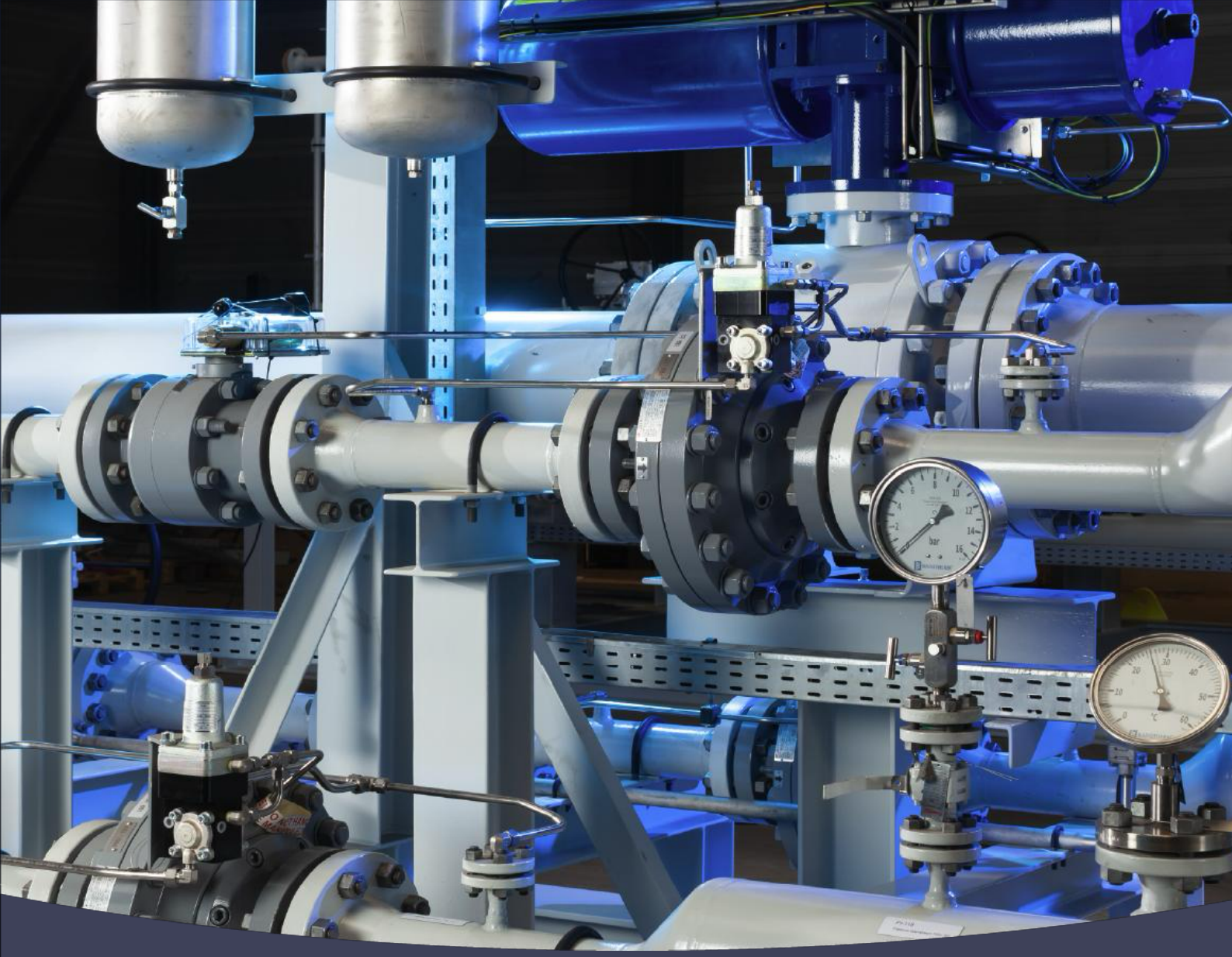

Group

Turning modular ideas into impressive products

Building the Energy Transition

www.fbgroup.com

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Introduction

Building the Energy Transition

We love modulair design design, so should you

FB Group leads the way in delivering cutting-edge technologies and solutions that power the global shift toward sustainable energy. With a focus on carbon capture, hydrogen innovations, water treatment, and natural gas processing, we combine expertise with a dedication to excellence, driving progress toward a cleaner and more sustainable future.

About us

We are FB Group

At FB Group, we specialize in delivering skid-mounted process units to support the Global Energy Transition. We are a dynamic organization driven by enthusiasm, resilience, and a commitment to excellence, guided by a straightforward, 'no-nonsense' approach. Our highly skilled and experienced team ensures we deliver innovative, high-quality solutions tailored to your needs.

What you can expect from us

Decades of Expertise

Innovative Technology

Commitment to Sustainability

Proven Track Record

What we do

Building the Energy Transition

The energy transition is the shift from non-renewable to renewable energy sources, reducing greenhouse gas emissions, enhancing energy security, and fostering sustainable economic growth.

This transformation progresses gradually, balancing technical and economic possibilities. Temporary measures like Carbon Capture Storage (CCS) or transitioning to natural gas help reduce emissions while technologies like hydrogen are scaled for industrial use.

What we do

We like to do things by the books

1

Sales & design

Sales Process & Conceptual Design

The sales process involves identifying the potential client, understanding their requirements and presenting possible solutions. It includes proposals, technical and commercial clarifications resulting in a final order agreement.

During the sales phase often a conceptual design is made and presented to client. This involves developing initial ideas and concepts that met the client's requirements. It also includes consulting possible suppliers for supply of various materials to investigate possible lead times and technical solutions.

2 Design & engineering

Design & Engineering

The first step after being awarded the order is to start on the Basic Design of the unit. This involves Process Engineering, Equipment sizing calculations and set-up of Process Flow Diagrams (PFD) and Piping & Instrument Diagrams (P&ID's). Detailed Engineering includes for Vessel drawings and calculations, 3D Skid Modelling, Structural steel design and Piping designs incl. calculations. In this phase also complete E&I engineering will be executed. The goal is to create comprehensive plans that guide the project's construction. Engineers analyze the designs to ensure they are feasible and meet all technical and safety standards. This phase may involve simulations, calculations, and adjustments to the design.

3 Sourcing

Securing the essentials

This step involves procurement of all necessary materials, components, and services required for the project. It includes identifying potential suppliers, negotiating contracts, and ensuring timely delivery of quality materials.

4

Fabrication

Turning Plans into Reality

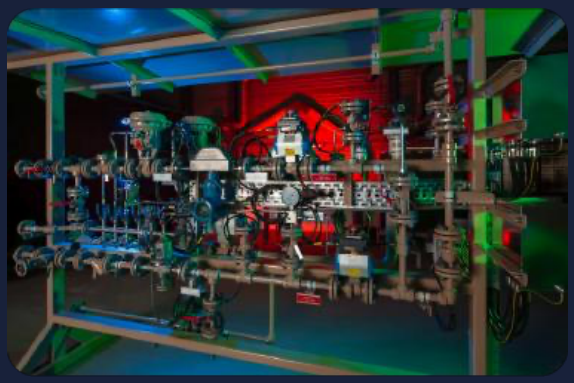
During fabrication, the various components like pressure vessels, steel structures and piping systems for the project are manufactured and constructed. This will take place in FB Group's workshops by qualified personnel. Excellent detailed engineering, good workmanship and quality control are crucial to ensure all parts meet the required specifications. Once completed the individual components will be (hydro)tested to prove design integrity in accordance with code requirements. After items will be coated or receive other corrosion protection i.e. pickling & passivation.

5

Assembly

The Moment of Truth

In this phase, the fabricated components are assembled to form the final product. This involves putting together all the parts according to the design specifications. It includes for mechanical, structural and Instrumentation assembly.



Testing

Seamless Execution

The final step involves testing the assembled product to ensure it functions correctly and meets all performance and safety standards. This can include functional tests and quality assurance checks and even full Factory Acceptance Tests (FAT). Any issues identified are addressed and resolved before the project is released and prepared for transport.

Each of these steps is crucial for the successful execution of a project, ensuring that the final product meets the client's expectations and industry standards. If you have any specific questions about any of these steps, feel free to contact us.

Our products

Innovative Solutions for a Sustainable Energy Future

FB Group is at the forefront of providing advanced technologies and solutions across key industries to drive the global transition to sustainable energy. From carbon capture and hydrogen innovations to water treatment and natural gas processing, our expertise and commitment to excellence ensure we contribute to a cleaner, greener future.

Carbon Dioxide

FB Group delivers innovative carbon capture and storage solutions to support the global energy transition.

Water

FB Group offers advanced water treatment technologies to protect the environment and promote sustainability.

Hydrogen

FB Group is committed to advancing hydrogen as a key energy carrier for a sustainable and carbon free future.

Natural Gas

FB Group delivers state-of-the-art natural gas processing solutions for efficient and sustainable operations.

Our Products

Carbon dioxide

Pioneering Carbon Capture and storage solutions

As an ambitious player in the industry FB Group believes that carbon capture, utilization, and storage (CCUS) will play a role in global efforts to reduce greenhouse gas (GHG) emissions. With our expertise and experience and driven by our commitment to contribute to a sustainable energy future, we aim to have impact to the onshore and offshore Carbon Capture and Storage solutions.

Pioneering Carbon Capture and storage solutions

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Our Products

Hydrogen

Driving the Future of Energy with Hydrogen Innovations

Hydrogen has been identified as an energy carrier that will play a major role in the decarbonization of the world. In the hydrogen market of the future, highly flexible storage options are essential to compensate for fluctuations between supply and demand by injecting and withdrawing hydrogen.

Storage and purification

FB Group has projects ongoing for TEG and TSA Units which shall demonstrate the injection and production of hydrogen from reused salt caverns and at the same time remove impurities such as water, hydrocarbons and sulfur components. Special focus is also on the adaptation and rededication of existing natural gas/oil caverns. For these areas FB supplies complete TEG-based dehydration units to be installed in aboveground facilities as part of the transition process to a future hydrogen economy.

Our Products

Water

Sustainable Water Solutions for a Cleaner Future

Preserving the world's water supply remains as one of the world's top environmental challenges. Minimizing waste is one of the principles behind any circular economy initiative. Failing to purify produced water or wastewater before discharging it back into the environment has dire consequences.

Advanced water treatment solutions

Water treatment packages are essential for managing waste- and produced water streams. These packages typically include a variety of technologies to remove contaminants such as oil and solids from the water before it can be safely discharged or reused. FB Group lines-up with various process licensors to design, fabricate and supply these packages in accordance with the highest industry standards.

Our Products

Natural gas

Comprehensive Natural Gas Conditioning and Processing

FB Group has extensive track records in both onshore and offshore domain for natural gas conditioning. As single source manufacturer, we deliver gas processing solutions like TEG (Tri-Ethylene Glycol) and TSA (Temperature Swing Absorption) Units, Pressure reduction and Flow Metering packages for a variety of gas operations. Our units comply to the highest emission standards and are equipped with state of the art technology and components.

Our projects

Check out some of our work

Hydrogen

Conditioning Units for H2CAST project

FB Group is proud to contribute to the development of Hydrogen storage by supplying a TEG type and TSA type Hydrogen (H2) conditioning unit for the H2Cast Project by Storag Etzel GmbH. This frontrunning initiative aims to demonstrate the feasibility of large-volume underground hydrogen storage and to validate the suitability of the salt caverns in Etzel for this purpose.

The H2CAST project will be testing hydrogen storage operations which will be an important step to the development of a hydrogen service industry. As part of this project, FB Group will supply a Tri Ethylene Glycol (TEG) and Temperature Swing Adsorption (TSA) Unit. This unit will be designed, fabricated, assembled, tested, and certified in-house according to local standards and authorities.

By taking on this pioneering role, FB Group is actively contributing to the energy transition. The company's involvement in the H2CAST Etzel project underscores its commitment to innovation for the hydrogen technology.

TEG Unit

TSA Unit

Carbon Dioxide

The first-ever CO2 Conditioning Unit in the Netherlands

We are proud to announce that **FB Group** has successfully completed the first-ever CO2 Conditioning Unit in the Netherlands, marking a significant milestone in the EU's journey towards a sustainable future

As part of the **Porthos project** in the Rotterdam area, this unit with its unique design will play a crucial role in **Carbon Capture & Storage (CCS)** by removing Sulphur (H2S) and water from CO2 gas captured from industries. The conditioned CO2 will then be safely stored in empty gas fields beneath the North Sea.

This project not only underscores our support to reducing CO2 emissions but also highlights our active contribution to the global energy transition and climate objectives.

We have achieved this milestone by multidisciplinary efforts and will continue our efforts to create a more sustainable world!

Group

Sluisweg 17, 4794SW, Heijningen, Netherlands

Natural Gas

Glycol Regeneration Unit supplied

Supply of a state-of-the-art Glycol (TEG) Regeneration Unit to be installed on an existing offshore gas production platform in the North Sea. This unit is designed to efficiently regenerate TEG used in gas dehydration while ensuring that hazardous outlet vapors are safely combusted with an impressive 99.9% efficiency in our Overhead Vapor Combustor (OVC).

One of the special features of this unit is its custom-designed windshield, which seamlessly integrates with the existing production platform. This unique design not only enhances operational efficiency but also significantly reduces offshore installation time.

Natural Gas

Skid Mounted Gas conditioning plant

Design and fabrication of a skid mounted natural gas processing plant. This plant will allow a large cement factory in Libya to change their energy system from oil based to natural gas and ultimately into electricity which will result in a considerable reduction in environmental impact. The complete plant has been built using the skid mounted concept which resulted in short and easy installation time by the local site contractor.

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