BILFINGER now!

we care

From production to storage: Our services for the oil & gas sector

we can

Better air: Clean across the seas with scrubbers

we create

ATVIN HIGH

How we create added value for our customers by bundling our strengths



COOPERATION

REACHING NEW HEIGHTS TOGETHER

A well-coordinated team can achieve more than a group of individuals. The same applies to engineering and industrial services

Bilfinger

WE MAKE IT WORK

BILFINGER

The world of Bilfinger at a glance: An animated info-graphic shows the diversity of our services and offerings. Find out what we can do for you!

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most recent Football World Cup proved it: A well-coordinated team focused on a common goal stands a better chance of succeeding in competition. Only by combining the respective strengths does a team become strong and able to access a level of performance that goes well beyond the sum of the individual skills of each player.

This is exactly the approach that Bilfinger will more intensively apply to its project business in the future. Because ultimately, things are not that much different to the world of sports: Those who bundle their own strengths and place a clear focus on the customer perspective can deliver real added value.

INDIVIDUALLY TAILORED

The combination of various competences from its operating units enables Bilfinger to deliver customized and complex services – not only in relation to the defined core industries.

Customers benefit from the decades of experience Bilfinger has gathered in the respective industries. Because there are specific requirements in each target industry. A team of experts recognizes market trends and ensures that the service range is actively geared to the individual needs of the customer. The result can be an innovative solution for the flexible and needs-oriented treatment of waste material in the nuclear sector. It can also be a complete plant for gas treatment with several Bilfinger companies involved in the project execution.

INNOVATIVE CONCEPT

A current project for a heat storage power plant in Hamburg shows the benefits of cooperation. On behalf of Siemens Gamesa, Bilfinger Engineering & Technologies GmbH and Bilfinger Rohrleitungsbau GmbH are executing delivery and assembly of the water-steam and hot air circuits and associated components. The heat storage unit, boiler and turbine will come from Siemens and will be integrated into the plant by Bilfinger. Bilfinger Rohrleitungsbau had al-

ready built a heat storage test plant for



René Thomas from Bilfinger and Hasan Özdem from Siemens Gamesa explain the background of the ioint proiect.

Siemens Gamesa several years ago. When the decision was taken to build a heat storage power plant, Bilfinger was again able to impress the client. Among the deciding factors were both the positive experience from the previous project as well as Bilfinger's comprehensive energy sector expertise.

As a leading maintenance partner, Bilfinger covers not only the CAPEX side but also the OPEX side. In this context, we create added value by reducing maintenance costs and at the same time ensure greater efficiency and availability.

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Bilfinger focuses primarily on six industries. But we offer appropriate and innovative solutions for other industries as well - by applying technologies across multiple sectors, for example. On the next page we begin a new series to give you a more detailed introduction to our comprehensive service portfolio.



HEAT STORAGE **EXPERTISE FOR NEW ENERGIES**

On behalf of Siemens Gamesa Renewable Energy, Bilfinger is developing and delivering plant technology for a heat storage unit: This system converts unused energy produced by wind turbines into heat and stores it in rock-fill. When needed, this heat is transferred to a steam power plant by means of an air current. The steam turbine then generates electricity that can be fed into the power grid.





From engineering to manufacturing and maintenance: What Bilfinger does for customers in the oil and gas business

l and gas are valuable resources – and we have the decades of experience necessary to create the added value desired by our customers in the industry across the entire value chain: from production and transport via pipelines through to gas storage and tank storage systems. We have excellent references for small and medium-sized projects and the right engineering solutions and technologies. One current example is an order in Romania where, on behalf of our customer Depomures (ENGIE), we have assumed responsibility for engineering as

storage facility.

A gas dehydration plant built by Bilfinger in Tirgu Mures, Romania.



well as procurement, assembly and commissioning of a complete gas dehydration plant on a natural gas

We are making important contributions to the supply of energy in Europe – as well as in North America and the Middle East. Technical consulting, planning and construction of pipeline systems, manufacturing and assembly as well as commissioning of plants -Bilfinger provides it all from a single source. Thanks to a technology alliance this also applies to small and medium-sized plants for the liquefaction of natural gas ("Small Scale LNG"). We are thus meeting the needs of a general trend because the use of LNG as fuel for trucks and ships is likely to increase in light of stricter emission requirements.

But our expertise does not end with the handover of a plant. In terms of maintenance, Bilfinger offers a broad spectrum of services. One focus is on oil and gas platforms in the North Sea. Our customers in this area include Shell and Equinor, among others. Our engineers, technicians and specialists are ready for assignments at short notice wherever they may be needed and ensure the availability of plants no matter the weather conditions. Customers on the mainland can also rely on Bilfinger's proven service standard, for example in the area of gas production and storage.



CORE INDUSTRIES **ENERGY & UTILITIES**

WELL-PREPARED

Bilfinger is making power plants fit for the future

D ilfinger supports energy customers in many areas including coal, gas, water and nuclear power plants. Among the core services are consulting, engineering, construction and maintenance as well as customized integrated solutions for power plants. To ensure that conventional power plants can also continue to be operated in the future despite increasing emission requirements, we conduct extensive modernization measures for boilers as well as firing systems and also install solutions for flue gas purification. At the same time, heat recovery systems from Bilfinger ensure that the overall efficiency of the plant is increased.

In the nuclear sector, Bilfinger manufactures and installs important components for nuclear power plants and other facilities. We specialize in complex piping constructions - including on the "nuclear island". We provide protective airlocks for personnel and material and design hot cells. Bilfinger is also a recognized partner for the treatment of nuclear waste. We have developed a flexible modular system covering



What can Bilfinger do that other industrial services providers can't?

Our service range covers the entire life cycle of an industrial plant that we design, develop and build. Depending on the customer's needs, we assume overall responsibility for complex projects: From the feasibility study to commissioning. Depending on what the customer wants, we focus on individual project execution steps or trades. Afterwards, in close cooperation with our maintenance colleagues, we are also happy to look after maintenance services. With Bilfinger, you get a full-service package.

TAKING A CLOSER LOOK **ENERGY & UTILITIES**

Nuclear waste treatment made easy



all significant steps from sorting through to decontamination as well as compacting.

As a leading industrial services provider, Bilfinger also offers a broad range of maintenance services. Our customers include Finnish utility company Fortum, where we assume responsibility for the maintenance of hydropower plants in Sweden. The Polish energy company PGNiG Termika has also been relying on Bilfinger's maintenance expertise for many years.

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Dr. Michael Löffelmann is Executive President of the Engineering & Technologies

What industries does Bilfinger operate in?

Our strategy is geared toward six core industries: Chemical & petrochemical, oil & gas, energy & utilities, pharmaceuticals & biopharma, metallurgy and cement. That doesn't mean that we don't serve other industries. We are also active in the food industry and in the automotive sector, for example. Key is that we bundle our strengths. This makes it possible for us to offer our customers new and improved services.

Where do you see growth potential?

One important key to growth is in integrated full-service packages, for example at gas treatment plants or in the modernization of process furnaces. In addition to engineering, we also cover procurement, assembly and commissioning. Because we deliver these projects, the customer gets very good quality at fair prices - and reduced interfaces during project execution. So that he can fully concentrate on what he does best: his core business.



CLEAN ACROSS THE SEAS

ENGINEERING & TECHNOLOGIES

OCEAN TANKER AURELIA
FULL STEAM AHEAD

Using scrubber technology to reduce emissions



we can

The international shipping industry must improve its environmental footprint. Most ships currently run on heavy oil, which comprises a share of more than three percent of sulphur. The International Maritime Organization (IMO) has moved to address the problem: Starting in 2020, a global threshold of 0.5 percent sulphur content will apply. Bilfinger has decades of experience with flue-gas desulphurization. Scrubber technology ensures that the sulphurous flue gas is filtered out using an absorption process and environmental standards are complied with.

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GERMANY | CONTINUENTAL EUROPE

ENGINEERING & TECHNOLOGIES MOBILE FLARE LOWERS EMISSIONS

Bilfinger has developed a mobile flare. It is used wherever stationary flares are not available. Gases are safely burned and existing plant systems are released from pressure. The product has an impressive safety standard and all consumables (nitrogen and propane) are carried with the mobile unit. It is possible to operate the flare for several hours using battery power.

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MAINTENANCE, MODIFICATIONS & OPERATIONS

Saudi Aramco is modernizing the Berri gas plant in Saudi Arabia. Bilfinger will assume responsibility for engineering, procurement and construction of the air-pressure system. The plant has a daily cubic meter capacity of about



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ENGINEERING & TECHNOLOGIES SUCCESSFUL COOPERATION WITH LINDE

Bilfinger and technology group Linde are working together on the construction of a polypropylene plant in Texas. The owner of the new production facility is Brazilian company Braskem. Bilfinger will install plant and piping as well as steel structures and will carry out insulation and corrosion protection work.



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THAT WAS TOPS!

In the ranking of the top industrial services providers in Germany, Bilfinger remained in the top spot for the tenth time in a row. This is the conclusion of the current Lünendonk List. Tom Blades, Bilfinger CEO: "It is no small achievement to maintain a leading position over the course of ten years. It is a testament to the confidence that our customers have in Bilfinger as a solutions partner."





BARCELONA, SPAIN STAND: I 135



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