



# BAUER GROUP

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# THE BAUER GROUP

More than 230 years of company history demonstrate one thing above all: Innovation, adaptability and sustainability are not just empty words for us, but values we truly live by. The Bauer name is now associated with the most difficult and largest foundation tasks around the world, which are executed with powerful, innovative and highly efficient equipment. We have also made a name for ourselves in environmental services and with products, services or projects for water and natural resources.

## **Our network**

Bauer operates a worldwide network on all continents. The operations of the Group are divided into three future-oriented segments with a high potential for synergy: Geotechnical Solutions, Equipment and Resources. Bauer profits greatly from the collaboration between its three separate business divisions, enabling the Group to position itself as an innovative and highly specialized provider of products and services for demanding projects in specialist foundation engineering works and related markets.

## **Our incentive**

We offer appropriate solutions for the world's major challenges, such as urbanization, the growing infrastructure needs or protecting the environment. Our employees around the globe, their commitment and expertise help to lay the foundation for our success, along with the trust our customers place in us every day. This trust is our incentive to do our best every day.

# OUR COMPANY

## **Our mission:**

*The BAUER Group is a leading provider of services, equipment and products related to ground and groundwater.*



Founded in 1994, **BAUER AG** as a holding company offers services to the companies in the **BAUER Group**, for example in the areas of HR and Accounting, IT, Facility Management, Legal and Training. BAUER AG sets the strategic guidelines for the three segments and coordinates topics across the different segments.

## **Construction**



The **Geotechnical Solutions segment** offers new and innovative specialist foundation engineering services alongside the established ones, and carries out foundation and excavation work, cut-off walls and soil improvements worldwide.

## **Equipment**



The **Equipment segment** is the provider for a full range of equipment for specialist foundation engineering as well as for the exploration, mining and extraction of natural resources.



## **Resources**



The **Resources segment** delivers innovative products and services and acts as a service provider with several business divisions and subsidiaries in the areas of drilling services and water wells, environmental services, constructed wetlands, mining and rehabilitation.



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*At Bauer, we put people first. Every individual employee embodies our company culture and the values associated with it.“*

**Florian Bauer**  
Executive Board member  
for Digitalization and  
Company Culture



## VALUES AND DIVERSITY MAKE US STRONG

### Our Values

At Bauer, there are around 12,000 people from more than 100 countries collaborating worldwide – in various divisions and roles, in different countries, with diverse ideas, strengths and interests. Our success is based on this strong international team and a diverse workforce that drives us forward. The diversity of the people at our company is one of our greatest strengths and one of the reasons we are proud to look back at more than 230 years of history.



Down to earth



Innovation



Responsibility



Openness



Appreciation

# AN EVENTFUL HISTORY

**1790**

Sebastian Bauer acquires a coppersmith's workshop in the center of Schrobenhausen



**1870**

Artesian well for the new Schrobenhausen train station, start of drilling work

**1928**

Dipl.-Ing. Karl Bauer constructs the central water supply system for the city of Schrobenhausen



**1956**

Dr.-Ing. Karlheinz Bauer becomes sole managing director, orientation of company towards specialist foundation engineering

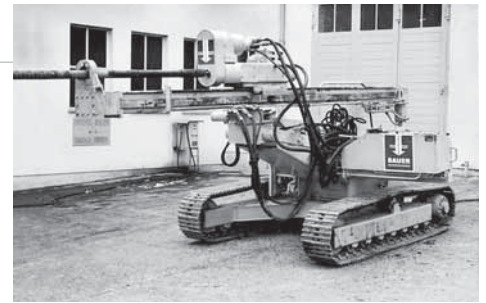


**1958**

Invention of injection anchor on the site of broadcaster Bayerischer Rundfunk in Munich

**1969**

Bauer starts manufacturing equipment, the first piece of machinery is the anchor drilling rig UBW 01



**1971**

Bauer anchors secure the tent roof at the olympic complex constructed in Munich in 1971

**1976**

The Bauer drilling rig BG 7 is manufactured in Schrobenhausen for the first time



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**1986**

Prof. Thomas Bauer becomes sole managing director:  
Further international expansion of the BAUER Group



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**1994**

Founding of BAUER AG as a holding company

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**2006**

July 4th: Initial public offering of BAUER AG in Frankfurt

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**2007**

Founding of BAUER Resources GmbH and thus a new strategic orientation with the three segments Construction, Equipment and Resources

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**2012**

The mark of 10,000 employees worldwide is exceeded for the first time

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**2013**

Foundation work for the Lakhta Tower and the Jeddah Tower – the future highest buildings in Europe and the world



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**2018**

Thomas Bauer becomes Chairman of the Supervisory Board, Michael Stomberg takes over as Chairman of the Executive Board



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**2019**

Bauer cutter technology achieves new depth record of 251.4 m during project in Canada

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**2020**

Bauer looks back on three successful decades of environmental services

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**2021**

The constructed wetland of Bauer Resources in Oman celebrates ten years of operation

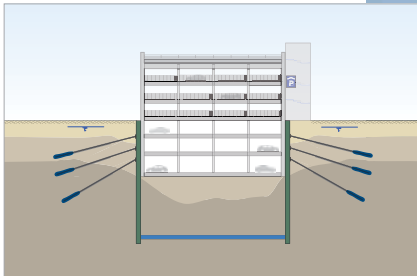
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Bauer presents its first electric drilling rig eBG 33



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**2022**

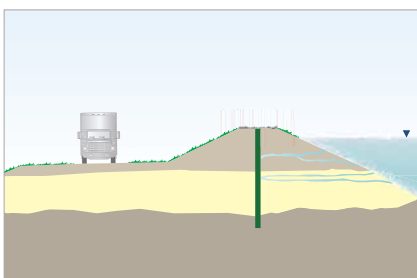
Bauer wins several contracts for the NEOM mega project in Saudi Arabia

# WHAT IS SPECIALIST FOUNDATION ENGINEERING?



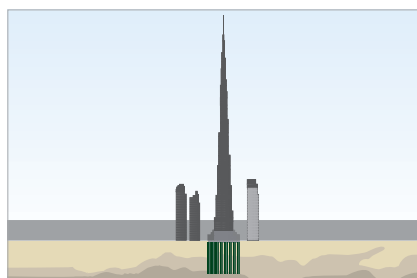
## Excavation pits

The construction of excavation pits is one of the principal tasks in specialist foundation engineering. Depending on the requirements, this could involve, for example, the execution of soldier pile walls, Mixed-in-Place walls, sheet pile walls, bored pile walls, diaphragm walls or cut-off walls.



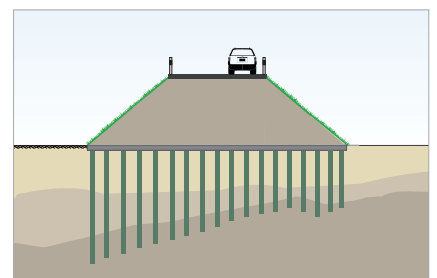
## Cut-off walls

These provide a vertical seal to protect – depending on the requirements – a structure, entire areas or a region's environment. Cut-off walls of every kind are used, for example, to seal off reservoirs and dikes, for the encompassment of excavation pits or industrial facilities.



## Foundations

The loads on new structures are becoming increasingly large, and ever more frequently they are being constructed on less stable construction soil. With pile foundations down to great depths, even large loads can be safely discharged into the subsoil.



## Soil improvement

In areas with difficult subsoil and low load-bearing capacity, soil improvement techniques can be used to minimize settlements and increase the load-bearing capacity of the subsoil as well as its stability.



# SUSTAINABILITY – WE TAKE ON RESPONSIBILITY

It takes sustainable action to be successful on the long term. We have pooled our activities under the name B.sustainable. Our understanding of sustainability extends to all the divisions of our company. In specialist foundation engineering and equipment manufacturing, the topics of energy efficiency, durability and careful use of resources are given top priority during the new development and enhancement of our methods and products. Moreover, in the Resources segment we offer sustainable solutions with which we are facing the challenges of the future. But sustainability also means taking on social responsibility. We shoulder this responsibility each and every day. Our goal is to create a more livable future by building the foundations for future generations with our products and services.

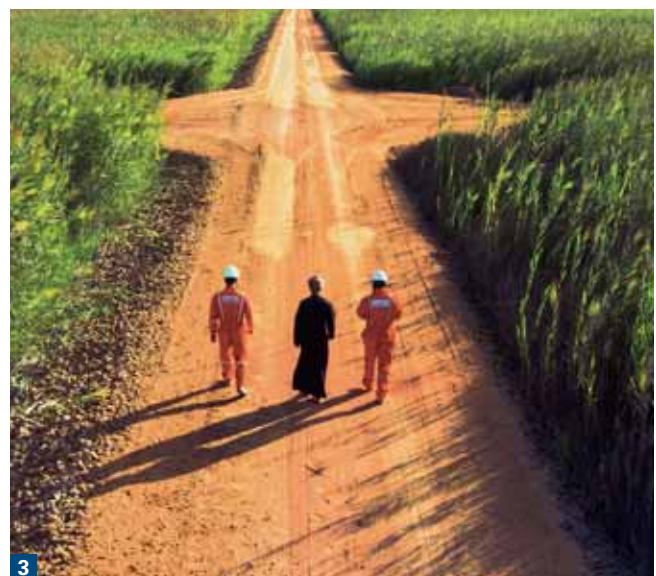


## B.sustainable

1 | The electrification of our equipment is a key component of our sustainability strategy. Whether for classical kelly drilling or high-performance methods, with a drive power of more than 400 kW, our eBG 33 covers a wide range of applications.

2 | Why remove excavated soil and deliver concrete when the existing soil can be used? The Mixed-in-Place (MIP) method developed by Bauer avoids laborious transport operations, lowers costs and emissions, and relieves strain on site neighbors as well as the environment, of course.

3 | In the middle of the desert in Oman, a local subsidiary of our BAUER Resources GmbH has been successfully operating the world's largest commercial reed bed treatment plant for more than ten years. With an area of 13.5 km<sup>2</sup>, the plant is a flagship project for biological water treatment.



# THE WORLD IS OUR MARKET

**1.5** EUR BILLION  
TOTAL GROUP REVENUES

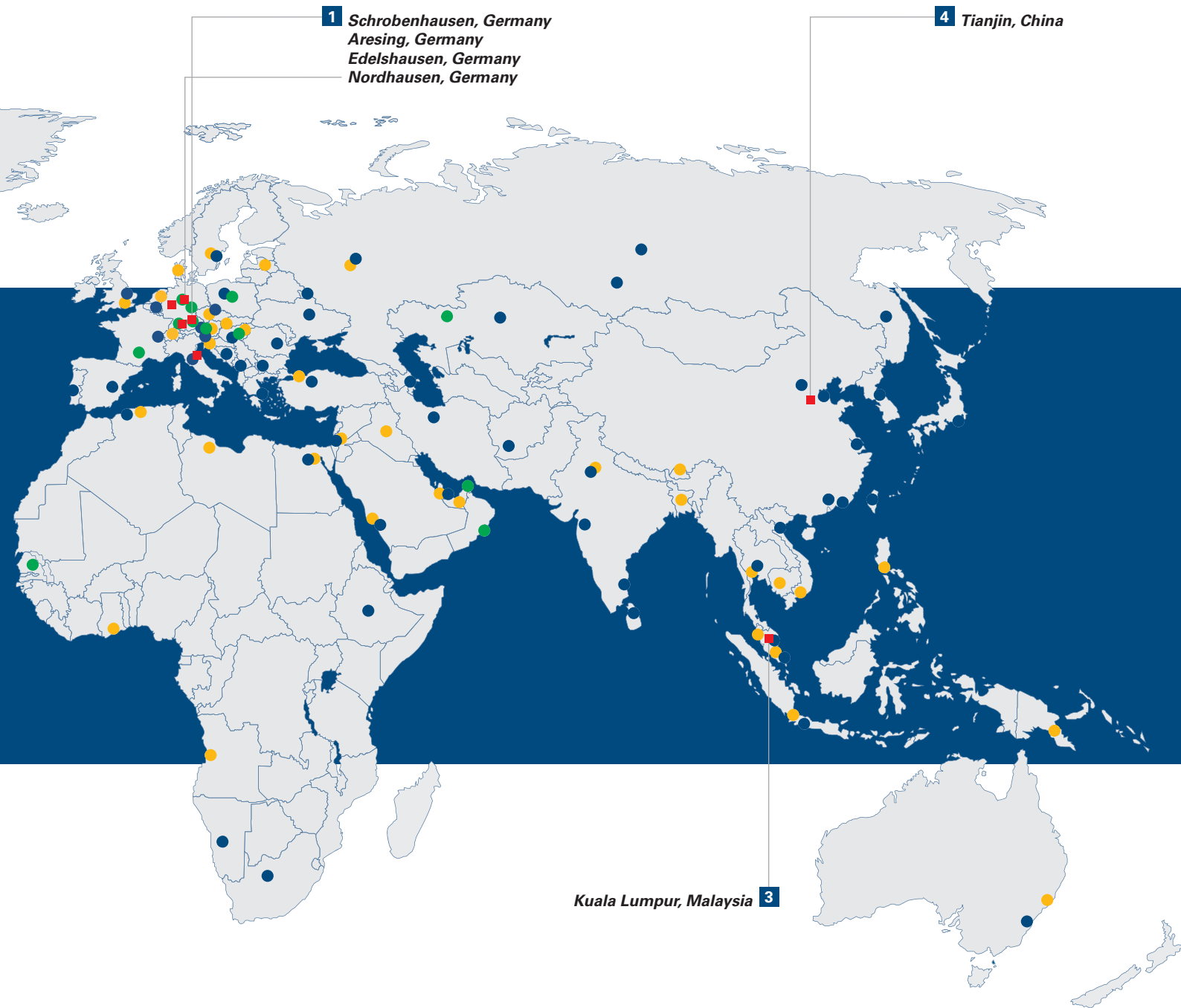
WITH OVER **100**  
NATIONALITIES

AROUND **12,000**  
EMPLOYEES

- Construction
- Equipment
- Resources
- Production site

Conroe, USA **2**





**2**



**3**



**4**

# ADDRESSING MAJOR TRENDS ...

Major global trends such as rapidly progressing urbanization, infrastructure expansion, water extraction and treatment as well as increasing environmental awareness open up attractive business opportunities for Bauer. For instance, worldwide population growth and increasing urbanization require ongoing investments in complex construction projects. By 2050, the share of the world's population living in cities will be more than two thirds – an estimated 6.4 billion people. In 2018 the percentage was around 55%. Combined with the overall growth of the world population,

this means that the population living in cities will nearly double. As a result, there is an increasing need for new and additional infrastructure in emerging economies as well as in established industrial nations. Given the fact that not even 1% of the total water deposits on earth are available to humans as freshwater, the availability of water resources will become even more important in the future, especially given the expectation of increasing droughts as a result of climate change. The sustainable protection of the environment consequently takes on a central role.

## Urbanization

Living space is becoming much more compact, but increasingly taller buildings are being constructed in ever tighter conditions. Bauer offers the optimal solution for the foundation of any structure and also develops the right equipment for the construction of foundation elements and for the investigation and exploration of soils as well as subsoils. Where decommissioned and contaminated areas need to be revitalized for future use, Bauer helps with the rehabilitation of soil and groundwater. And when the goal is to utilize properties underground and up to their limits, Bauer is the right contact for excavation pit construction.



# ... WITH OUR EXPERTISE

## Infrastructure expansion

The expansion of various transport systems never stops. Whether bridges, airports or railway lines, Bauer is involved in the foundations for numerous infrastructure projects. If these structures are getting older, Bauer also takes care of the replacement construction or rehabilitation. To move transport connections underground, Bauer carries out diaphragm wall work for floodgates, tunnels or subways. This work relies on the same equipment, developed in-house, for which Bauer is known as a world market leader.



## Water extraction and treatment

Water is a vital yet limited resource. For this reason, water extraction and treatment also require highly specialized services from Bauer. From well materials and pipe systems to water distribution systems all the way to holistic solution systems for constant water supply, Bauer brings together numerous areas of expertise, which is increasingly important in times of increasing drought. Moreover, Bauer takes care of the decontamination of waste water. This encompasses the cleaning of contaminated waste water from the oil industry or polluted groundwater as a consequence of many years of operation of former refineries, gas plants or chemical facilities.



## Growing environmental awareness

The understanding of sustainability at Bauer extends to a wide range of environmental aspects related to equipment and construction sites. This includes the application of sustainable construction methods such as Mixed-in-Place for dam or dike rehabilitation, or for the encompassment of excavation pits. But the electrification of equipment will become even more important in the future. Last but not least, Bauer makes a significant contribution to reducing environmental impacts with the professional disposal of contaminated soils and slurries, and the biological cleaning of polluted water.





**Operaparken, Denmark:**

*In Copenhagen, Bauer executed the diaphragm wall work for the "Operaparken" project. To construct 6,600 m<sup>2</sup> of diaphragm wall, a BAUER MC 96 duty-cycle crane with BC 48 cutter and an MC 76 with rope grab were used.*

## UNIQUE CONSTRUCTION PROJECTS

BAUER Spezialtiefbau GmbH has played a leading role in shaping the development of specialist foundation engineering and executes projects around the world. Bauer Spezialtiefbau is organized regionally in Germany and operates on all continents with more than fifty subsidiaries and branch offices. Networks all over the world make it possible to deploy equipment and know-how quickly and flexibly, and thus to always offer the technically and commercially optimal solution. Apart from all conventional methods, we also execute specialist foundation engineering techniques that were developed in-house. Our main services include all kinds of piles, anchors, diaphragm and cut-off walls as well

as injections and vibration methods. The recognized quality of these trades is based on many years of experience, qualified employees and continual development work. We attach great value to the topic of digitalization and map complex excavation pits as a digital twin. In the interest of sustainability, we continually enhance our methods in order to minimize environmental impacts and reduce them even more in the future. Our central fields of work include executing complex excavation pits and foundations for large-scale infrastructure projects and buildings, as well as cut-off walls and soil improvements.



1

**1 Parkstadt Schwabing, Munich:**

For a 9 m deep excavation pit, Bauer constructed a 6,000 m<sup>2</sup> single-anchored Mixed-in-Place cut-off wall.

**2 Port of Alexandria, Egypt:**

For the construction of a quay wall encompassing 225,897 m<sup>3</sup> in the port of Alexandria in Egypt, along with four trench cutters, two Bauer drilling rigs of type BG 28 were also used.

**3 Herbert Hoover Dike, USA:**

On the Herbert Hoover Dike in Florida, Bauer is constructing a 21.7 km long cut-off wall using the cutter-soil-mixing method.

**4 Bruce Highway, Australia:**

Construction of 405 permanently cased piles with rock socketing and diameters between 1,200 mm and 1,800 mm, and pile lengths between 15 m and 25 m.

**5 Teesta VI, India:**

On the Teesta River in India, Bauer is constructing 4,700 m<sup>2</sup> of cut-off wall using the jet grouting technique, and 4,600 m<sup>2</sup> of diaphragm wall.



2



3



4



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## INNOVATIVE EQUIPMENT TECHNOLOGY

We are constantly making advancements, even after more than 50 years of experience in the development and construction of equipment for specialist foundation engineering. The ideas and visions of the BAUER Maschinen Group have conquered the world. So it's only logical that we now feel at home around the world and no site location is foreign to us. Whether the requirements call for drilling, pile driving, grabbing, cutting, compacting, mixing or separating, our portfolio encompasses all the technologies that set the standards in the industry. Our curiosity has taken us this far and will continue to drive us in the future to adopt new conceptual approaches. We engage with questions such as how to implement digital solutions at maximum benefit or how to prioritize sustainability even more in specialist foundation engineering.

No challenge is too large or too demanding for us. For example, when equipment technology is needed for the extraction of resources, the foundation of offshore wind parks or the construction of flood protection structures – we accept the task. With our focus on the essentials, our experienced craftsmanship and passion, we can make any problem a success. That's why so many customers rely on us. To make sure it remains that way in the future, we listen, keep pace with the times and retain the pioneering spirit that has always guided us. In this way, we transform every major challenge into a manageable task.





1

**1 Drilling rigs:**

A BG 45 during work on the East Coast Main Line in Great Britain.

**2 Leaders and pile driving equipment:**

Using a RG 19T for the construction of an artificial island in Poland.

**3 Anchor drilling rigs:**

Using a KR 805-3G to tie back a bank wall on the island of Sylt.

**4 Mixing and separation technology:**

A BE 300-C desanding plant with its complete accessories during installation work in Italy.

**5 Duty-cycle cranes and cutters:**

An MC 128 duty-cycle crane with HDS 250 and a BC 50 cutter being used for the FalCon project for the exploration of diamond deposits up to a cutting depth of 250 m.



2




3



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5



**Reed bed treatment plant, Nimr:**  
Up to 175,000 m<sup>3</sup> of polluted water from oil production are cleaned every day by the world's largest reed bed treatment plant in Oman using a purely natural method.

## PROTECT RESOURCES

The Resources segment moves the world of today and tomorrow with highly innovative solutions in the areas of drilling services and water wells, environmental services, constructed wetlands, mining and rehabilitation. The segment thus brings together all areas of expertise for the protection of the environment and the use of water. Where soils are industrially polluted, we help with the rehabilitation of all sorts of contaminated sites – whether former refineries, gas plants or chemical facilities. If these structures are getting older, we also take care of the demolition, rehabilitation or replacement construction. In order to clean polluted water, we develop innovative technologies and build plants for water treatment. Particularly with the world's largest reed bed treatment plant in Oman, we underscore our role as a forerunner in sustainability.

In the middle of the desert, over an area of 13.5 km<sup>2</sup> – roughly 1,600 football fields – contaminated water from oil production is cleaned biologically with the help of around 1.5 billion reed plants. Moreover, with the development and delivery of well materials or well drilling, we ensure a constant water supply for the population, particularly in areas that will be more strongly affected by droughts in the future. And when it comes to handling, recycling and disposing of waste professionally, our own soil cleaning centers guarantee the highest possible reliability of disposal. If underground storage facilities are no longer needed, we also safeguard them securely for future generations. Last but not least, our area of activity also includes safeguarding existing shaft facilities, excavating shafts and the exploration of new drifts.



**1 iCampus, Munich:**

Brownfield remediation of a former industrial site in Munich's Werksviertel district: In total, almost 125,000 m<sup>3</sup> of ground was excavated and disposed of, including 140,000 t of contaminated earth.

**2 Innerstetal bridge, Hildesheim:**

Good planning and organization were demonstrated during the rehabilitation of the Innerstetal bridge on the A7. Spesa installed around 5,000 m<sup>3</sup> of concrete in just 35 months.

**3 Reiche Zeche, Freiberg:**

The heritage-listed Reiche Zeche headframe of the Freiberg University of Mining and Technology's research and training mine was replaced and partially rehabilitated by Schachtbau Nordhausen.

**4 Old refinery, Leuna:**

On the grounds of the old refinery, the innovative EcoVert® technology treats around 500 m<sup>3</sup> of polluted groundwater every day using a purely biological method.

**5 Production, Peine:**

The GWE Group manufactures well materials of all kinds from A to Z and develops powerful pump systems as well as custom solutions.



The materials and specifications may be changed without prior announcement. The figures may contain optional equipment and do not show all possible configurations. These specifications and technical data are intended for information purposes. Errors and misprints are excepted.



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