FREYSSINET

"I then design the structure down
to the last details, since I believe that
the quality of a structure hinges largely
on these details."
Eugène Freyssinet

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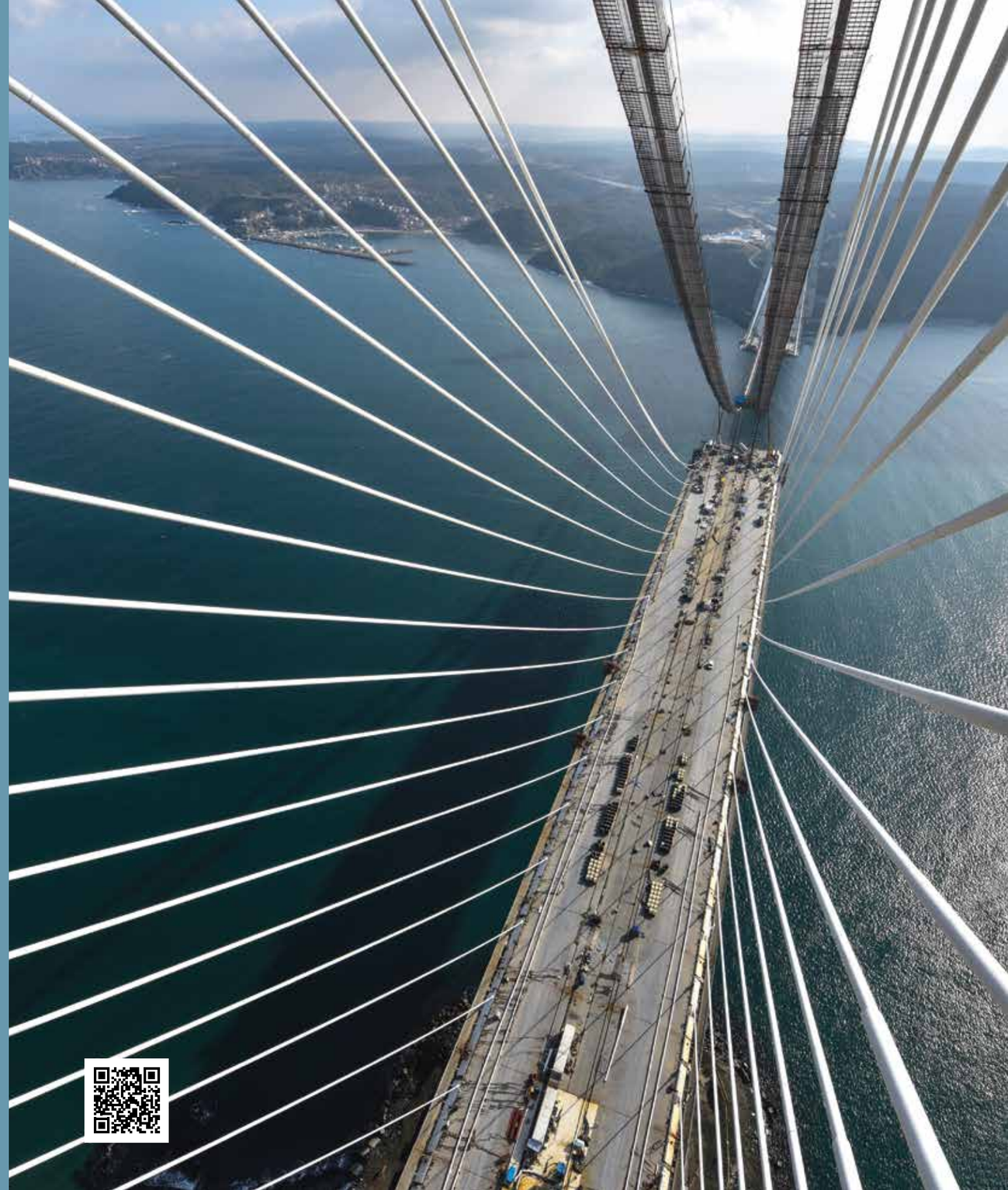
Translation: ALTO
Freyssinet Communications Department - 280 avenue Napoléon Bonaparte, 92500 Rueil-Malmaison - France



Freyssinet, the benchmark in civil engineering

Freyssinet brings together an unparalleled array of specialist civil engineering expertise. Covering the design of structures, the production of materials and equipment and their implementation on site, Freyssinet offers integrated technical solutions in two major fields: construction and structural repair.

OVER **7,500** EMPLOYEES

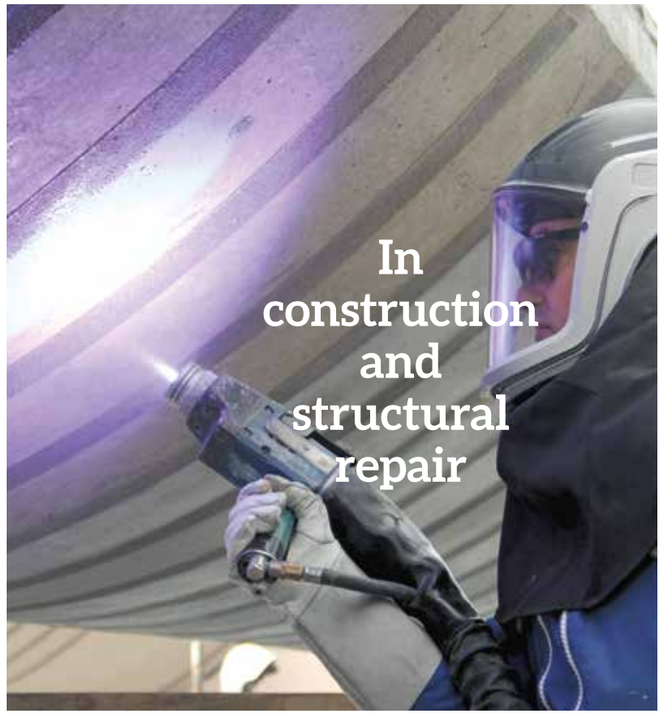
LOCATIONS IN OVER **70** COUNTRIES AROUND THE WORLD

2015 REVENUE: **€765 M**

ENGINEERING

PRODUCTION

EXECUTION



SPECIALITIES

- Prestressing
- Construction methods
- Cable-stayed structures
- Structural accessories
- Structural reinforcement
- Concrete repair
- Reinforcing steel protection
- Earthquake protection
- Specialised maintenance

A BROAD ARRAY OF STRUCTURES

- Civil engineering structures
- Buildings
- Offshore structures
- Industrial and energy generation facilities
- Marine and river structures
- Tunnels and arches
- Historic monuments

The Freyssinet spirit

As a market leader in our sectors, we deliver efficient, sustainable solutions to meet client requirements around the world. Our one-of-a-kind specialist civil engineering expertise enables us to handle every challenge.

Passion

Excitement and enthusiasm are inseparable from technical expertise and technology. Passion alone makes it possible to build the spectacular projects in which we are involved year by year. Our engineers pool their talent, experience and creativity to seek and find the best solution at each stage of the project, from design to implementation.

Excellence

We strive for excellence across all our activities – employee safety, international expansion, human resources, solution design and risk control. Excellence is the ethical cornerstone of our approach, underpinning the exacting way in which we carry out our projects. Customer satisfaction is the benchmark against which we measure our performance.

Vision

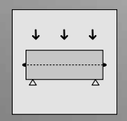
Freyssinet has been a civil engineering pioneer since its inception. We are constantly innovating and finding new applications to develop sustainable solutions, making new discoveries and filing new patents. Our commitment to the future combines global expertise, local experience, support for our clients beyond project handover and a special focus on developing the skills of our employees.

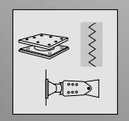
Our expertise

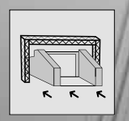
We design integrated technical solutions
to meet the needs of our clients.

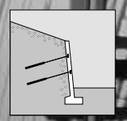

Stay cables


Suspension bridge


Post tensioning


Structural fittings


Heavy lifting


Geotechnic


Construction methods


Strenghtening of concrete structures


Concrete repair and protection


Protection of reinforcement bars

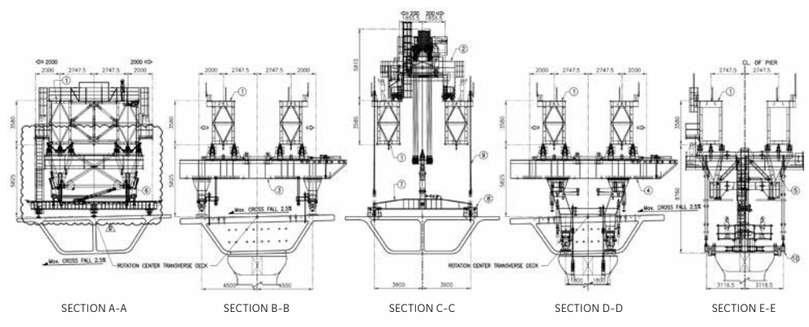

Wood, masonry and steel structures retrofitting


Underpinning and stabilization


Specialised maintenance

Construction

Innovation, performance and long-term durability: our approach to meeting construction and specialist civil engineering requirements.



Dammam Bridge, cross-section of the launcher during arch erection.

Meeting challenges

Eugène Freyssinet, a pragmatic, visionary and, above all, seasoned engineer, revolutionised the construction of civil engineering structures by inventing prestressed concrete.

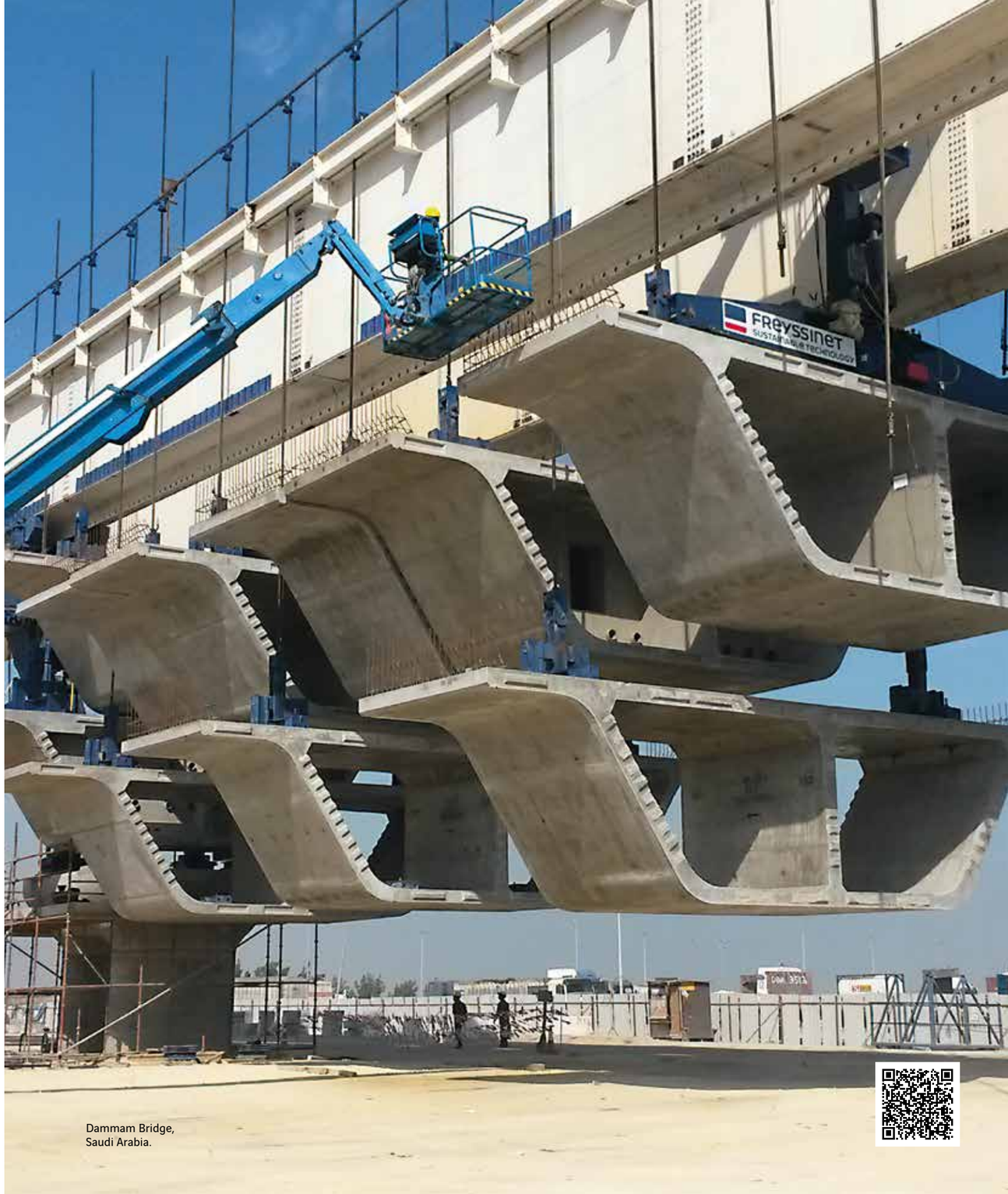
His work forged our company's culture and put its stamp on history by rising to technical challenges through discipline, passion and method.

We apply the same principles of excellence in innovation, performance and durability to each project and part that we design, produce or implement.

The best technical and economic solution

We work on all types of civil engineering structures, from the familiar to the most exceptional: footbridges, road bridges, power plants, liquefied natural gas tanks, offshore platforms, wind turbines, tunnels, sports stadiums and facilities, apartment buildings, commercial buildings, historic monuments and water tanks.

In working for owners, contractors and local authorities, our approach is always the same: we utilize our experience, expertise and specialist capabilities to create or adapt the solution that is economically and technically best suited to each project.



Dammam Bridge,
Saudi Arabia.

Prestressing and anchorages

Freyssinet prestressing and anchorages are widely respected for their outstanding performance and durability, achieved by controlling the production of their components and designing customised applications.

Construction methods

We provide solutions for every project, both prefabricated and produced in situ: launching and assembly jacks, launching rails, stay cable towers and special handling systems (jacks, cables, air cushions).

Cables

Freyssinet offers a broad range of cables, dampers, sheaths and parts used in the construction of cable-stayed structures.

Accessories

Freyssinet develops and produces accessories, such as bearings, expansion joints and earthquake protection systems, which are tailored to each structure.

MuCEM, Marseille, France.

Repair

We deliver solutions to protect, repair, reinforce and maintain buildings and engineering structures.

Repair, reinforce, protect, maintain

We carry out one-off projects, for example to safeguard a building or adapt a structure to new use or new regulatory requirements, and we also handle comprehensive regular maintenance under customised contracts.

The full range of structures

We repair ageing structures and structures requiring modification, including bridges, engineering structures, buildings, industrial and water civil engineering structures, marine and river structures, tunnels and arch structures and old buildings. We work with all types of concrete, steel and wood.

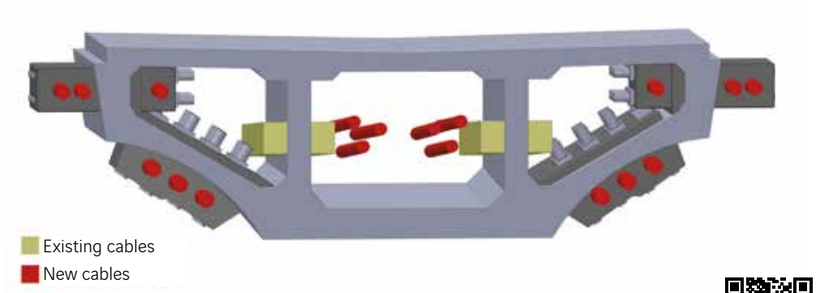
A single interface and guarantee

We deliver the entire project, from design to implementation. This integrated comprehensive coverage ensures reliable service for the client.

State-of-the-art expertise

Our Research and Development department offers innovative repair solutions that are designed, developed and tested by our engineers.

Our experience with construction enables us to deliver extremely technical works that few providers can handle.



Find out more
about the Hammersmith flyover.

Repair
Foreva
by Freyssinet

Foreva®, a reflection of Freyssinet's approach to repair, guarantees the quality and durability of renovation works. A charter with a precise list of objectives certifies each solution making up our turnkey service including structural design, production, implementation process and team training. Foreva® certifies, for each client, compliance of our rehabilitation works with best practices, applicable national standards and environmental requirements. We are able to ensure repair, reinforcement, protection and maintenance at the highest level of performance.

Engineering & innovation

Our design offices develop solutions that combine our best experience and innovations.

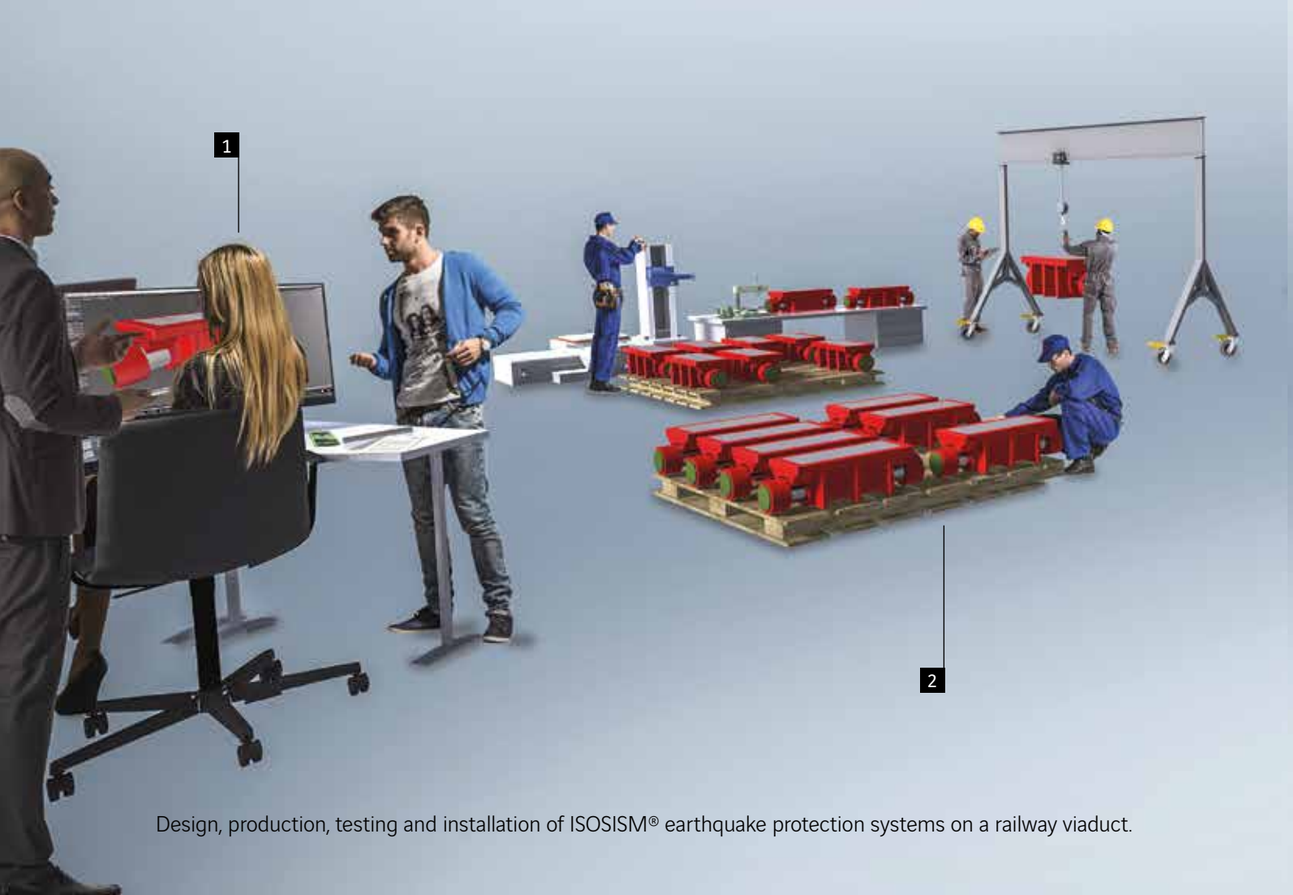
1. Design
From the start of the project, our engineers and contract managers work together to design the optimum technical solution.

2. Production
We apply best practices in selecting and producing parts, systems and products that comply with the project's technical criteria and the applicable standards.

3. Testing
Our solutions are tested on our test benches and certified by an independent body.

4. Installation
Teams of trained, specialised teams ensure methodical, precise installation of our solutions.

5. Delivery
Our focus is on customer satisfaction; we deliver a project that complies with your specifications and enables you to operate the structure safely.



Design, production, testing and installation of ISOSISM® earthquake protection systems on a railway viaduct.

Engineering

Every civil engineering or building project is unique.
Our solutions are bespoke.

The best commercial and technical solution

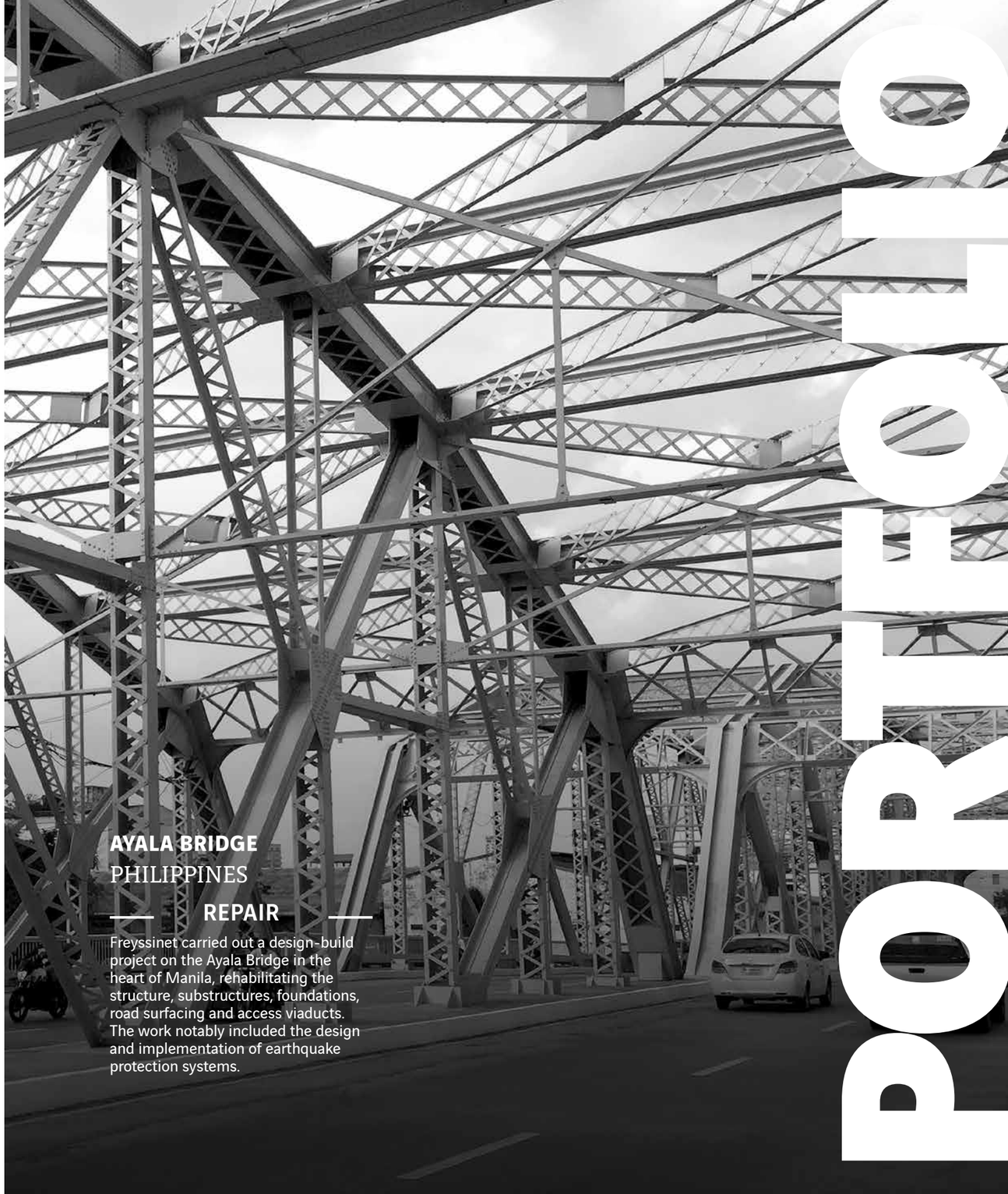
Engineers and contract managers work together from the start of a project and throughout its development to devise the most suitable technical and operational solution, in compliance with project specifications and locally applicable standards.

A widely respected engineering method

Freyssinet develops systems, methods and products that are designed, tested and approved for all types of structures around the world. Our combined experience, which is regularly expanded, forms the solid foundation underpinning each new project.

Local approach and international experience

Freyssinet's international design office provides key support for group engineers assigned to projects around the world. It is made up of specialised experts in each field of construction and repair who are also involved in the group's research and development programme. The synergy between our local approach and our international expertise ensures that projects are customised.



YAVUZ SULTAN SELIM BRIDGE

TURKEY

Construction

The bridge is the key element in the North Marmara Motorway bypass around Istanbul, which crosses the Bosphorus to the north of the city. Its 1,408 metre central span holds the world record for a cable stayed bridge. Freyssinet designed, supplied and installed the 176 cable stays, the arch segment lift system and the prestressing for three of the bridge access viaducts.

TRAIRI WIND TURBINES

BRAZIL

Construction

In Trairi, Freyssinet designed and built the turbine foundations and 119 meter prefabricated prestressed concrete towers in partnership with Alstom (GE). An innovative construction method – a special lifting device developed by Freyssinet called Eolift© – was used on the 36 turbine wind farm.

CITÉ RADIEUSE
FRANCE

Repair

In Marseille, Freyssinet worked on the Cité Radieuse, built by architect Charles-Édouard Jeanneret, known as “Le Corbusier”, between 1947 and 1952. The building, damaged by fire, required substantial concrete structural repair and reinforcement work.

DONG SIRI OFFSHORE PLATFORM
DENMARK

Repair

Anchored in the North Sea 220 km from the Danish coast, the Siri offshore platform operating since 2003 had been weakened by cracking. Freyssinet designed and supplied an innovative cable-based reinforcement system, adapting the H2000 cable to meet the project’s pressure resistance, comprehensive waterproofing and corrosion protection requirements.

BC PLACE STADIUM
CANADA

Construction

The vast stadium in Vancouver, built in 1983, underwent substantial improvement works in 2010. The project included installation of a cable-stayed roof. Freyssinet designed, supplied and installed the roof's constituents. It took less than a year to raise and tension the 2,000 tonne network of cables.

PUYMORENS TUNNEL
FRANCE

Repair

The Puymorens tunnel at the French-Spanish border underwent a major upgrade. A full range of fire protection systems – thermal protection, refuges and evacuation tunnel – were installed in a project coordinated by Freyssinet, which was in charge of the design-build safety improvement programme.

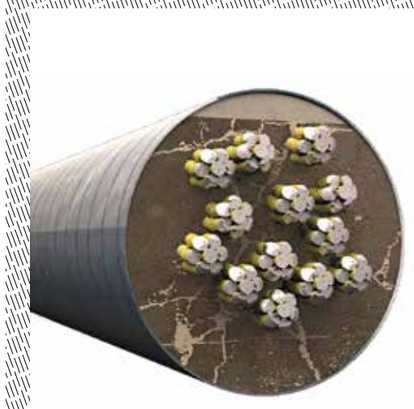
LIANTANG 3
HONG KONG

Construction

Not far from Sheng Sui in the north of the country, the Hong Kong government initiated a major motorway project to provide access to the border with China. Freyssinet is currently working to build four viaducts as part of a major interchange and to design, supply and install prefabricated arch segments, prestressing, bearings and joints.

Inventing the civil engineering of the future

Taking inspiration from the projects we develop and from the technical, economic and environmental challenges we face, we are constantly devising new operational solutions.



FOREVA® ULTRASOUND, EXTENDING THE LIFE OF PRESTRESSING CABLES

The process consists of injecting a corrosion inhibitor into the sheaths of prestressing tendons deemed to be at risk of corrosion due to the presence of chlorides. The corrosion inhibitor is injected using a special technique based on a powerful ultrasound pump that ensures comprehensive filling of the cement slurry.

The innovation culture

Freyssinet owes its beginnings to a breakthrough technology – prestressed concrete. Since its inception, the company's Research and Development teams have been developing product and technique innovations that are helping to revolutionise construction:

- supported by ADEME, Freyssinet's exclusive Eolift® process breathes new life into the wind turbine market by combining innovative structural, industrialisation and lifting processes to build very high turbine towers;
- commended by experts, an innovative technique was used to repair the Hammersmith flyover in London without interrupting traffic.

Continuous improvements of products and techniques

Every year, our engineers working in Research and Development and project engineering optimise our existing systems and help to maintain the excellence of the solutions we offer our clients. As part of this effort to improve cable stays, anchorages, joint strength and earthquake protection systems, an average of ten patents are filed every year around the world.

Products

The quality of our service also reflects the quality of the materials and products we produce to high standards using rigorous methods.

Customised

Depending on the conditions in which the structure will be used and on the type and features of the structure to be built, we fabricate the most appropriate parts, products and systems.

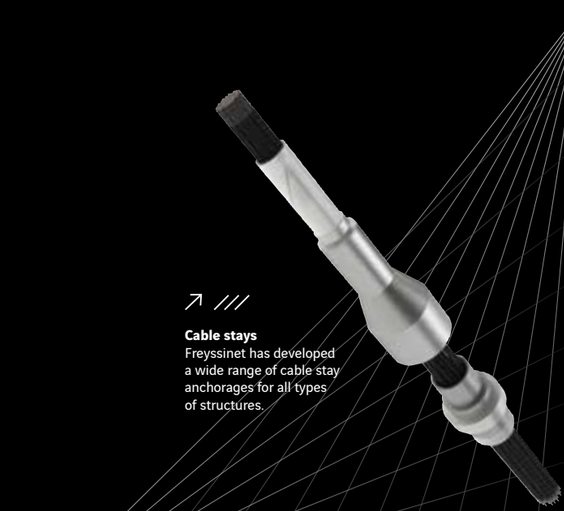
To coordinate design, solutions, production processes and choice of materials, all Freyssinet bearings, expansion joints, anchorages and bars are designed and engineered in our in-house technical department, which customises them to fit the particular features of each project.

Certified

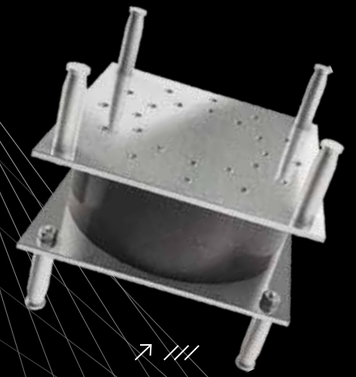
To ensure that we meet the Freyssinet quality level and comply with the most exacting standards, we control and guarantee the production of all the products we use.

Our suppliers are subject to the same rules as our own production sites and follow a precise set of specifications. They are overseen by our inspectors, who are present in all factories.

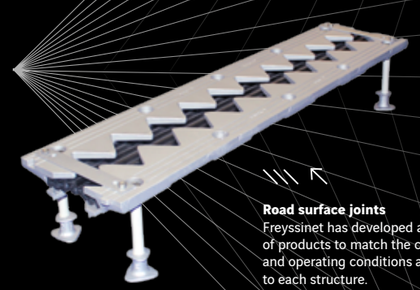
Our quality control department and two testing centres are managed in partnership with major recognised laboratories and validate the quality of our products in accordance with international performance and quality standards. These include the measurement of material strength, surface protection and a wide range of tests which are carried out on the finished products under final structural design conditions.



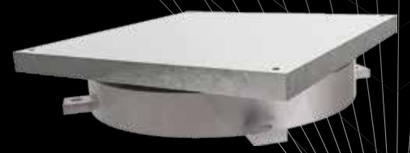
Cable stays
Freyssinet has developed a wide range of cable stay anchorages for all types of structures.



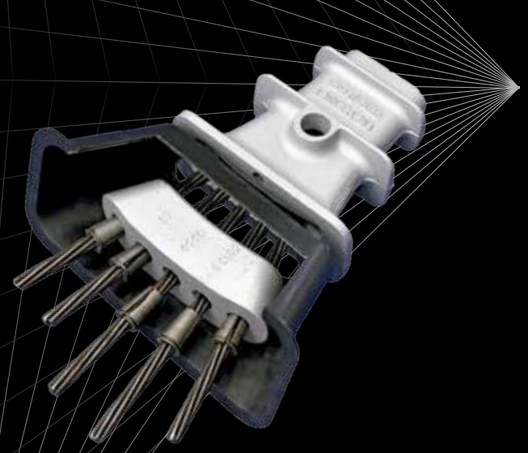
Earthquake protection
Freyssinet offers a complete range of earthquake protection system, called ISOSISM®.



Road surface joints
Freyssinet has developed a range of products to match the climate and operating conditions applying to each structure.



Bearings
Freyssinet offers a wide range of bearings for bridges, stadiums, pipelines, offshore platforms and all types of buildings.



Prestressing
Freyssinet designs and produces anchorage systems for structure and building prestressing. A special range of solutions is dedicated to reinforcing existing structures and buildings.

Production

The Freyssinet Products Company industrial division coordinates all Freyssinet production around the world. FPC brings together the full range of Freyssinet expertise in materials, fabrication, production, inspection and logistics.

Produce

We are supported by our production units around the world and by a reliable network of partner factories. Our products have the benefit of the latest innovations developed in our Research and Development department.

Inspect

Our parts are carefully produced and inspected according to the most demanding standards before being given the Freyssinet quality label. These standards cover the rigorous selection of raw materials, optimised machinery fleet, regular in-depth training of operators, systematic metering, non-destructive testing.

Transport

Freyssinet's logistics system ensures on-time, lowest-cost delivery of products to our worksites, no matter where they are located and how they are configured.

Our teams

Freyssinet employees have contributed to the company's success and corporate image for more than half a century. They are our primary asset.

Our teams

All over the world, transcending the diversity of their activities and locations, the men and women who work for Freyssinet share a culture that combines our quest for excellence, focus on service, team spirit and rigorous compliance with commitments.

A breeding ground for talent

To meet the needs created by our strong growth on five continents, we pay special attention to our recruitment policy. As a partner of a large number of universities around the world, every year we offer internships and work-study contracts and host several people enrolled in the Volontaires internationaux en entreprise (VIE) programme. We make a point of promoting long-term employment of graduates and experienced people, alike primarily with a technical educational background.

Mobility for job promotion

Geographical mobility, especially among our supervisory staff, makes our teams responsive and adaptable. This gives them prospects for promotion based on the development of skills and empowerment.

Supporting skills

Training, supporting and promoting Freyssinet's people is a priority at the company and helps drive our expansion. Our relationship with our employees is focused on their long-term employability, which we foster in our dedicated training centres. The Freyssinet Academy for development of skills in our business activities, the Foreva Team for repair specialities and PM+ for overall project management are just a few examples of our overall skills management training.

Promoting equal opportunities

Freyssinet promotes integration, diversity and equal opportunities. Across all the countries in which we have locations, the company cultivates across-the-board gender equality in our teams. We also support our employees' volunteer work on behalf of local development and education.

7,500 EMPLOYEESS

88% TECHNICIANS AND WORKERS

12% MANAGERS AND ENGINEERS

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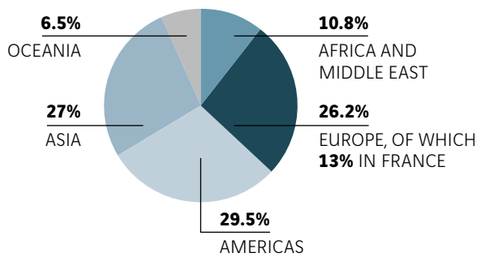
37 AVERAGE AGE

GEOGRAPHICAL DISTRIBUTION OF EMPLOYEES



Safety

Preventing risks and reducing the number of accidents

Our goal is to become the safety benchmark in the construction sector.

OUR COMMITMENTS

1. People are at the heart of the company and constitute its main asset.
2. General management departments hold primary responsibility for safety and safety leadership.
3. Training is a crucial tool for enabling everyone to adopt our safety culture.
4. Safety is at the heart of each stage of a construction project.

OUR PRINCIPLES

- We work with the stakeholders
- We methodically plan our work
- We ensure that the environment is safe
- We provide efficient equipment
- We identify and mitigate dangerous situations
- We train our people to prevent accidents

Find out more

Publications

Download documentation from our website: www.freyssinet.com

Web and social media

Site web

LinkedIn

Twitter

YouTube

Our locations

All our subsidiaries worldwide and their contact data

Freyssinet, a subsidiary of the Soletanche Freyssinet Group

As the world leader in soil (Soletanche Bachy, Menard), structural (Freyssinet, Terre Armée) and nuclear (Nuvia) engineering, the Soletanche Freyssinet group brings together an unparalleled array of specialised civil engineering expertise and brands. Its 22,000 employees are operating in some 100 countries worldwide.
Sixense was created in June 2016. Alongside its sister companies, this new business line provides solutions for optimising and monitoring infrastructure, ground and soils, and the environment throughout the life cycle of engineering structures.

www.soletanchefreyssinet.com

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