



# WE MAKE IT POSSIBLE

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A member of  
**Bouygues Construction**



# OUR MISSION & PURPOSE

Every structure carries loads and is subjected to ongoing forces that can lead to material deformation or failure. In order to continue to build bigger, longer and stronger, the critical areas of structures must be strengthened and the behaviour of the ground that supports them needs to be controlled.

This is where VSL comes in. As a specialist in post-tensioned and cable-stayed structures, foundations and ground engineering, VSL contributes to the design and construction of major engineered structures and maintains, repairs and upgrades structural systems, to guarantee performance, safety and durability.

Our strength comes from our 360° approach, which combines engineering and construction methods, structural systems and technologies, and project execution.

Our objective is to understand the structure as a whole, including its environment and use, in order to propose and deliver the best technical solutions to turn even the most complex schemes into reality.

## ACTIVE IN 4 KEY MARKETS

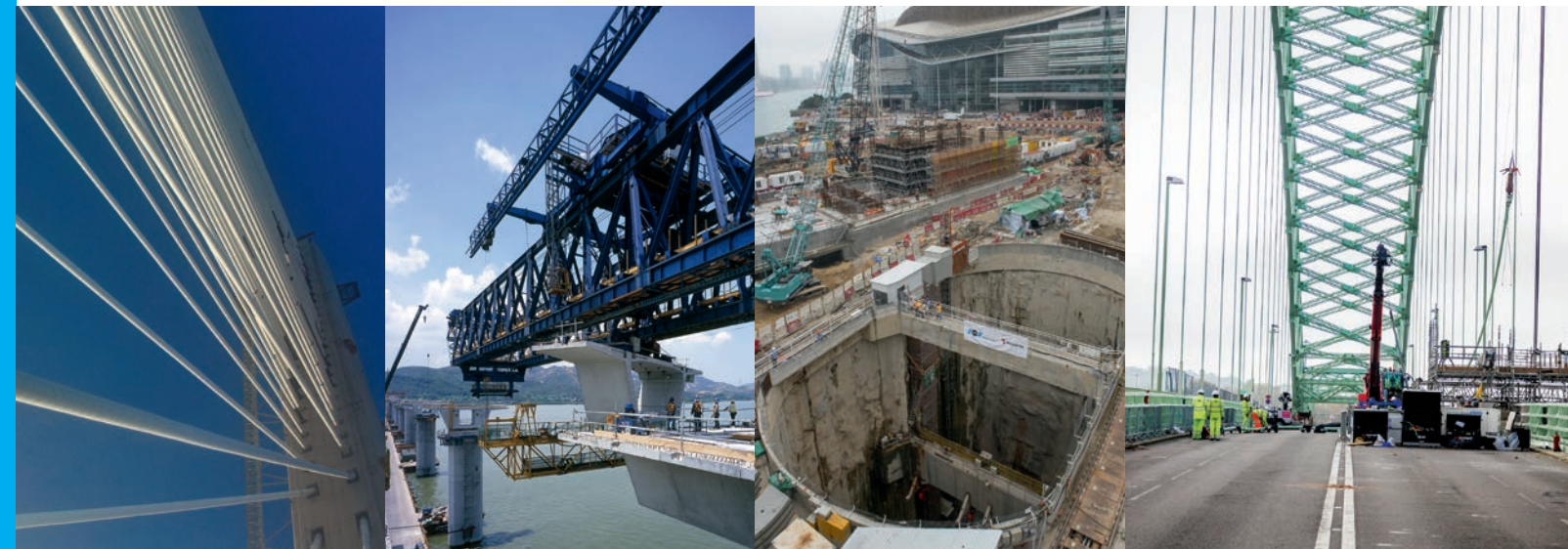
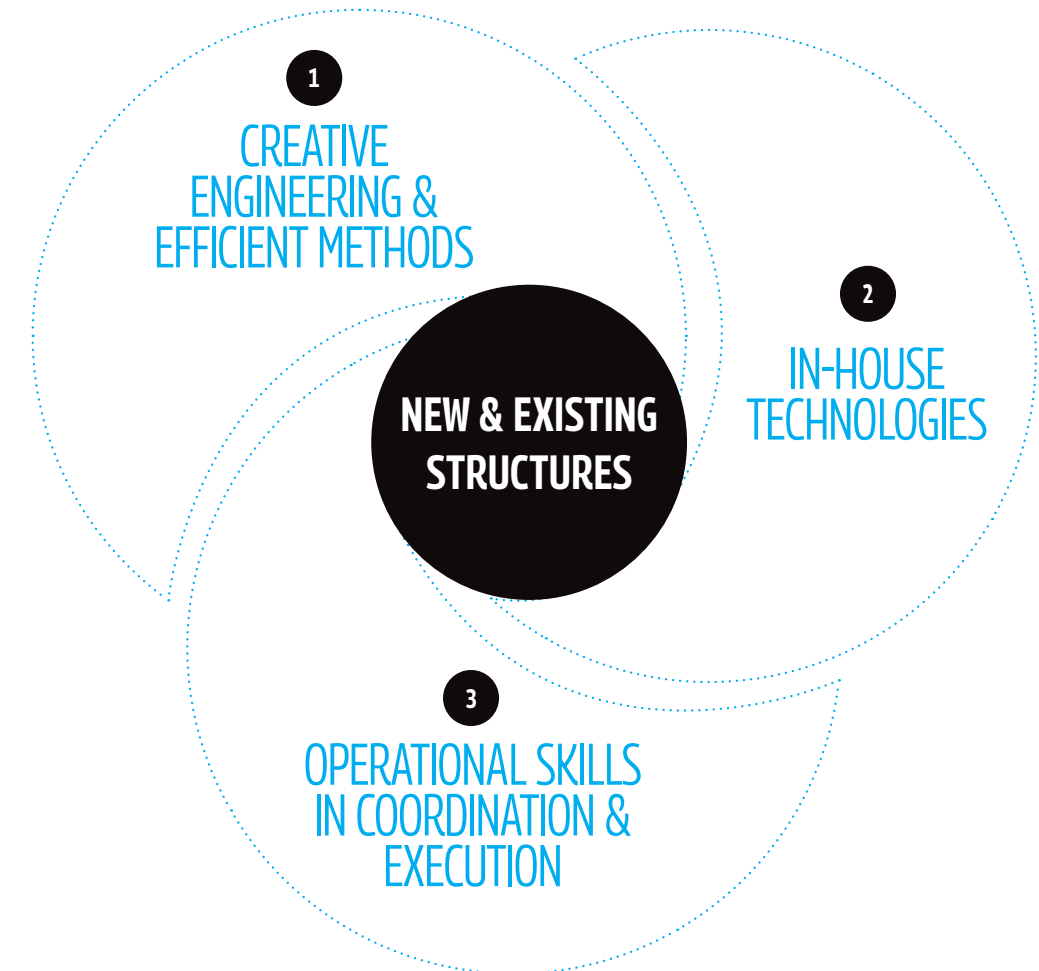
CONSTRUCTION  
OF TRANSPORT  
INFRASTRUCTURE

CONSTRUCTION  
OF BUILDINGS

CONSTRUCTION  
OF INDUSTRIAL &  
ENERGY-PRODUCING  
STRUCTURES

ASSET  
PRESERVATION,  
STRUCTURAL  
REPAIRS &  
UPGRADING

A 360° APPROACH TO MAKE  
OUR CLIENTS' PROJECTS POSSIBLE





# VSL TODAY

## 4 KEY AREAS OF EXPERTISE

1

### TECHNOLOGIES FOR DURABLE STRUCTURES

We ensure the development and constant improvement of our portfolio of in-house technologies, including post-tensioning systems, stay-cables, ground anchors and VSoL® systems for retained-earth walls.

2

### CIVIL WORKS

We help our clients with construction designs and methods, and provide operational skills for specific applications such as bridge deck erection, containment structures and heavy lifting.

**VSL**

### FOUNDATIONS & GROUND ENGINEERING

We are specialists in ground engineering and special foundations thanks to our long history of proven design and build capabilities gained on the most complex and varied projects.

3

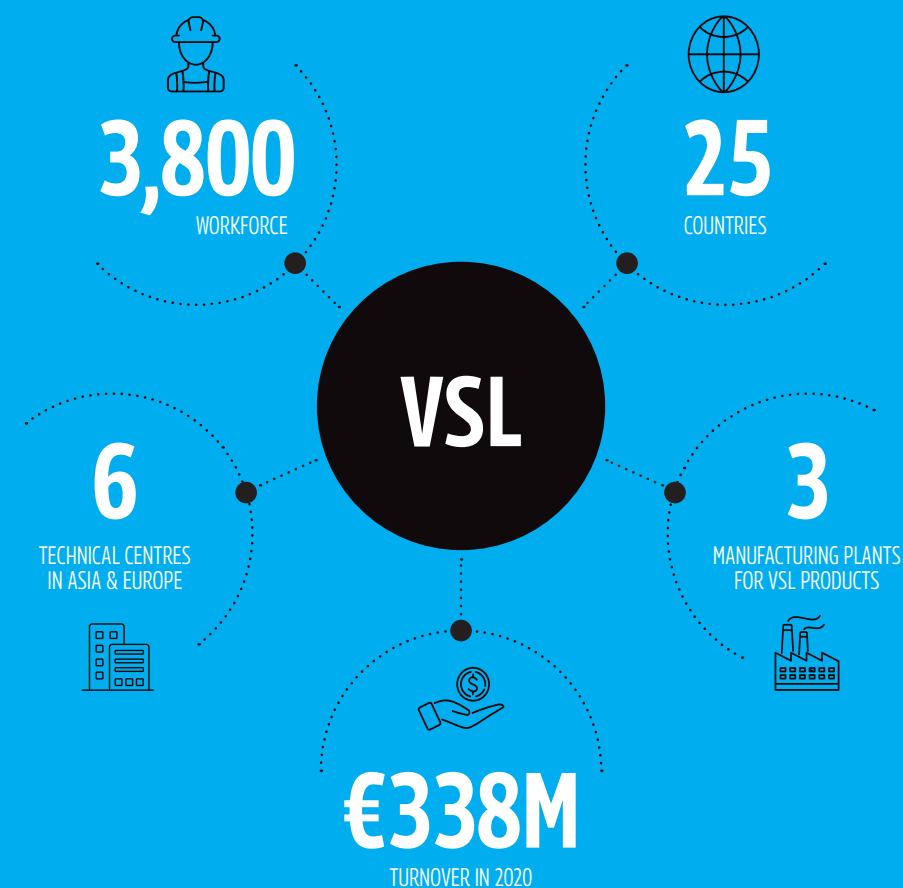
### ASSET PRESERVATION, STRUCTURAL REPAIRS & UPGRADING

We offer tailored services to suit your structure's life cycle, from inspections and assessment through to repair works and upgrading.

4



## KEY FIGURES



# 1/ WE PROVIDE PERFORMANCE

## A CONSTRUCTION PIONEER 'MADE IN SWITZERLAND'

VSL stands for Vorspann System Losinger, a wire prestressing system first patented in Switzerland in the early 1950s. VSL was a pioneer of post-tensioning particularly for bridges.

Throughout our history, we have continued to develop our technologies in response to increasingly stringent specifications in terms of quality, performance, speed of construction and durability.

A member of Bouygues Construction, VSL is today a **worldwide company with bases in 25 countries** and with licensees in a further 10 countries.

## EVER-BETTER PERFORMANCE FOR OUR CLIENTS' SATISFACTION

In 2020, VSL launched the **Be More company-wide project**, dedicated to continuous improvement of performance. Its objectives are to raise the level of quality and create value and ever-better satisfaction for our clients.

Be More is all about how we work at VSL: it is based on a **customer-focused approach**, and **involves all company functions and processes**, giving all employees the power to question how we work, and to improve it. Not only is it based on a **collective mindset**, it also mainly makes use of **lean management** principles and tools.

## WHY TRUST US?

1/ PERFORMANCE

2/ CREATIVITY

3/ RESPONSIBILITY & COMMITMENT



## DEVELOPING TAILOR-MADE DESIGNS EXECUTED BY HIGHLY EFFICIENT METHODS



Our added value lies in our ability to **bridge the gap between design and construction** through our multi-faceted expertise, allowing us to understand all the challenges that have an impact on a project: physical constraints, complex geology, difficult scheduling, dense urban environments, budget and many more.

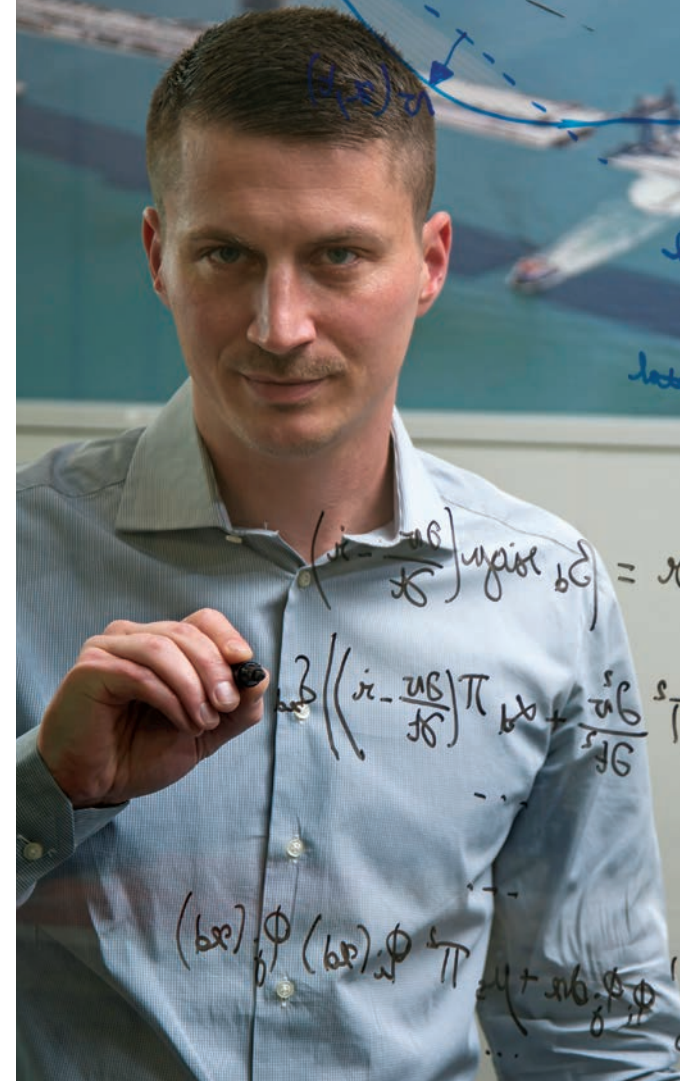


## MASTERING SYSTEMS & EQUIPMENT



We champion **innovative in-house technologies**, which we constantly develop, challenge and improve right from conception through to testing and implementation. This ensures we manage technical, operational and economic risks more efficiently.

In addition, **we design and fabricate specialist construction equipment** such as launching gantries and lifting frames for the erection of bridges, which require dedicated teams with specialist knowledge to oversee the whole project cycle. Our pool of specialists also takes care of our equipment in the long term to guarantee the highest quality of service, at every stage in the lives of our machines – from design to decommissioning – for our clients worldwide.



## BENEFITING FROM OUR LOCAL PRESENCE & SHARED KNOWLEDGE

The **matrix structure of our organisation** combines geographic proximity to our clients and markets with the experience and expertise of four business lines to support our local businesses worldwide: VSL Technologies, Civil Works, Ground Engineering and Repair & Preservation.

Each project benefits from the support and expertise of VSL's business lines specialists, centralised supply chain and technical centres. This allows the **sharing of processes and good practice** through access to a pool of materials, equipment and resources in order to provide the highest level of service to our clients wherever their projects are.

## NURTURING VSL'S COLLECTIVE KNOWLEDGE & BRAINPOWER

In a business where technical excellence is key and technologies and regulations are constantly evolving, we favour long-term relationships with our employees, as the skills and experience that they develop with us mean they become highly specialised in their fields.

We cultivate the **continuous training and development of our staff** to guarantee outstanding performance and safety. Our VSL Academy opened its doors in 2008 with the ambition of applying VSL's technical excellence and ever-growing quality and safety standards throughout our network.

**Combining digital training and a roaming academy** where 'trainers go to the trainees', the VSL Academy ensures trainees have the skills required to guarantee adoption of the best working procedures.





## 2/ CREATIVITY IS IN OUR DNA

### CULTIVATING INNOVATION

Innovation is at the heart of our culture and the key to our success. VSL has two distinct innovation processes that nurture each other: short-term innovations driven by individual projects and long-term innovations through R&D.

VSL has registered **370 patents** to date and invests a significant budget in innovation both through projects and R&D.



### PIONEERING TECHNOLOGY

VSL is at the forefront of the development of internationally-applicable technical standards and guidelines thanks to our experts, who are active **members of various technical committees of organisations such as FIB, PTI, IABSE**, and more.

We work to the industry's latest standards and technologies and have adopted **BIM** as an integral part of our development process. We use it to improve the planning, design, construction and operation of the structures and to facilitate the work of our clients and others we collaborate with.

VSL is also involved in Bouygues Construction's innovation programme to research the **use of big data and artificial intelligence (AI) in order to better detect early signs of deterioration in concrete structures**, making use of available and consolidated data sources. This will eventually lead to algorithms that can predict the future evolution of a structure's condition.

## 3/ WE ARE RESPONSIBLE & COMMITTED

### PROTECTING LIVES AT WORK

**Health & Safety is the number one priority** for VSL and the Bouygues Construction Group. Together with all BYCN entities, VSL has adopted 12 basic H&S rules that are applied and followed strictly on all construction sites globally.

In addition, we set annual H&S improvement objectives to focus our efforts and allow us to measure progress. These include accident rates; H&S training for workers, site supervisors and project managers, as well as top managers; and H&S action plans and a vigilance index, involving site inspections by management.



### RESPECTING ETHICS

**VSL's business practices** are governed by integrity, honesty, fair dealing and full compliance with the law, as established in the Bouygues Group's Code of Ethics.

### REDUCING VSL'S GREENHOUSE GAS EMISSIONS BY 30% BY 2030

VSL and Bouygues Construction have a shared objective to reduce their greenhouse gas emissions by at least 30% by 2030. VSL set up an exhaustive scorecard to accurately calculate its annual carbon footprint and is currently starting to define action plans for progressive achievement of the ambition by 2030.



WE MAKE IT POSSIBLE



# WE'RE READY TO MAKE YOUR PROJECT POSSIBLE!

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[www.vsl.com](http://www.vsl.com)