

Company Overview

— 07th June 2023

DYWIDAG IN NUMBERS

Key Numbers

YEARS OF DYWIDAG

150+

CURRENT PROJECTS

100+

PRODUCT SYSTEMS

300+

ACCREDITATIONS

100+

SPECIALISTS

1500+

REVENUES

450m+



Business Overview

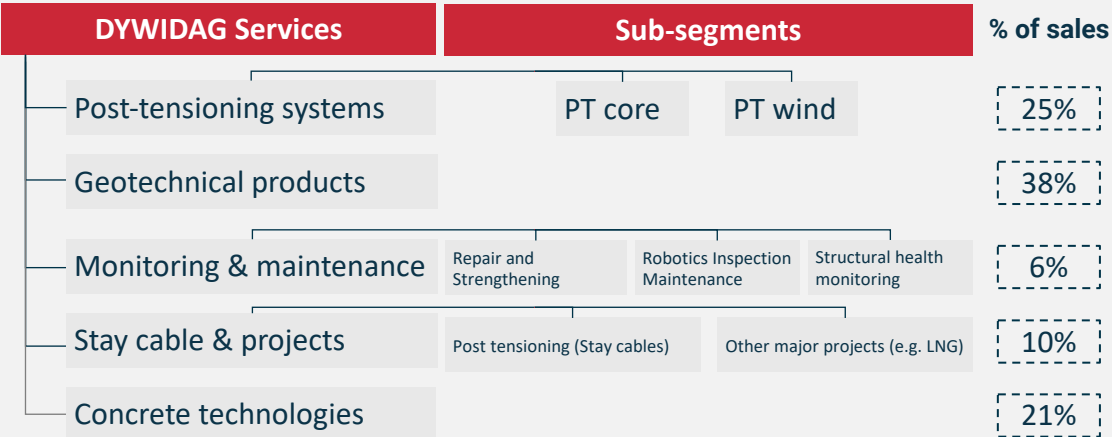
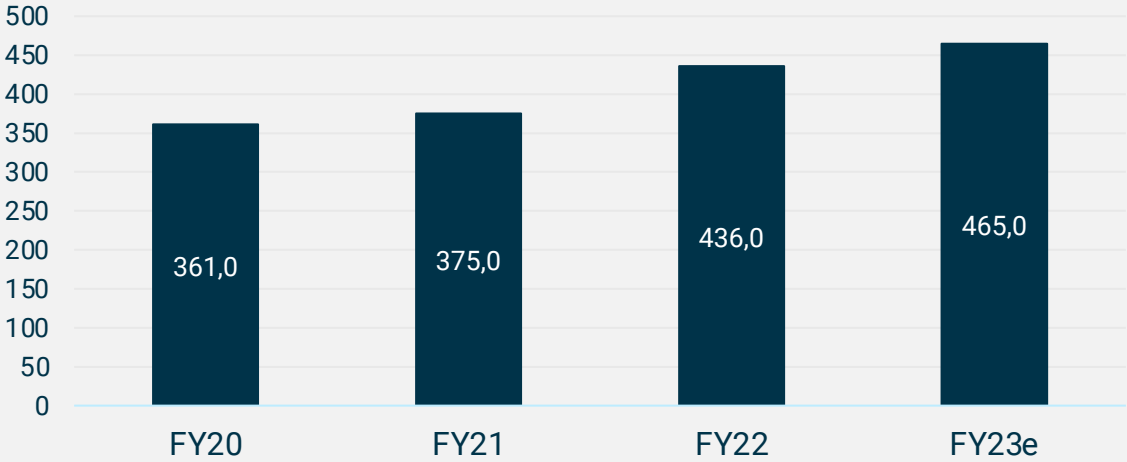
DYWIDAG is a specialist engineering business providing products and services to stabilize ground and create, strengthen, support concrete structures. The company also provides specialist monitoring and inspection services.

The business was founded in 1865, employs circa 1,500 people and is headquartered in Munich.

The main service lines are post-tensioning, geotechnical products, repair and strengthening services, stay cable system design and installation, structural monitoring and concrete technologies.

Key customers are companies in the civil engineering and building sector delivering infrastructure projects.

Revenues – Euro m



History



Dyckerhoff & Widmann AG (DYWIDAG) founded a small concrete construction company.



DYWIDAG-SYSTEMS INTERNATIONAL (DSI) founded to expand international business. Invests in R&D and a second global segment: **geotechnics**.

Triton

Private equity investor **Triton** becomes the new shareholder of DSI.



Alpin Technik and Datum Group acquired **monitoring services**.



DSI rebrands as **DYWIDAG**.

1865

1979

2011

2018

2020

1950

DYWIDAG starts license business for construction systems with **bridge post-tensioning** at its core.



2006

DSI enters the European **concrete accessories** market by making acquisitions in France and Germany.



2016

Development of construction activities in Middle East & Asia, including new joint ventures in Qatar and India.



2019

DSI acquires Polish based PARTEC.



2021

Divestment of DSI Underground to Sandvik.



Products and Services



Geo-technical

manufacture & supply of permanent & temporary anchors, self drilling anchors, mesh, chemicals & associated accessories



Post-tensioning systems

manufacture and installation of bonded and un-bonded post tensioning systems



Stay cables

design and installation of stay cable systems




Repair & refurbishment

replacement resp. adding of post-tensioning systems to existing structures, rope access & wrapping of stay cables



Concrete technologies

chemicals, form tie bars systems and modular manufactured formwork systems for reinforced concrete construction



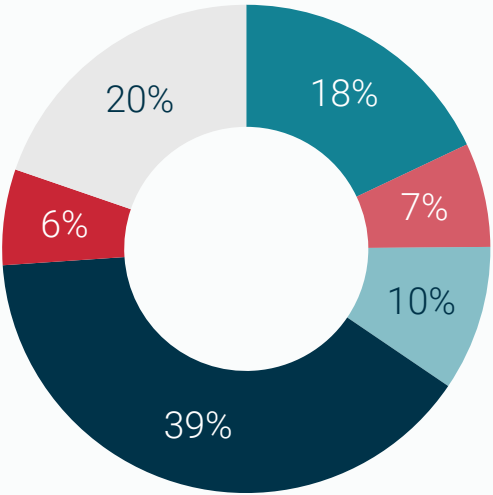
Monitoring & inspection

ground movement, rail deflection, stresses/movements in cables and anchors and inspection



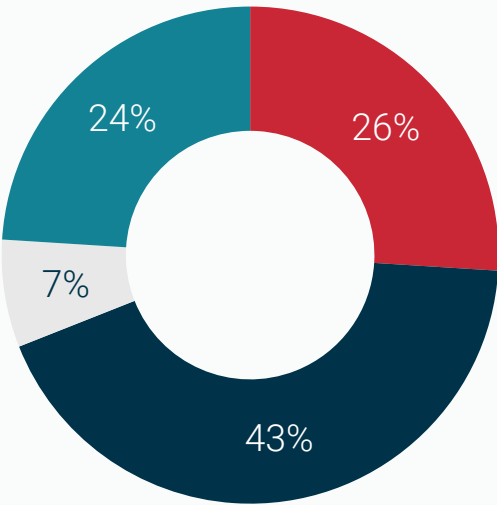
Revenue Segmentation

BY SERVICE



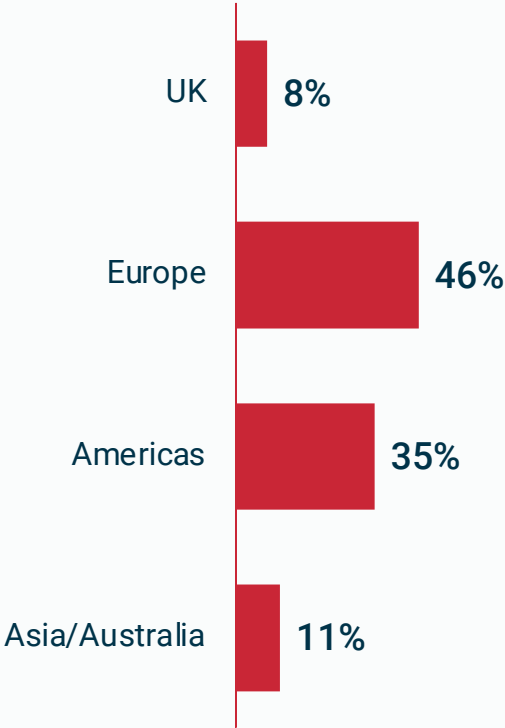
- Post-tensioning (Bridges/Buildings)
- Post-tensioning (Wind towers)
- Staycables
- Geotechnical products
- Monitoring/inspection and repair
- Concrete technologies

TYPE / DURATION OF BUSINESS



- Long-cycle projects
- Short-cycle projects
- Services
- Book and deliver

BY REGION



End Markets



Infrastructure

Bridges / roads / tunnels /
rail / dams



Construction

Commercial buildings



Mining

Open cast mines / access roads
(slope stabilisation)



Oil and gas

LNG Tanks



Renewables

Wind turbines



Power

Repair and maintenance service

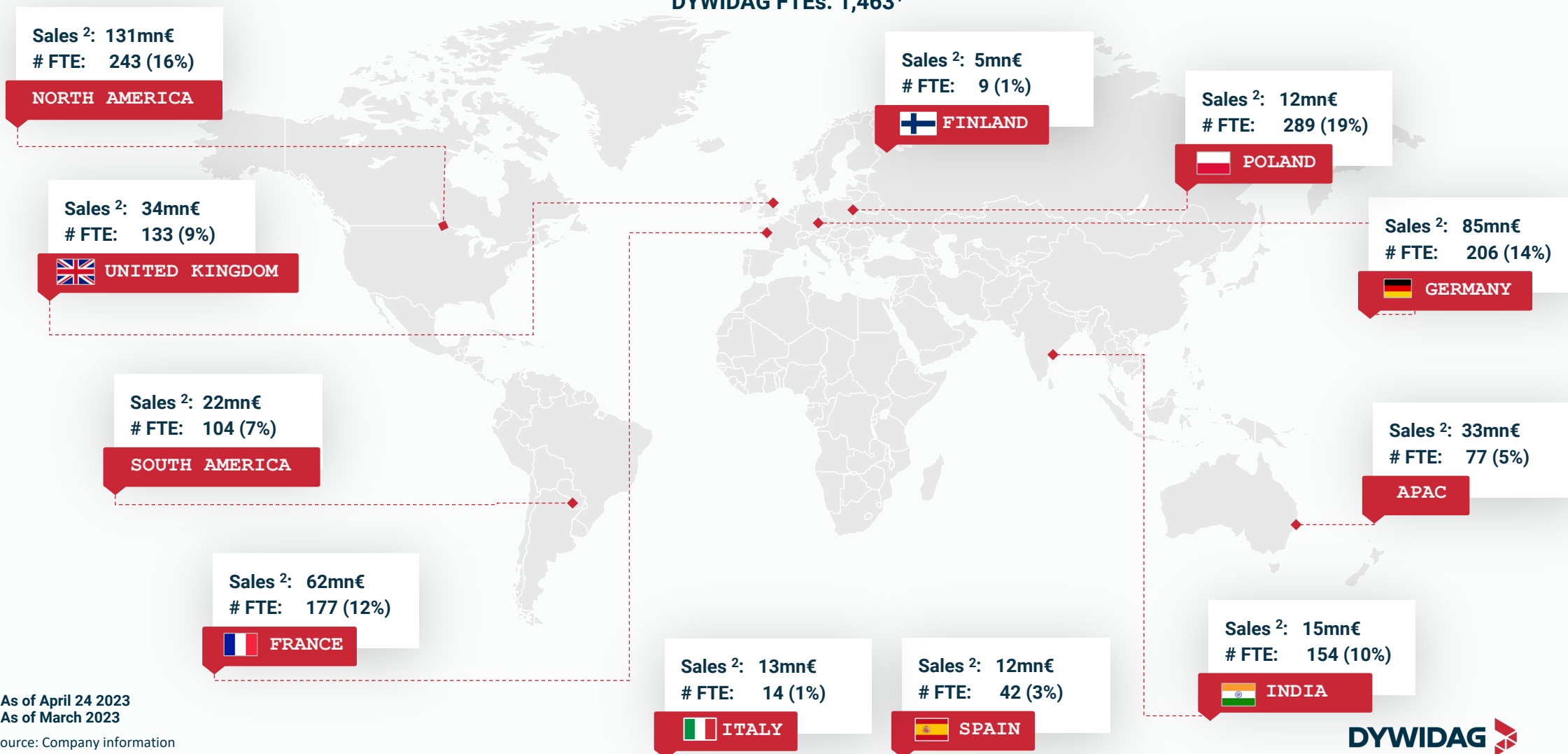


Nuclear

New power stations and infra-
structure for storage of nuclear
waste

Geographic Presence

DYWIDAG FTEs: 1,463¹



¹ As of April 24 2023

² As of March 2023

Source: Company information

Purpose, Vision, Values & Objectives

We have a clear vision of where we should operate, how to compete and how to grow.

Our Purpose

to make infrastructure safer, stronger, smarter.

Our Vision

to be **the leading global supplier of post tensioning systems, stay cable systems, geo-technical products and concrete construction technologies** to the infrastructure and construction industries.

We aspire to be the best at what we do.

Our Values

- **Safe** – we will always operate safely
- **Trustworthy** – we do what we say
- **Ethical** – we act with integrity and always conduct our business in an ethical way
- **Results orientated** – we are focused on delivering the right results for all our stakeholders
- **Collaborative** – we work as a team internally and externally
- **Innovative** – our business DNA is based on engineering excellence and innovation

Our Strategic Objectives



A market leader in what we do



A business regarded by our customers



A profitable and cash generative company



A place which we all want to work at



A safe group with a long-term zero incident target

Our Future Strategy

We have a clear vision of where we should operate, how to compete and how to grow.

Where do we play?

- ▶ Re-focus on the core business and grow sales in the most profitable / cash generative products in geotechnical, post tensioning, Stay Cables, Concrete technologies, monitoring product / service lines
- ▶ Re-focus monitoring services on its original core markets – rail infrastructure and in building a growing revenue stream for infra-structure intelligence software services
- ▶ Reduce presence in more commoditized lower margin / high risk services and exit un-profitable or low margin markets

How do we compete?

- ▶ Differentiate products / services through value added engineering solutions, product approvals, service delivery levels, product range / availability, smart monitoring technology / digital services and key supplier arrangements
- ▶ Operate an agile / responsive regional model – “local presence / global competence”
- ▶ Attract and retain the best sales, technical and operational people in the industry

How do we grow?

- ▶ Build presence in higher growth / higher margin markets in Americas, UK and Asia / Australia
- ▶ Expand presence in adjacent markets such as mining infrastructure and tunnelling and sell a full GT product range in all key markets
- ▶ Re-capture lost market share in core GT / R&S markets in Europe and the UK and build presence in renewables in Europe
- ▶ Grow volumes in concrete accessories (formwork systems and building chemicals)

We make infrastructure safer, stronger, and smarter.

Purpose:

Safer

Stabilising ground,
bridges, building
and critical
structures.

Stronger

Creating stronger,
longer lasting
structures.

Smarter

Delivering innovative
engineering and structural
monitoring systems.

Our Vision

We strive to be the leading global supplier of post-tensioning and stay cable systems, geotechnical products and concrete technologies to the infrastructure and construction industries.

We aspire to be the best at what we do.

Chenab
Bridge,
India

Our Values

How we do business?

Safe

We will always operate safely.

Trustworthy

We do what we say.

Results orientated

We are focused on delivering the right results for all our stakeholders.

Collaborative

We work as a team internally and externally.

Ethical

We act with integrity and always conduct our business in an ethical way.

Innovative

Our business DNA is based on engineering excellence and innovation.

Changuinola Dam,
Panama

Our Future Strategy

Where do we play?

▶ Re-focus on the **core business** and grow sales in the most profitable / cash generative products and service lines for geotechnics, post-tensioning, stay cables, concrete technologies and monitoring and maintenance

▶ **Refocus monitoring service** on its original core markets: rail infra-structure and in building a growing revenue stream for infra-structure intelligence software services

▶ **Reduce presence** in more commoditized lower margin / high risk services and exit unprofitable or low margin market

Stuttgart 21,
Germany

Our Future Strategy

How do we compete?

- ▶ Differentiate products and services through value added engineering solutions, product approvals, service delivery levels, product range or availability, smart monitoring technology, digital services and key supplier arrangements
- ▶ Operate an agile and responsive regional model: “Local Presence, global competence.”
- ▶ Attract and retain the best sales, technical and operational people in the industry

Stuttgart 21,
Germany

Our Future Strategy

How do we grow?

- ▶ Build presence in higher growth or higher margin markets in Americas, UK and Asia, Australia
- ▶ Expand presence in adjacent markets such as mining infrastructure and tunnelling and
- ▶ sell a full GT product range in all key markets
- ▶ Re-capture lost market share in core Geotechnics and Repair & Strengthening markets in Europe and the UK and build presence in
- ▶ renewables in Europe
- ▶ Grow volumes in concrete technologies (formwork systems and building chemicals)

Stuttgart 21,
Germany

Barapullah Bridge,
India

Our Strategic Objectives



A market leader
in what we do



A place which we
all want to work at



A business
regarded by our
customers



A safe group with a
long-term zero
incident target



A profitable and
cash generative
company

Our foundation

People

The right, empowered team taking ownership working with healthy structures, culture and values.

Supply chain partners

We care for long-term partners with aligned interests.

IT

Right infrastructure, e-commerce and business systems

R&D

Invest in new products + product development

Manufacturing facilities

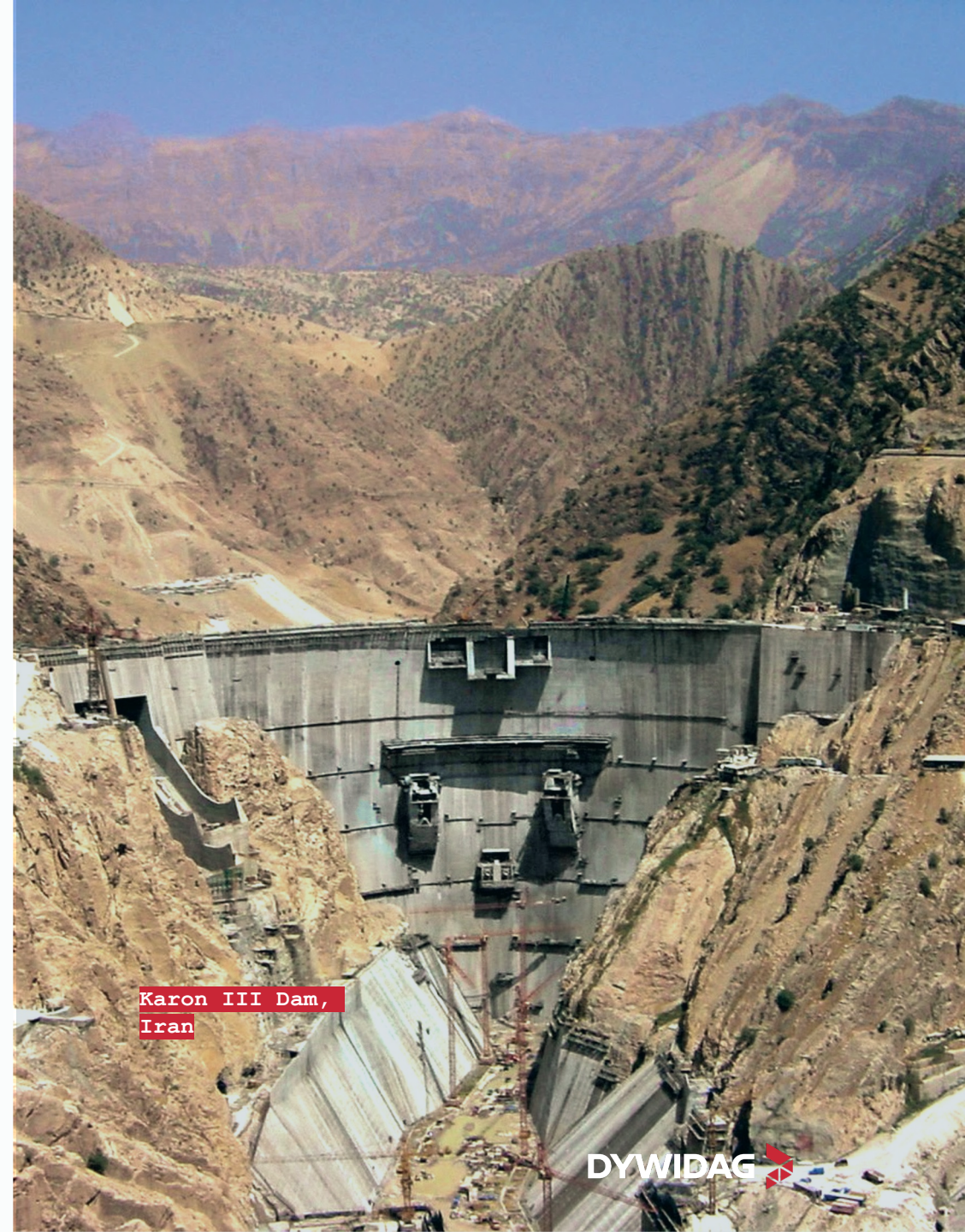
Our enablers are the right locations, valuable assets, processes and maintenance regimes.

Rewards & incentives

Clear and aligned with organizational goals

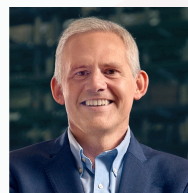
Operating systems

smart, simple and implemented HSE, quality and financial systems

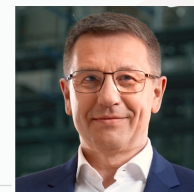


Karon III Dam,
Iran

Senior Management Team



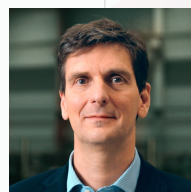
HUGH
PELHAM
CEO



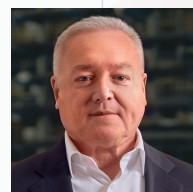
PIOTR
PECZAK
CHIEF FINANCIAL
OFFICER



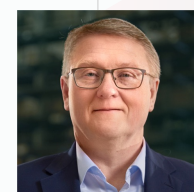
CHRISTIAN
ROEMSCHIED
PRESIDENT
EUROPE



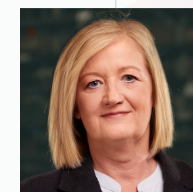
THOMAS
KAHL
PRESIDENT ASIA &
MEGA PROJECTS



MIKE
KELLEY
PRESIDENT
AMERICAS



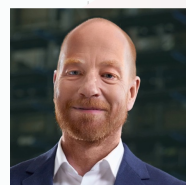
IAN
JARVIS
PRESIDENT UK



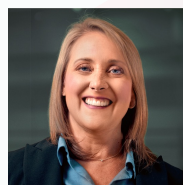
JOANNE
COOKE
PRESIDENT TAM
GROUPE



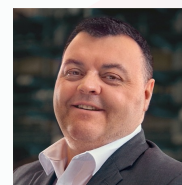
DR. CHRISTIAN
GLÄSER
CHIEF TECHNOLOGY &
OPERATIONS OFFICER



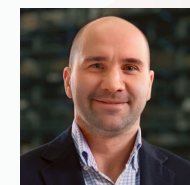
TOBIAS
ENTZIAN
GENERAL COUNSEL,
LEGAL



CHRISTINE
GEORGE
HUMAN
RESOURCES



STEPHEN
TRAINER
IT



NORBERT
KLOSA
HSE

Geotechnics

Anchor and piling systems for soil, rock, and infrastructure stabilization (over 30,000,000 supplied).

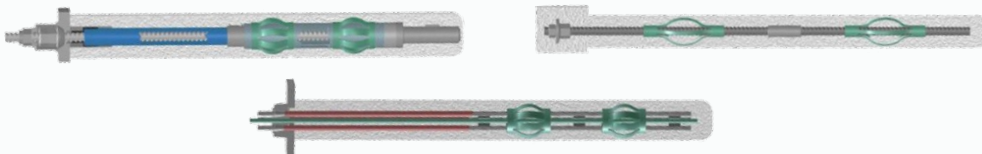
Applications

- ▶ Excavations
- ▶ Slope Stabilizations
- ▶ Structural Repair Solutions
- ▶ Foundations
- ▶ Hydro- and Marine Structures

Customers

- ▶ Geotechnical Contractors
- ▶ Special Foundation Engineering Companies
- ▶ General Contractors

Key Products



Zugspitze, Germany

Engineered Solutions

Production, supply, and tensioning of DYWIDAG Ground Anchors, Soil Nails, Piles and Tierods

Post-Tensioning

Strengthening concrete structures by engineering and installing the largest variety of tendons in the world.

Applications

- ▶ Bridges
- ▶ Tanks
- ▶ Wind Towers
- ▶ Commercial Buildings

Customers

- ▶ Public Institutions (Department of Transportation; DOT)
- ▶ Specialized Wind Contractors
- ▶ General Contractors

Key Products



Tsubasa Bridge, Cambodia

Engineered Solutions

Production, supply, installation, engineering services, and technical support of DYWIDAG stay cables, strand and bar tendons

Maintenance

Repair and strengthening, tailored to your infrastructure's needs.

Applications

- ▶ Bridges
- ▶ Dams
- ▶ Buildings
- ▶ Parking structures
- ▶ Stadiums
- ▶ Tunnels

Key Products

- ▶ Repair of monostrands, barrier cables, concrete
- ▶ External strengthening
- ▶ Retrofitting
- ▶ Cableskin and maintenance

Customers

- ▶ Asset owners
- ▶ General contractors
- ▶ Operators



RSA Office Building, US

Services

Strengthening historic building by utilizing strand system: External bonded post tensioning system on each side of 5 post tensioned beams

Concrete Technologies

Applications

- ▶ Commercial Buildings
- ▶ Civil Engineering
- ▶ Structural Repair
- ▶ Residential Construction
- ▶ Precast Concrete Elements

Key Products

- ▶ Permanent Formwork
- ▶ Waterproofing
- ▶ Reinforcement Technologies
- ▶ Chemicals for Concrete Structures
- ▶ Grouts, Mortars and Concrete Repair
- ▶ Lifting and Fixing Tools for Precast
- ▶ DYWIDAG Form Tie Systems

Customers

- ▶ General Contractors
- ▶ Small- and medium sized businesses



Sewage Plant Marne Aval, France

Engineered Solutions

Comprehensive range of construction materials including manufacture and supply of special solutions for individual projects and applications, supported by design input and technical support

Monitoring

Monitoring, inspection by certified inspectors and bots—providing infrastructure intelligence for every phase of life.

Applications

- ▶ Bridges
- ▶ Slopes
- ▶ Tunnels

Customers

- ▶ Asset Owners
- ▶ Public Institutions & Authorities
- ▶ Engineering Companies

Key Products

- ▶ Infrastructure Intelligence
- ▶ Infrastructural Health Monitoring
- ▶ Robotic Inspection
- ▶ Testing and Inspection



Smart Köhlbrand Bridge, Germany

Services

Selection and installation of 320+ sensors and measurement technology, data hosting on-site, real-time transmission to customer SFTP server



Extreme Weather Challenges DYWIDAG to Work Under Tight Timeline and Tough Conditions

YEAR OF EXECUTION

2022

OWNER

Network Rail

GENERAL CONTRACTOR

Universal Piling Ltd

SCOPE

Supply, technical support, design

PRODUCTS:

DYWIDAG Drill Hollow Bar Micropile



Atlas Road Track & Bridge Monitoring

YEAR OF EXECUTION

2020

OWNER

UK Power Networks

GENERAL CONTRACTOR

Clancys, UK

SCOPE

Supply, installation, technical support

PRODUCTS:

Automated and Manual Monitoring, VoidMate,
Infrastructure Intelligence



YEAR OF EXECUTION

2020

LOCATION

United Kingdom, Newcastle upon Tyne

INFRASTRUCTURE

King Edward VII Bridge

SCOPE

Supervision, Testing, Installation

PRODUCTS:

Automated Structural Monitoring

Monitoring Solution Keeps Britain's "Last Great Railway Bridge" Healthy



Longest Stay Cable Bridge in South America Links Brazil and Paraguay

YEAR OF EXECUTION

2019-2022

INFRASTRUCTURE

Ponte da Integração

OWNER

*DNIT (Departamento Nacional de
Infraestrutura de Transportes)*

SCOPE

Supply, Installation

PRODUCTS:

*Stay Cable Strands, Dampers for Stay Cables,
Cable Installation and Equipment, Clevis
Anchorage, Dyna Grip Standard System*



Highest Slope Stabilization in Bahia, Brazil

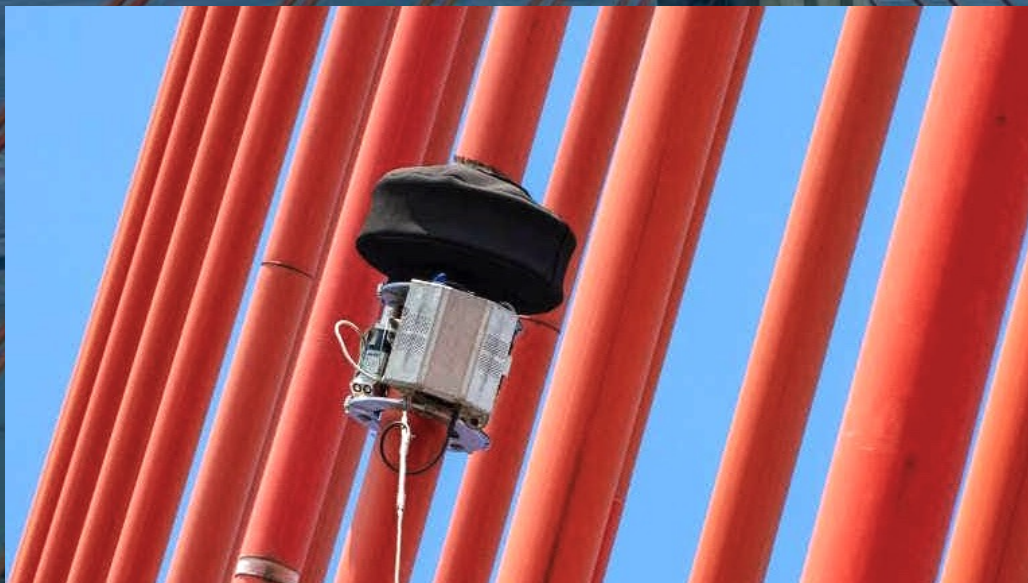
YEAR OF EXECUTION
2021

OWNER
Atakarejo, Brazil

GENERAL CONTRACTOR
TECHNOGEO, Brazil

SCOPE
Supply, installation

PRODUCTS:
DYWIDAG THREADBAR Anchors



Smart Stay Cable Testing Solutions Keep World-famous Bridge Safe

YEAR OF EXECUTION

2019 – 2022

YEAR OF EXECUTION

Kao Ping Hsi Bridge

OWNER

Taiwan Freeway Bureau

SCOPE

Testing, inspection, reporting, training

PRODUCTS:

Magneto-inductive testing, robotic visual inspection, manual visual inspection, visual inspection using rope access, vibration measurements and damping evaluation of cables, lift-off tests of anchorages



The Pulau Balang Bridge: Working in a Challenging Environment

YEAR OF EXECUTION

2019 - 2020

OWNER

Kementerian Pekerjaan Umum (Ministry of Public Works)

SCOPE

Supply, design, installation

PRODUCTS:

DYWIDAG Stay Cables



Dolmen Flyover Interchange Improves Safety and Traffic Flow

YEAR OF EXECUTION

2021-2022

LOCATION

Netherlands

OWNER

Provincie Drente

GENERAL CONTRACTOR

TECHNOGEO, Brazil

SCOPE

Supply, installation

PRODUCTS:

Bonded post-tensioning system using strand, stressing of posttensioning systems, grouting of post-tensioning systems, installation and grouting tools supply



Ensuring Existing Bridges are Safe and Strong with DYWIDAG Tendons

YEAR OF EXECUTION

2022

LOCATION

Germany

OWNER

Autobahn GmbH des Bundes, Niederlassung
Westfalen

GENERAL CONTRACTOR

Karrie Bauwerkserhaltung GmbH

SCOPE

Supply, Installation

PRODUCTS

External unbonded post-tensioning system
using DYWIDAG threadbars



YEAR OF EXECUTION

2018-2021

OWNER

IP (Infraestructuras de Portugal) and GOBIERNO DE ESPAÑA - Ministerio de Transportes, Movilidad y Agenda Urbana

SCOPE

Inspection, Supply, Installation, Monitoring

PRODUCTS:

Magneto-inductive sensors, DYWIDAG Stay Cable

A New Generation of Smart Stay Cables for Guadiana Bridge



Modernizing Chicago's Train Tracks for Today's Demands

YEAR OF EXECUTION

2018-2024

LOCATION

USA

OWNER

City of Chicago

GENERAL CONTRACTOR

Walsh-Fluor

SCOPE

Supply

PRODUCTS

External unbonded post-tensioning system
using DYWIDAG Threadbars, Internal unbonded
post-tensioning system using DYWIDAG
Threadbars



Constructing an Extradosed Bridge in a Remote Location

YEAR OF EXECUTION

2017 – 2021

LOCATION

Kazungula Bridge, Zambia

OWNER

Transport Hub Republic of Botswana and Road
Development Agency Republic of Zambia

CONTRACTOR

Daewoo Engineering & Construction Co. Ltd.

SCOPE

Supply, installation, technical support, supervision

PRODUCTS:

Single Strand Exchange with Fatigue & Tensile Tests at
Laboratory, Dyna Link Anchor Box System (Saddle
Solution), Stay Cable Strands, Cable Installation and
Equipment



Hybrid Wind Tower Construction

YEAR OF EXECUTION

2022 – 2023

LOCATION

Germany

CUSTOMER

Max Bögl

SCOPE

Factory based Production / Installation and stressing of tendons on jobsite

PRODUCTS

Cooperation for supply and installation of specially developed DYWIDAG Wire Ex Tendons as external post tensioning system for the construction of up to 160m high Hybrid Wind Towers, predominantly for the German market

REVENUE

28M€ in 2022 (150 Wind Towers) and expected revenue of >36M€ (230 Wind Towers) in 2023