

exe | QUADRANTE



exe
engenharia

QUADRANTE
COMMISS GROUP

MARINE & HARBOUR ENGINEERING
DESIGNING . DELIVERING . ADDING VALUE



EXE-QUADRANTE is an Engineering Consultancy Company with a global footprint specialized in Port and Marine Engineering.

With a highly experienced team of civil, coastal, hydraulic, structural, environmental and MEP engineers, merging more than 25 years of experience, EXE-QUADRANTE proposes a competitive offer in the marine and harbour engineering sector, to deliver ground-breaking and value added solutions for an ever-challenging world.

The main purpose of EXE-QUADRANTE is to support our clients accomplish their own mission. We offer a full and comprehensive range of engineering capabilities, from project planning to project development and execution, to deliver sustainable, innovative and economically efficient marine infrastructures.

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- Marine works civil structures
- Dredging
- Material handling equipment design
- Marine temporary structures design

Integrated
Full Scope
Design



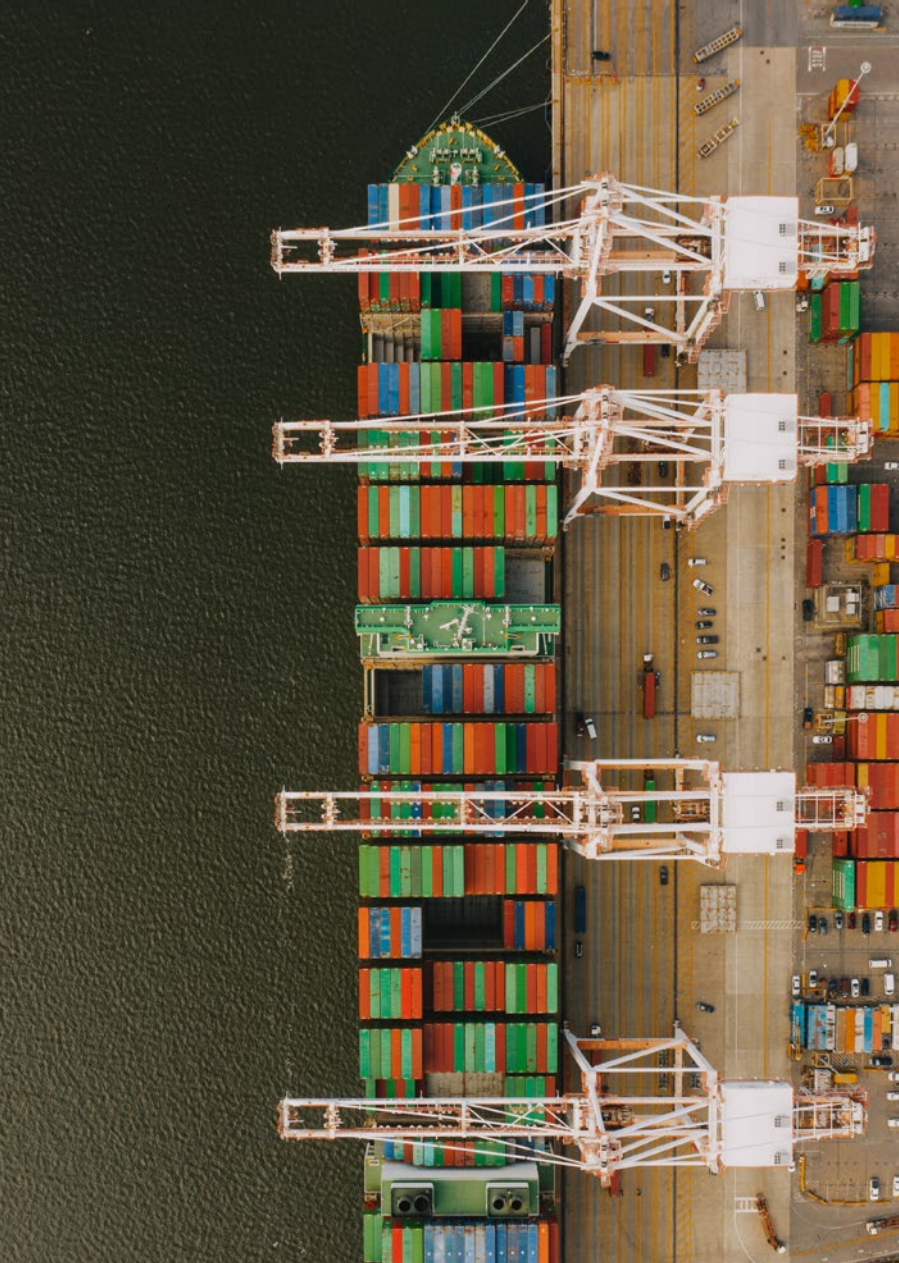
QUADRANTE
COMPASS GROUP

- Yards and pavements
- Ports electrification and Renewables Energy
- Warehouses and shops
- Environmental studies

EXE ENGENHARIA boasts a remarkable history of more than 25 years in marine and harbour engineering. Though the business started in 2000, their founding partners have more than 48 years of combined experience developing port projects all over the world. Since its foundation EXE ENGENHARIA has partaken in several major maritime and port projects around the world offering full range of consulting engineering services and value added solutions for their Clients.

QUADRANTE is an international consultancy firm of engineers and architects with over 25 years of industry experience. Headquartered in Lisbon and with on-the-ground offices worldwide, QUADRANTE have built a comprehensive track record of projects in areas such as airports, highways, railroads and ports becoming a leading engineering consultancy firm in Portugal.

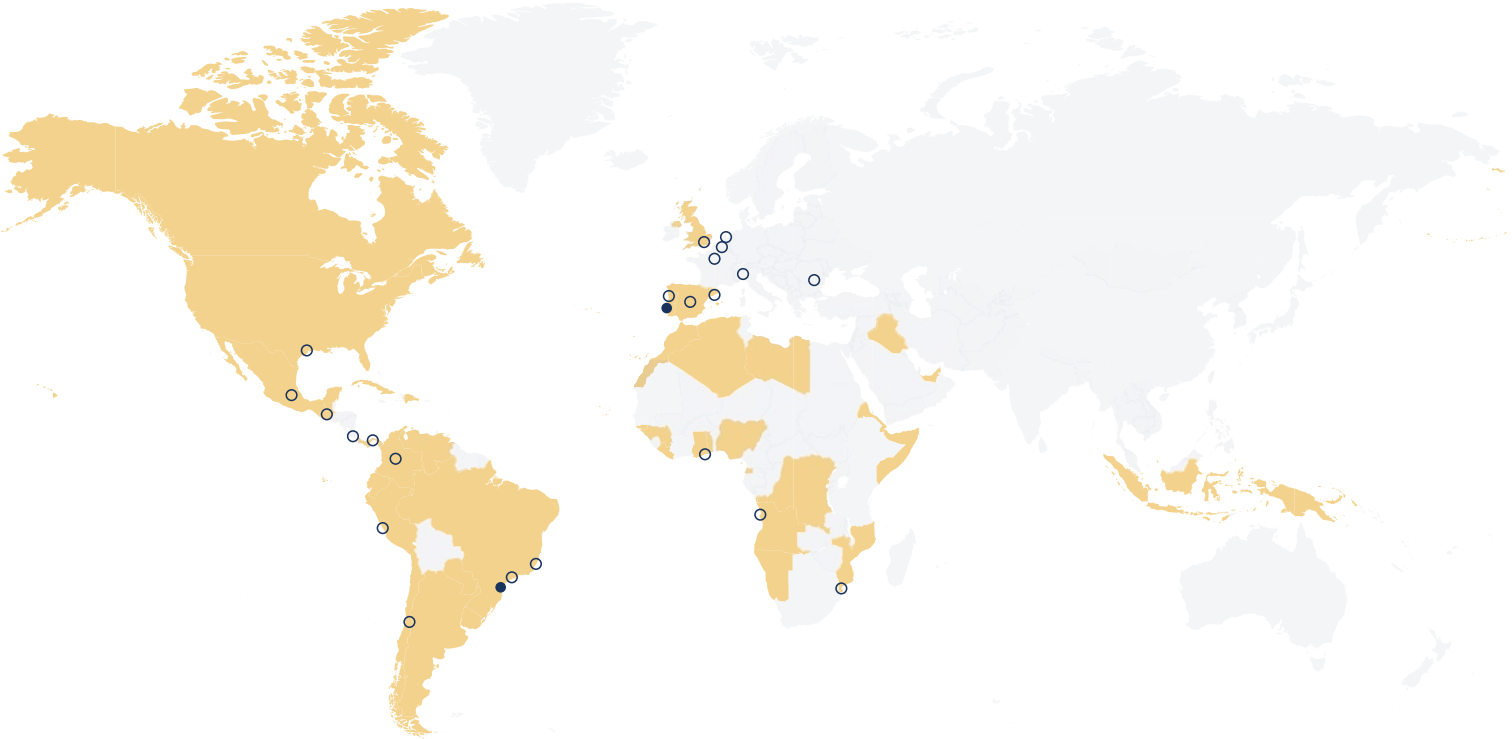




WHAT WE STAND FOR

- 25 plus years of experience adding value in Port and Marine Engineering consultancy.
- Highly experienced team of civil, coastal, hydraulic, structural, environmental and MEP engineers.
- Outstanding history and experience in unique marine engineering projects, ranging from container terminals, liquid and solid bulk terminals, general cargo terminals, ferries and cruise terminals, recreational ports, and military installations.
- Experience working with a wide range of clients, including, engineering contractors, public port administrations and private port operators.
- Delivery capability and efficient management of engineering solutions across all stages of the project's lifecycle.
- Integrated engineering solutions, combining expertise from different disciplines:
Maritime and Ports; Transport, Buildings; Environment and Climate Change, Hydraulics, Industry and Energy, Airports and Project Management and Supervision.
- International footprint, with offices on three different continents (Europe, Africa and Latin America)
- Ambitious Sustainable Development Goals focused on the best solutions for our customers.

PRESENCE



● Headquarters ○ Office ■ Marine and Harbour Engineering Experience

+ 1300

People

+ 11100

Total Projects

+ 140 M€

Revenues

20

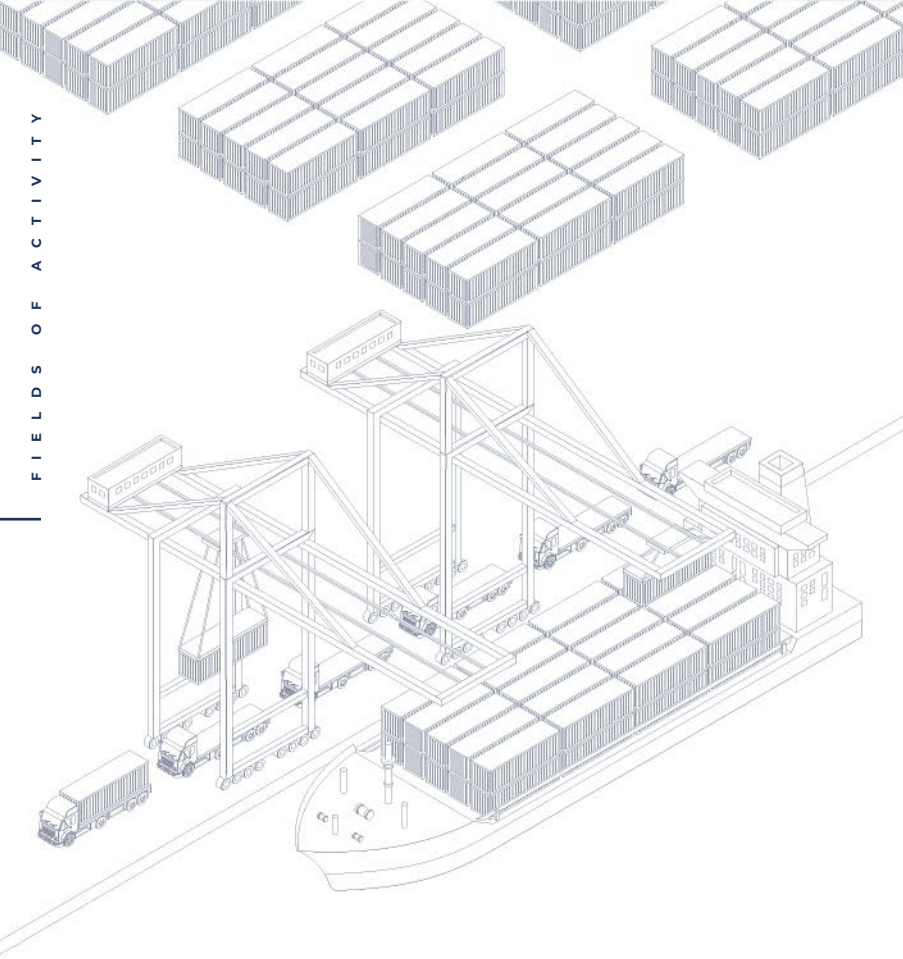
Countries

FIELDS OF ACTIVITY

MARITIME CARGO TERMINALS

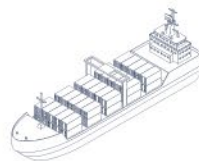
PASSENGER AND RECREATIONAL PORTS

COASTAL ENGINEERING

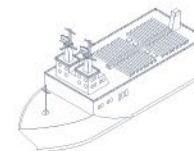


MARITIME CARGO TERMINALS

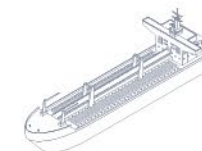
Container Terminals



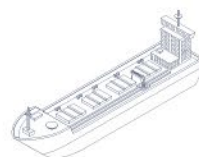
RoRo Terminals



General Cargo Terminals



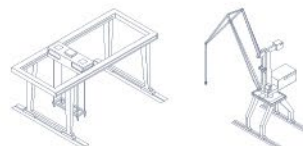
Bulk Terminals



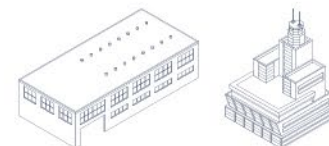
Liquid Bulk Terminals

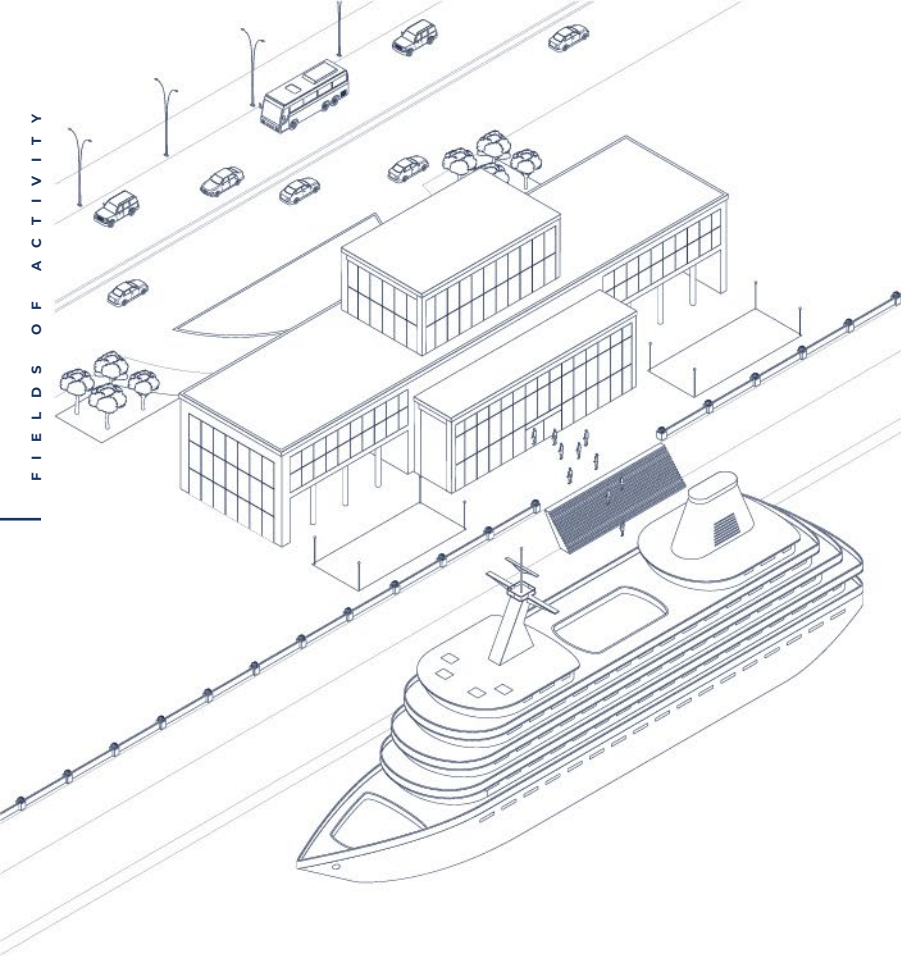


Naval Shipyards



Multipurpose Marine Instalations





PASSENGER AND RECREATIONAL PORTS

Cruise Terminals

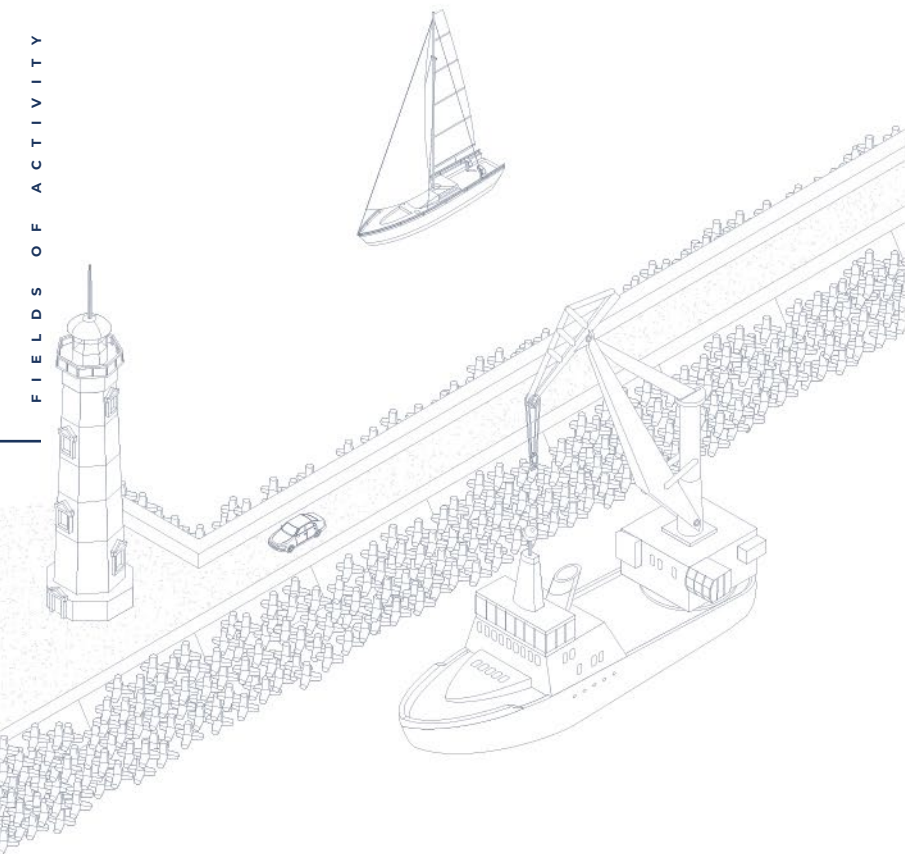


Ferry Terminals



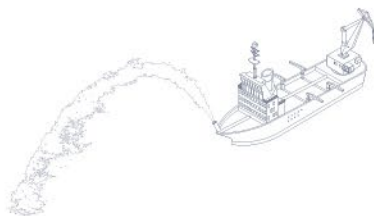
Marinas



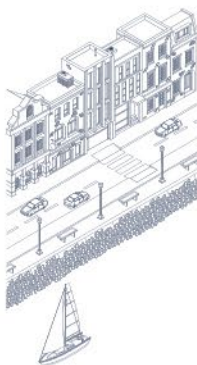


COASTAL ENGINEERING

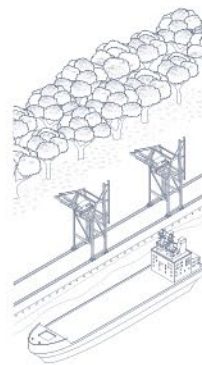
Dredging and Reclamations



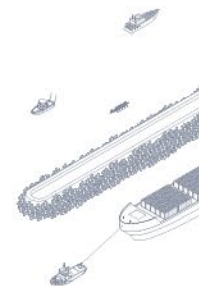
Coastal Protection



Environmental Impact Assessment



Breakwaters



CAPABILITIES

PORT PLANNING AND TERMINAL DEVELOPMENT

VALUE ENGINEERING - SMART CONSTRUCTION DESIGN

QUAY WALLS AND JETTIES

VESSEL BERTHING, MOORING AND TRANSFER FACILITIES DESIGN

MATERIALS HANDLING

MARINE HYDRAULICS - INTAKE AND OUTFALL PIPELINES

MARINE ENERGY TRANSITION ANALYSIS

DREDGING AND RECLAMATION

BREAKWATERS AND COASTAL PROTECTION

ENVIRONMENTAL AND SOCIAL STUDIES

SERVICES PROVIDED

FEASIBILITY STUDIES

FRONT END ENGINEERING DESIGN (FEED)

DETAILED ENGINEERING AND DESIGN

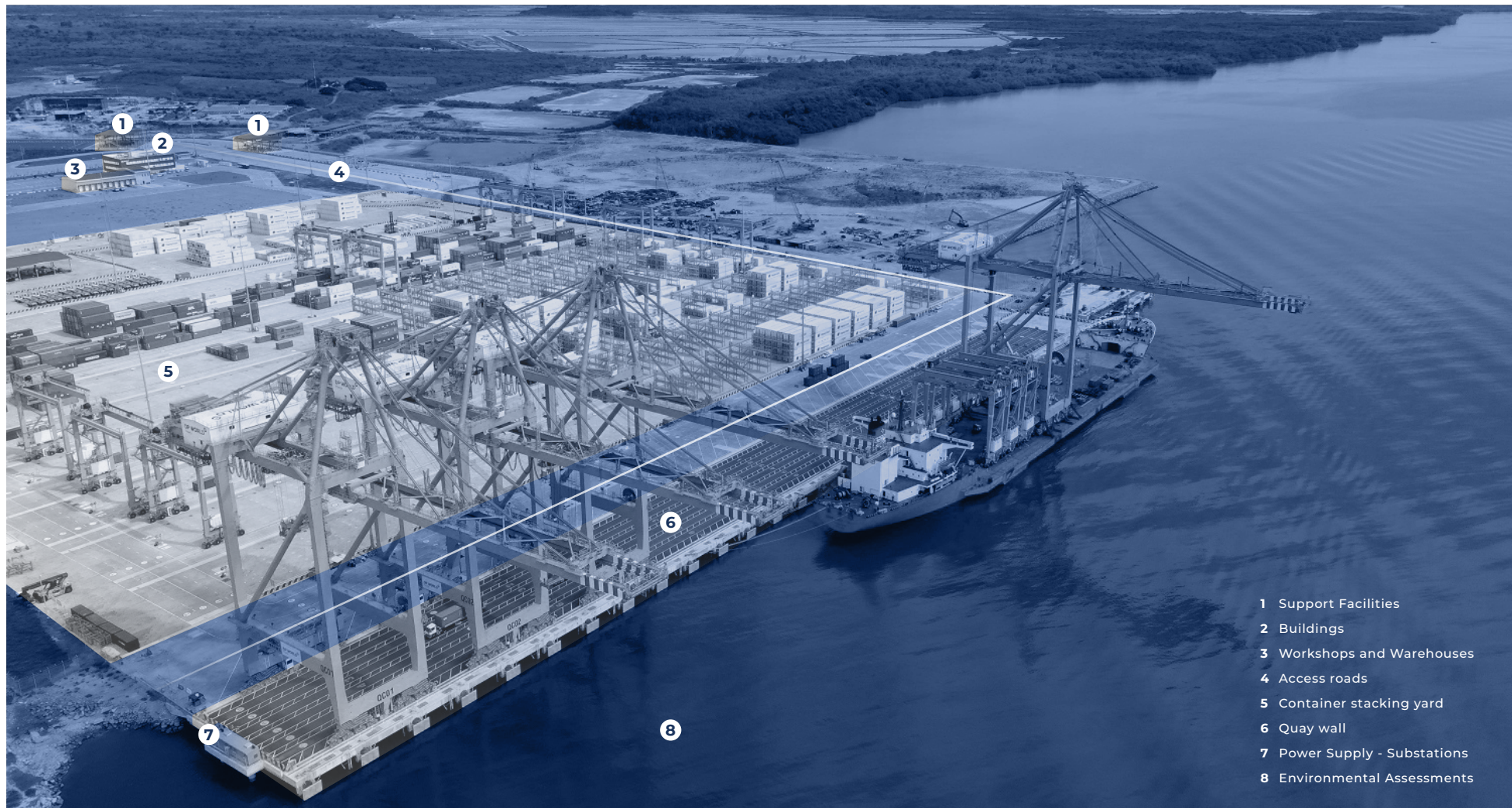
TECHNICAL SUPPORT

CONTRACT ADMINISTRATION AND SITE SUPERVISION

COST ESTIMATION

ENVIRONMENTAL AND SOCIAL STUDIES AND ASSESSMENTS

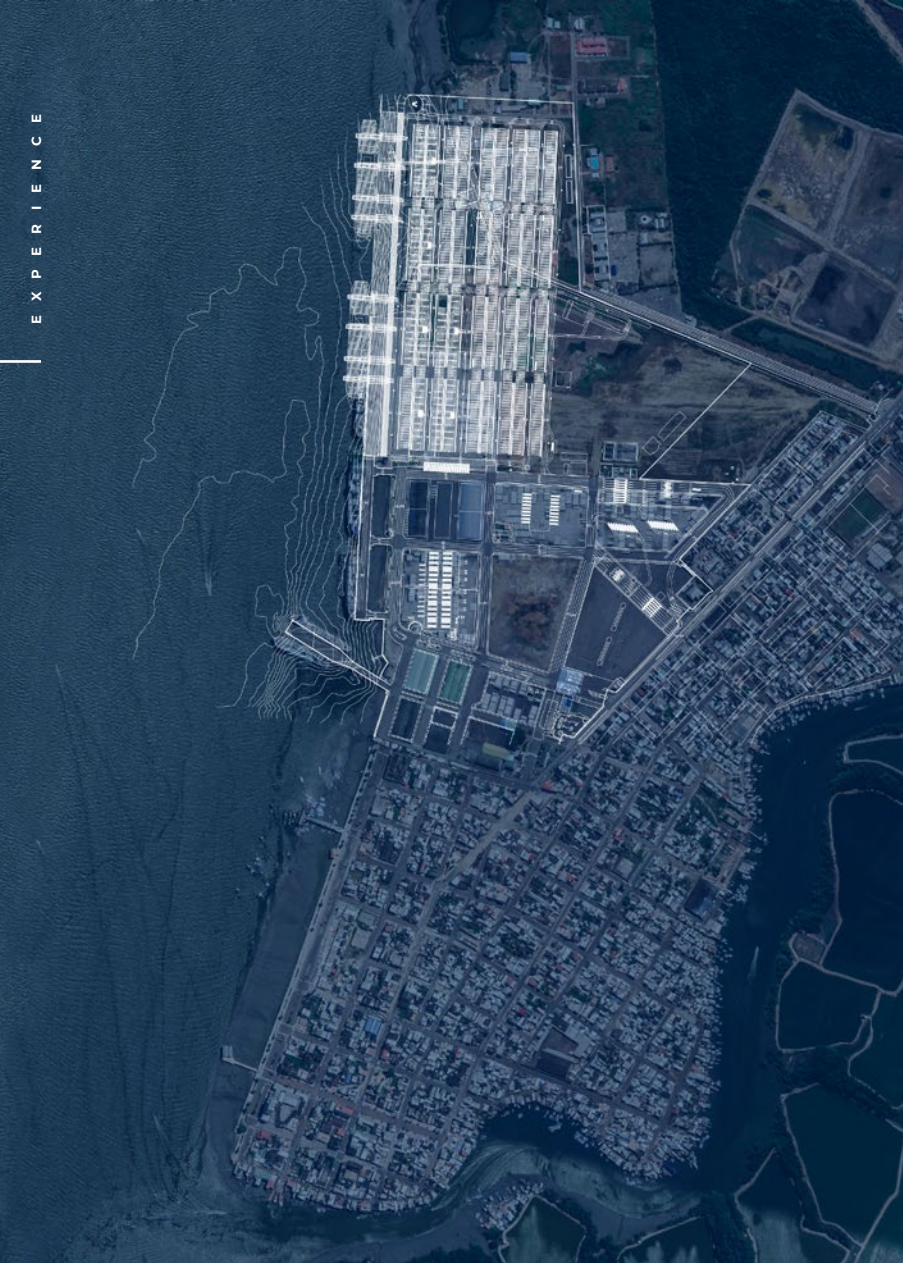
BIM SOLUTIONS



- 1 Support Facilities
- 2 Buildings
- 3 Workshops and Warehouses
- 4 Access roads
- 5 Container stacking yard
- 6 Quay wall
- 7 Power Supply - Substations
- 8 Environmental Assessments

EXPERIENCE

M A R I N E & H A R B O U R E N G I N E E R I N G



PORT & TERMINAL DEVELOPMENT

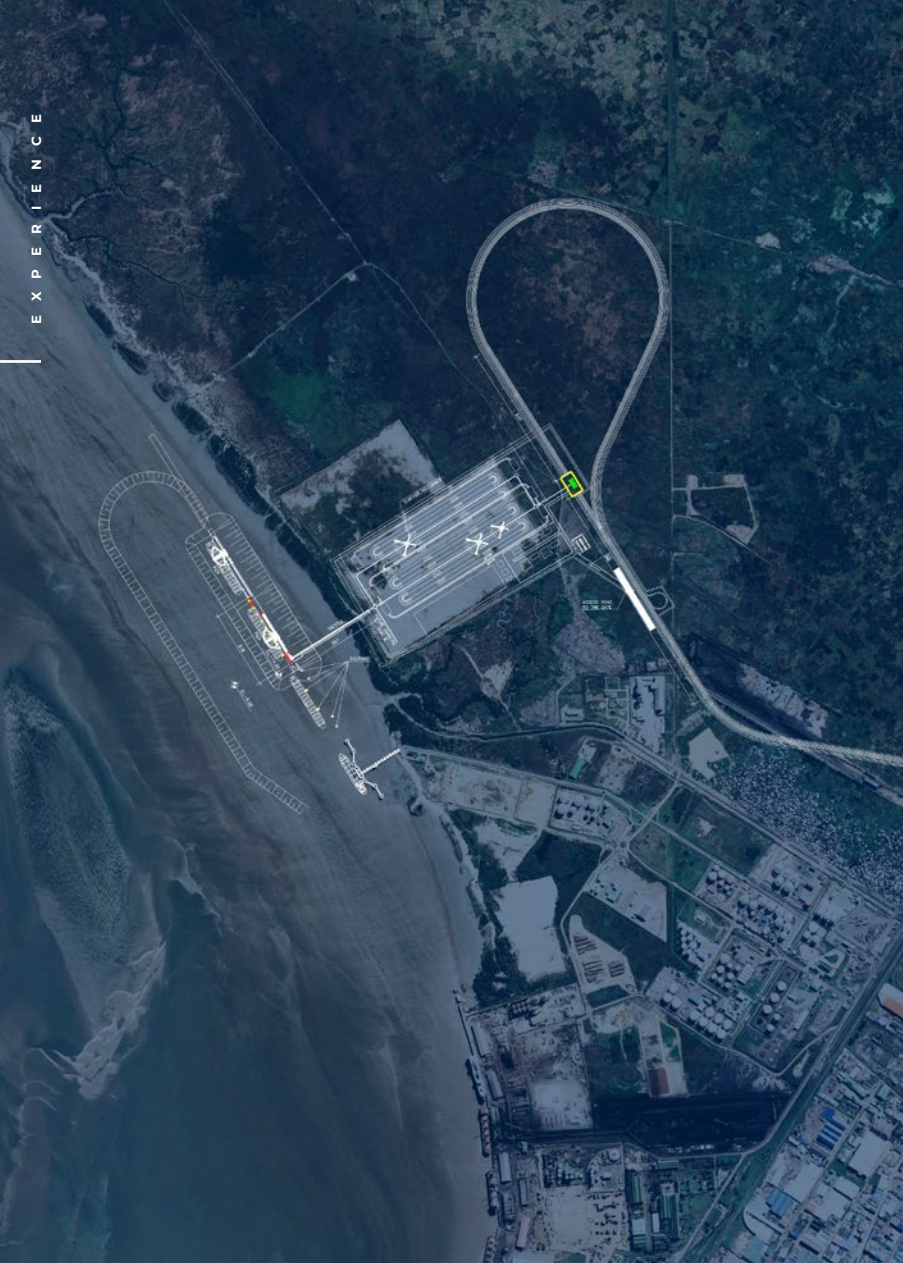
MULTIPURPOSE TERMINAL BOLIVAR PORT

Country

Ecuador

Scope of Works

· Port Design solution for design & build tender process



PORT & TERMINAL DEVELOPMENT

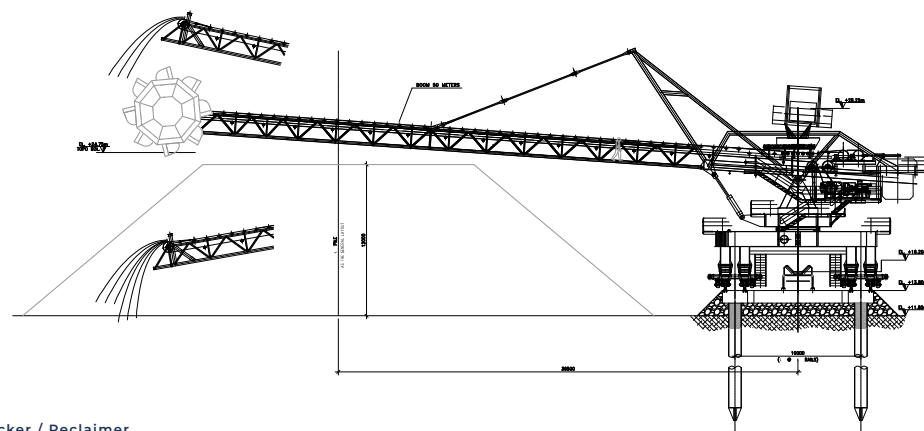
COAL TERMINAL BEIRA

Country

Mozambique

Scope of Works

- Port Design solution for design & build tender process
- Detailed design
- Metocean Studies
- Marine Hydraulics and navigation studies



Stacker / Reclaimer

PORT & TERMINAL DEVELOPMENT

PORT COMPLEX PORT OF DANDE

Country

Angola

Scope of Works

- Port Design solution for design & build tender process
- Metocean Studies
- Marine Hydraulics and Navigation Studies





PORT & TERMINAL DEVELOPMENT

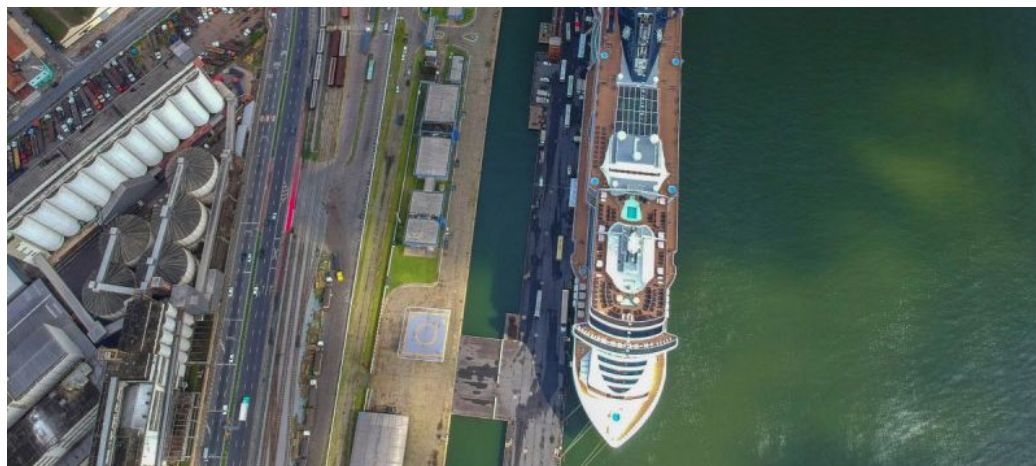
OUTEIRINHO CRUISE TERMINAL SÃO PAULO

Country

Brazil

Scope of Works

· Preliminary and Detailed Design





BULK TERMINALS

LNG TERMINAL MELCHORITA

Country

Peru

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design
- Project and Contract Management
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

PIER III IRON ORE TERMINAL PONTA MADEIRA

Country

Brazil

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

LIQUID BULK TERMINAL DORALEH

Country

Djibuti

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

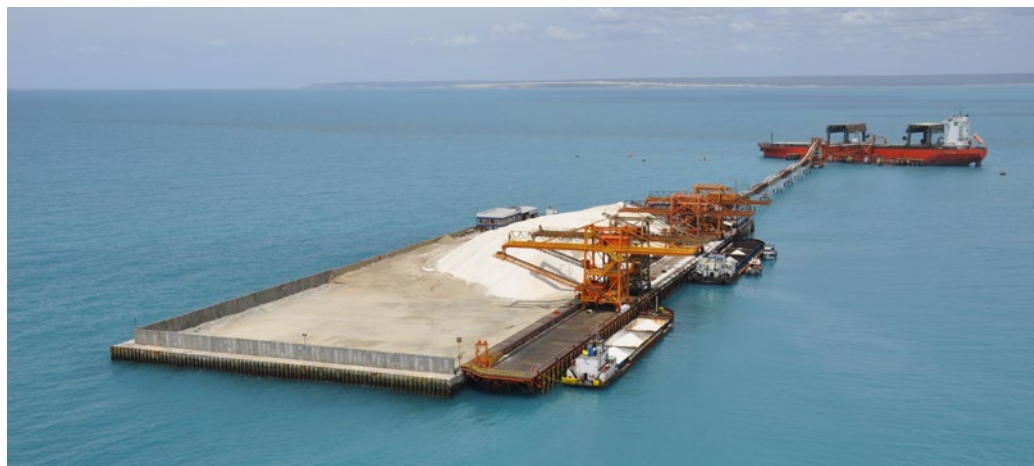
SALT OFFSHORE TERMINAL AREIA BRANCA

Country

Brazil

Scope of Works

- 15000m² Artificial Island Design with berth facilities for 75000 DWT Vessels
- Detailed Design for 500m conveyor belt bridge
- Technical Assistance During Construction
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

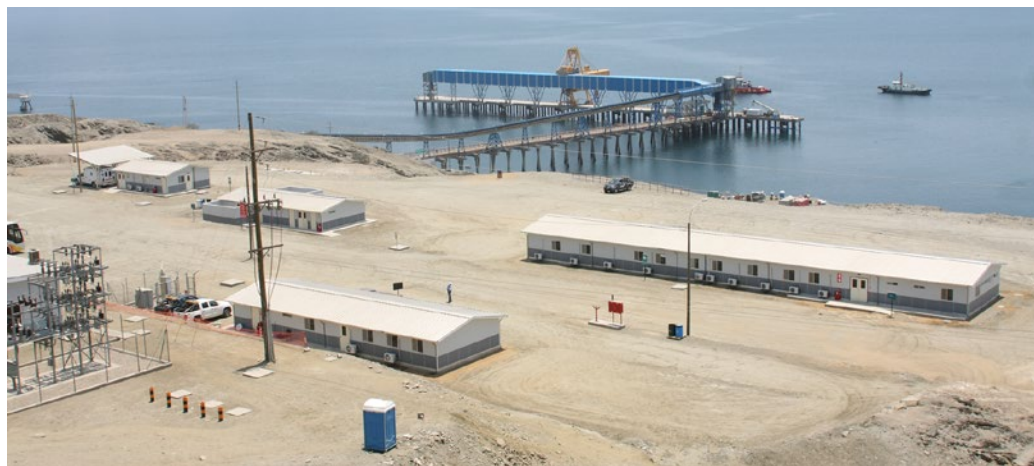
PHOSPHAT TERMINAL BAYOVAR

Country

Peru

Scope of Works

- Detailed Design for jetty and berth facilities for 75000 DWT Vessels
- Technical Assistance During Construction
- Temporary Works Structures Design - Cantitravel
- Construction methodology
- Conveyor belts and Shiploader Design





BULK TERMINALS

TERMINAL DE GRANEIS SÓLIDOS PUNTA CATALINA

Country

Dominican Republic

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

BULK TERMINAL MATARANI

Country

Peru

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design
- Material Handling Equipment Design - Conveyor Belt and Shiploader
- Temporary Works Structures Design - Cantitravel





BULK TERMINALS

BULK TERMINAL - BAUXITE TROMBETAS

Country

Brazil

Scope of Works

- EPC Tender Concept Design
- Initial Technical Due-Diligence
- Preliminary and Detailed Design of the Jetty and Berth for 80.000DWT Vessels





CARGO TERMINALS

MULTIPURPOSE TERMINAL POSORJA

Country

Ecuador

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design - 400m Quay Wall
- Preliminary Design for a 14.000 TEUs Terminal
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

MULTIPURPOSE TERMINAL BERBERA

Country

Somalia

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design - 400m Quay Wall
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

CONTAINER TERMINAL DORALEH

Country

Djibuti

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design:
 - 1.050 m Quay Wall; 2 km Causeway; 45 ha Container Yard
- Technical Assistance During Construction
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

MULTIPURPOSE TERMINAL MARIEL

Country

Cuba

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design:
700 m Quay Wall; 25ha Container Yard; Admin Buildings and Workshops
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

CONTAINER TERMINAL SANTOS

Country

Brazil

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design:
1.100 m Quay Wall; 25ha Container Yard
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

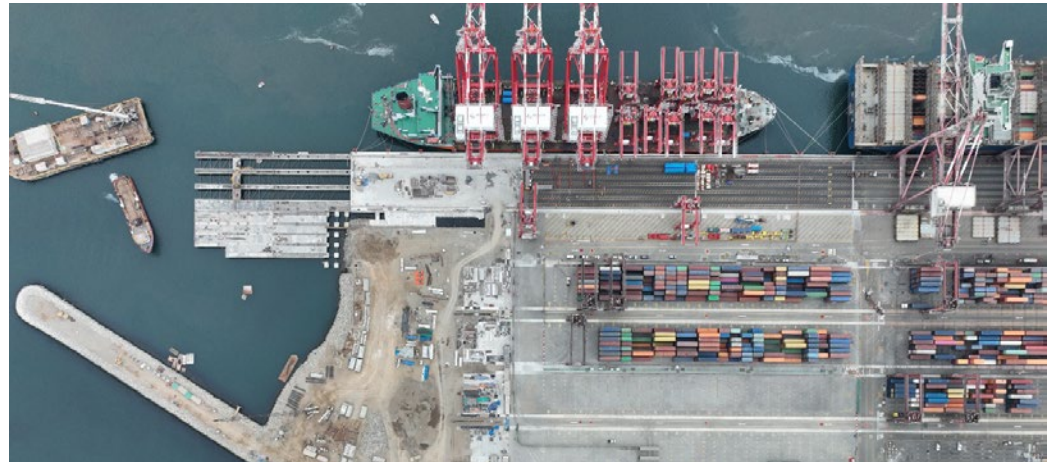
CONTAINER TERMINAL CALLAO

Country

Peru

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design:
 - 1.050 m Quay Wall; 25 ha Container Yard
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

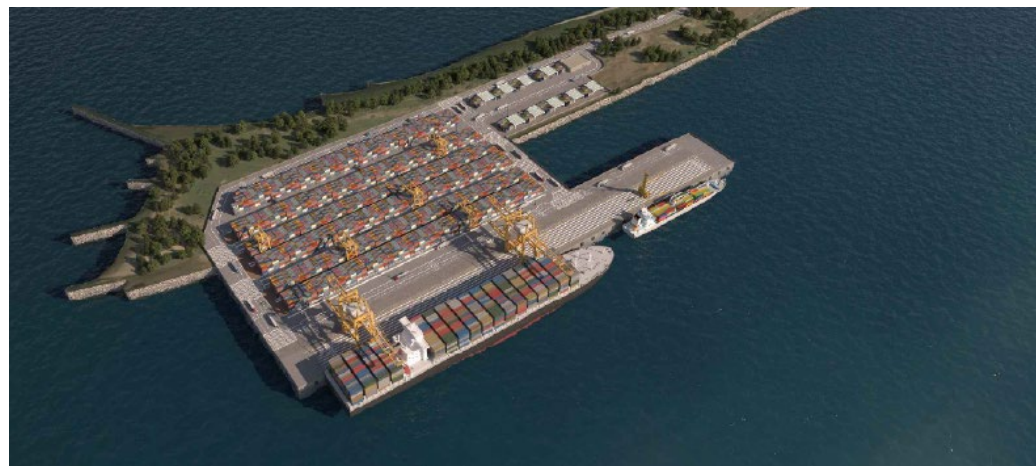
CONTAINER TERMINAL BANANA

Country

Democratic Republic of Congo

Scope of Works

- EPC Tender Concept Design
- Preliminary and Detailed Design:
600 m Quay Wall; 30 ha Container Yard
- Temporary Works Structures Design - Cantitravel





CARGO TERMINALS

GENERAL CARGO TERMINAL PRAIA

Country

Cape Verde

Scope of Works

- Technical and engineering support
- HSEQ management during construction





COASTAL ENGINEERING

INTAKE AND OUTFALL PIPELINE JAGUARIBE

Country

Brazil

Scope of Works

- Length: 3,272 m
- Outer Diameter: 1,735 m
- Concrete blocks: 593 units, 8.2 tf each





COASTAL ENGINEERING

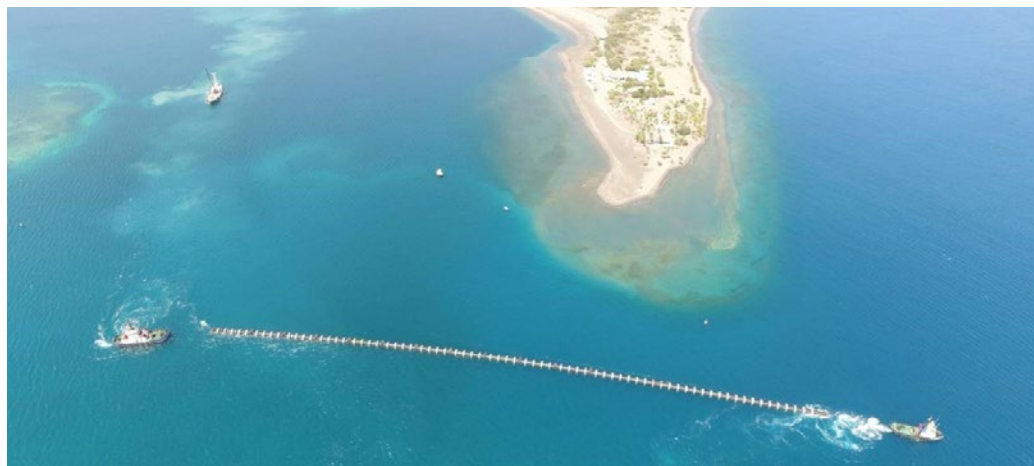
INTAKE AND OUTFALL PIPELINE PUNTA CATALINA

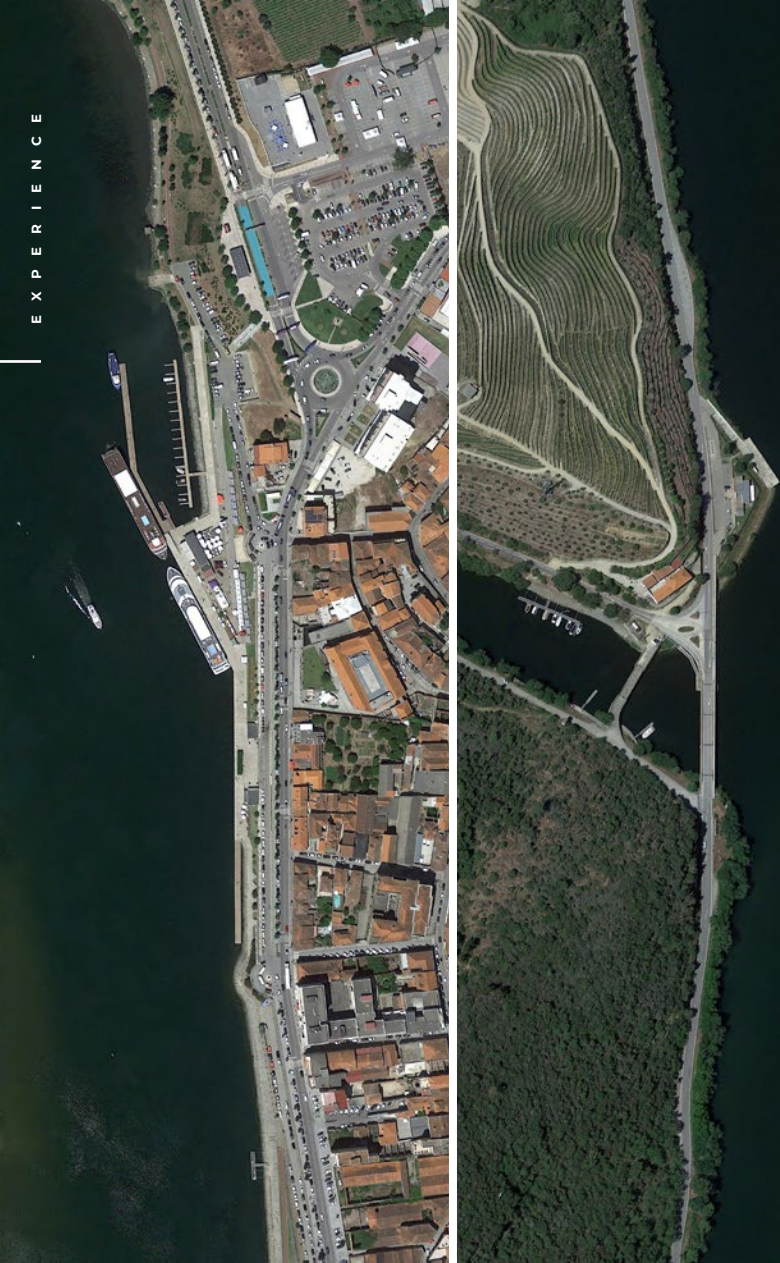
Country

Dominican Republic

Scope of Works

- 1050m lenght and 2,5m diam. pipeline design





PASSENGER AND RECREATIONAL PORTS

INLAND PORTS

Country

Portugal

Scope of Works

- Detailed Design
- Technical Assistance



Peso da Régua



Foz do Távora



Santos Container Terminal, Brazil

VALUE ENGINEERING - CONSTRUCTION METHODOLOGY TEMPORARY CONSTRUCTION STRUCTURES

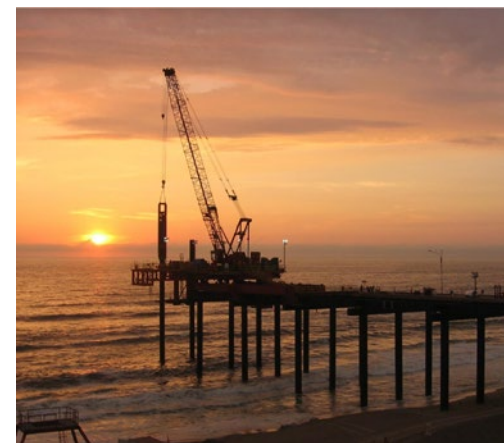
CANTITRAVELERS

Scope of Works

For more than 25 years, EXE QUADRANTE has conceived of more than 40 temporary structures to support quay wall construction works. These bespoke, and project specific structures, either cantitravelers or pile driving barges, are particularly suitable for the most common type of quay wall, most specifically deck on piles and combiwall structures.



Arzew Fertilizer Terminal, Algeria



LNG Terminal Melchorita, Peru



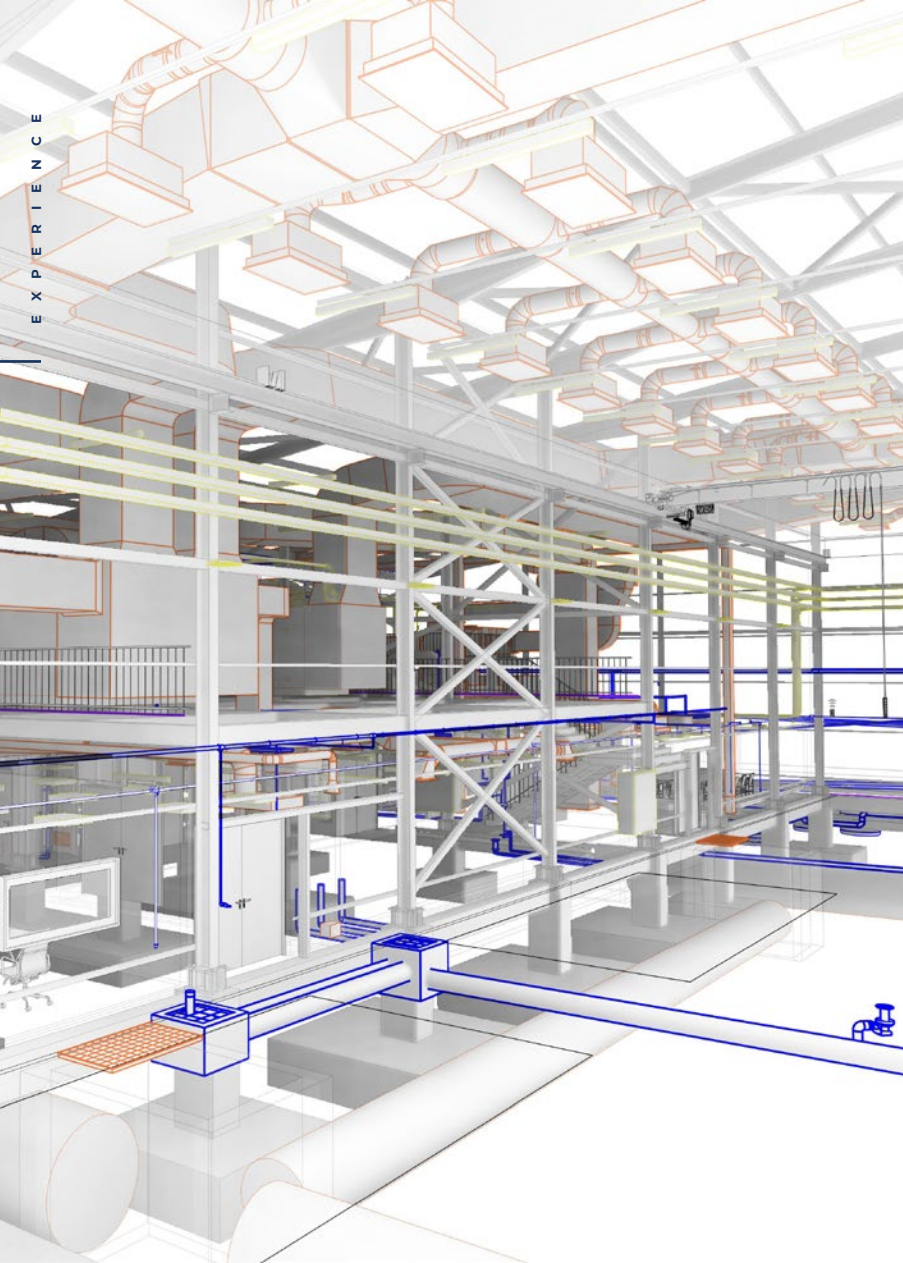
VALUE ENGINEERING - CONSTRUCTION METHODOLOGY TEMPORARY CONSTRUCTION STRUCTURES

PILE DRIVING FLOATING TOWER

Scope of Works

- Piling Tower development and structural design



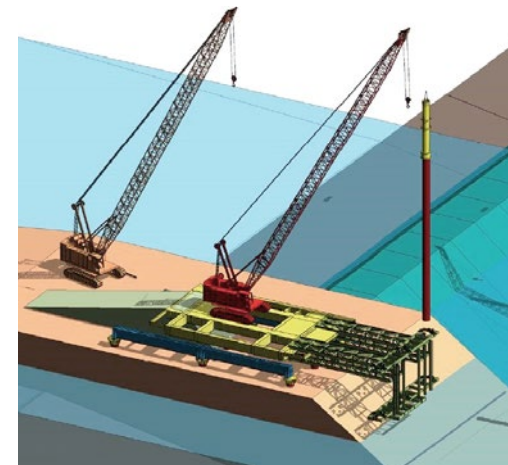
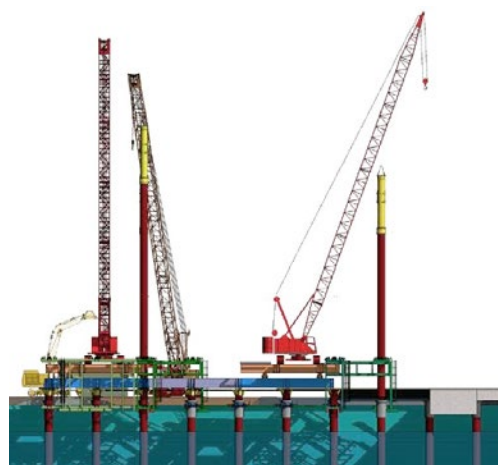


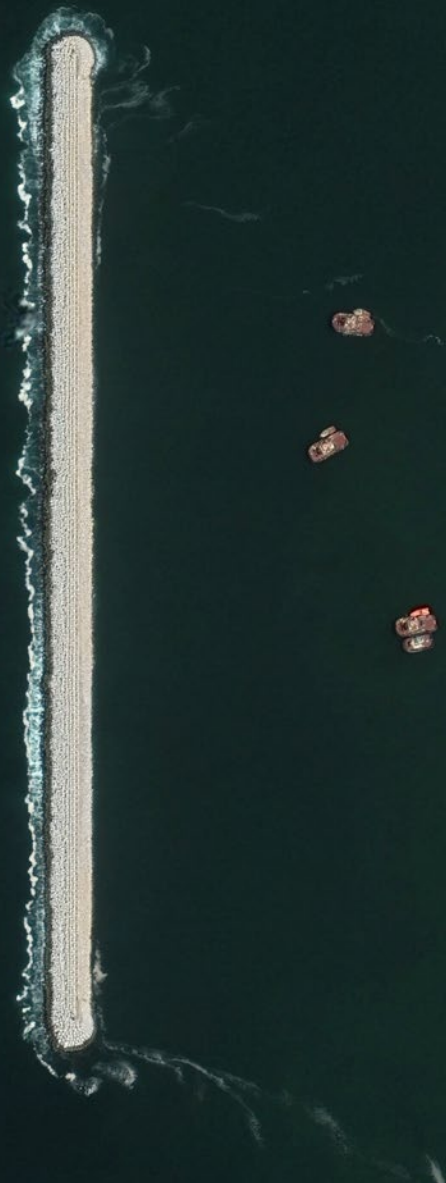
VALUE ENGINEERING - BIM

BIM - BUILDING INFORMATION MODELING

Scope of Works

EXE QUADRANTE set off using BIM processes across all phases of the project lifecycle as early as 2015. In EXE-QUADRANTE, BIM is about providing the right data to support decision-making at very early stages of the project, enabling efficiency and accuracy, adding value and encouraging greater synergies between all stakeholders, and most significantly, deliver greater predictability throughout the entire project lifecycle.



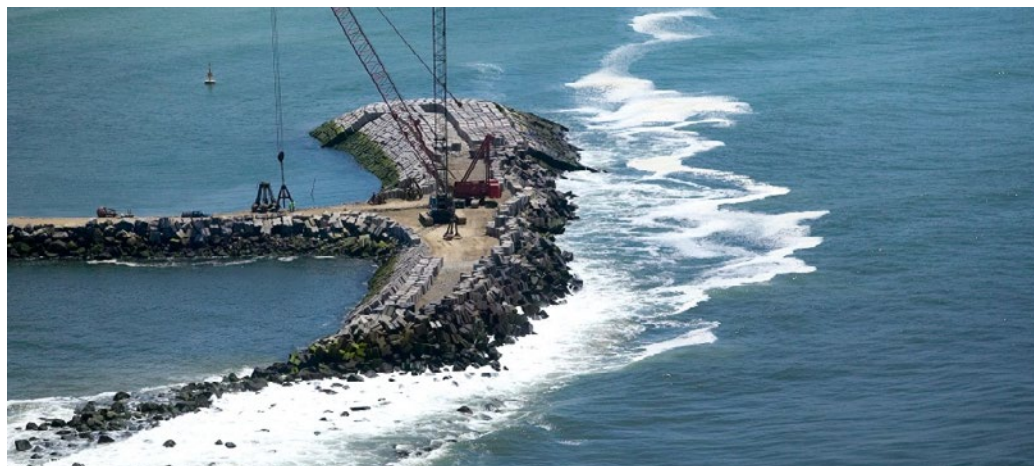


COASTAL ENGINEERING

COASTAL PROTECTION AND BREAKWATERS

Scope of Works

- Coastal protection studies
- Detail design for rock revetment
- Marine Hydraulics and wave studies



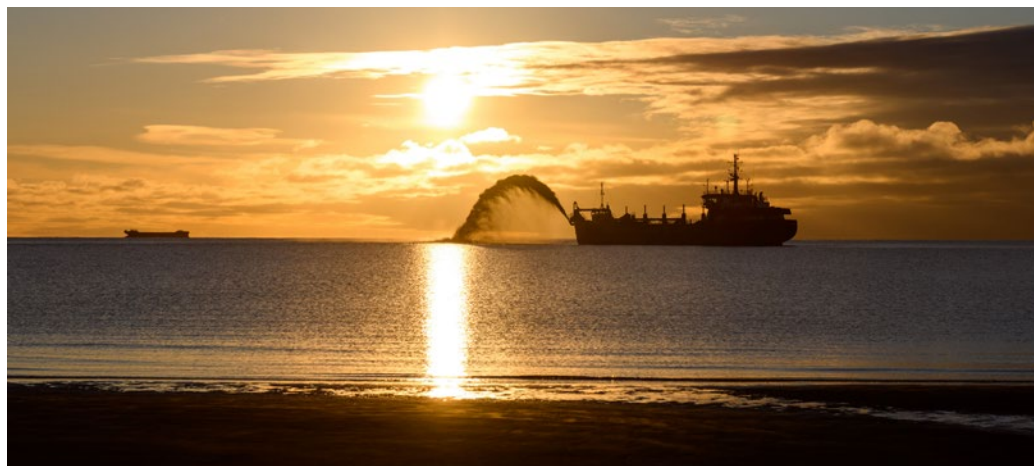


COASTAL ENGINEERING

DREDGING AND RECLAMATION

Scope of Works

- Waterways, access channels and berth pockets design
- Dredging and Reclamation Design



EXPERIENCE

P O R T S E L E C T R I F I C A T I O N & R E N E W A B L E E N E R G Y



PORTS ELECTRIFICATION & RENEWABLE ENERGY

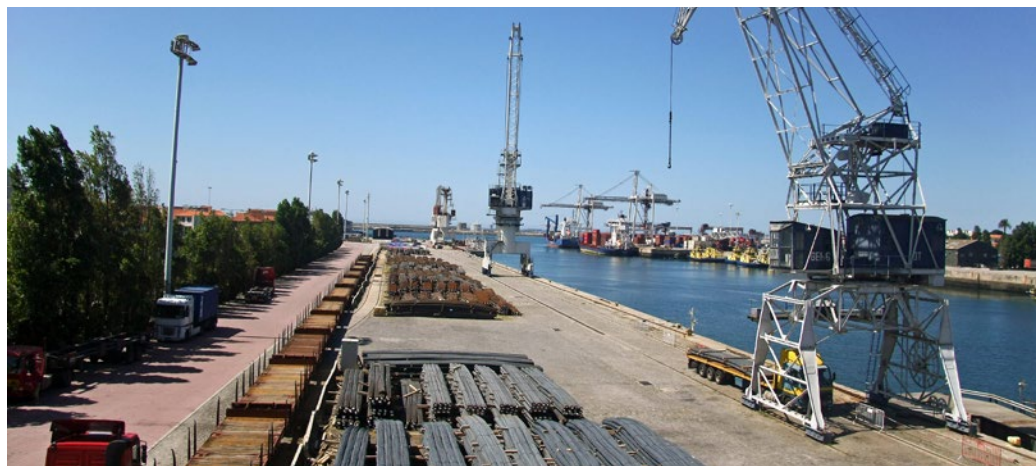
OPS AND 30KV MEDIUM VOLTAGE NETWORK LEIXÕES

Country

Portugal

Scope of Works

- Concept Design
- Detailed Design





PORTS ELECTRIFICATION & RENEWABLE ENERGY

OPS FOR CRUISE AND 5NO CONTAINER TERMINALS LISBON

Country

Portugal

Scope of Works

· Feasibility Study





PORTS ELECTRIFICATION & RENEWABLE ENERGY

CRUISE TERMINAL / SANTA APOLÓNIA SUBSTATION LISBON

Country

Portugal

Scope of Works

· Detailed Design





PORTS ELECTRIFICATION & RENEWABLE ENERGY

PORT SUBSTATION LUANDA

Country

Angola

Scope of Works

· Detailed Design





PORTS ELECTRIFICATION & RENEWABLE ENERGY

CRUISE AND FERRY TERMINAL OPS PORTIMÃO

Country

Portugal

Scope of Works

· Feasibility Study





PORTS ELECTRIFICATION & RENEWABLE ENERGY

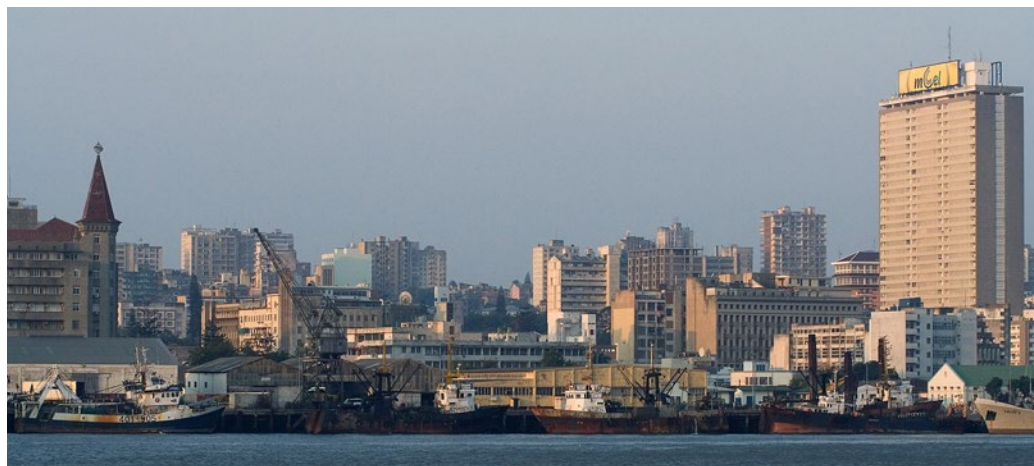
EXPANSION PROJECT MAPUTO

Country

Mozambique

Scope of Works

- Concept Design
- Tender Support
- Design Review and Supervision



PORTS ELECTRIFICATION & RENEWABLE ENERGY

PV PLANTS – 272MW RIO MAIOR & TORRE BELA

Country

Portugal

Scope of Works

· Basic and Detailed Design of the PV Plant and Substation





PORTS ELECTRIFICATION & RENEWABLE ENERGY

PV PLANT – 450 MW CORUCHE

Country

Portugal

Scope of Works

· Environmental Impact Assessment and Permitting Design of the PV Plant and Substation



PORTS ELECTRIFICATION & RENEWABLE ENERGY

PV PLANT – 202 MW CERCA

Country

Portugal

Scope of Works

· Permitting and Tender Design of the PV Plant



PORTS ELECTRIFICATION & RENEWABLE ENERGY

11 MW & 9 MW PV PLANTS ALJEZUR & SABUGAL

Country

Portugal

Scope of Works

· Detailed Design and Permitting



EXPERIENCE

T R A N S P O R T I N F R A S T R U C T U R E



TRANSPORT INFRASTRUCTURE

RAILWAY ACCESS AND RAIL YARD (8,7 KM) SETÚBAL

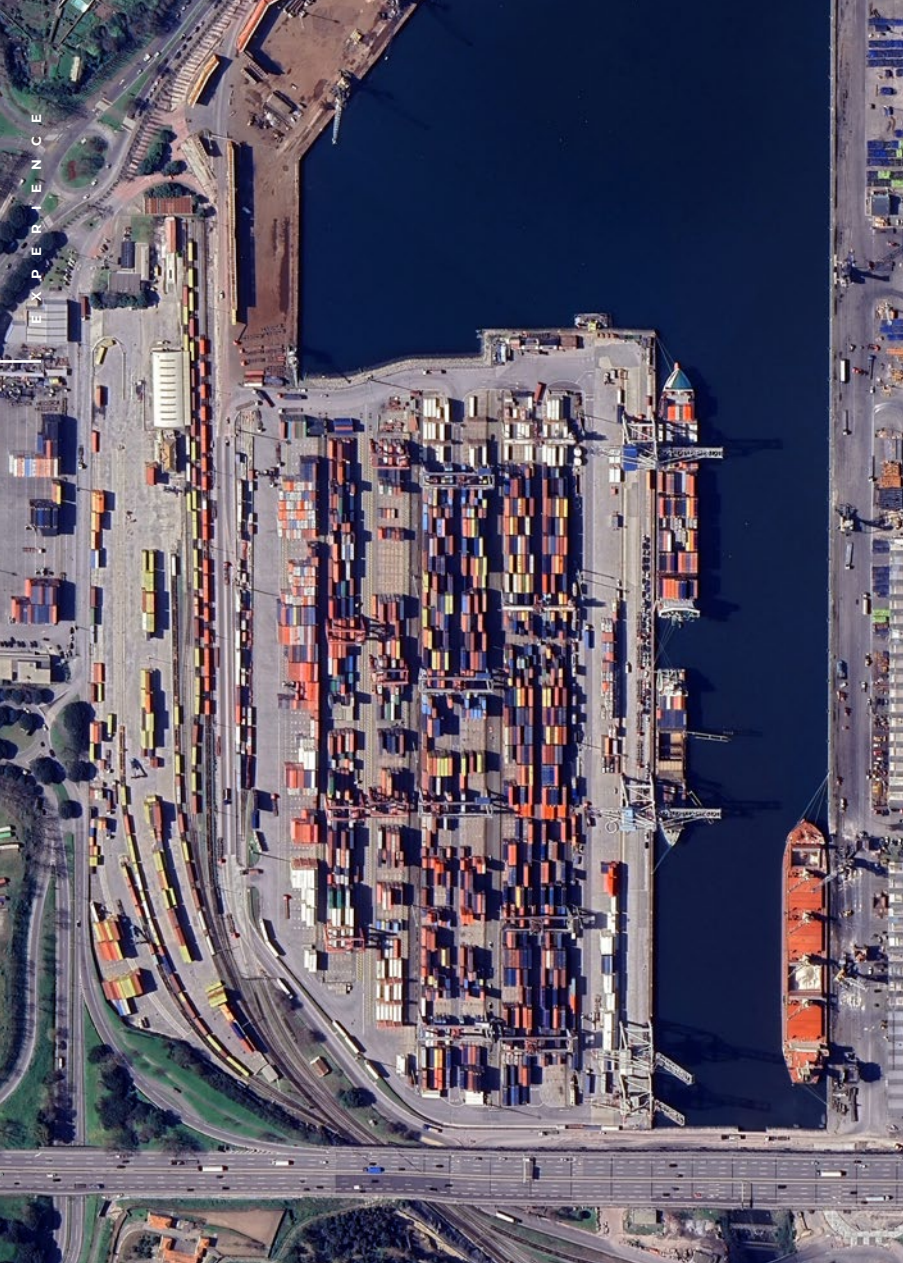
Country

Portugal

Scope of Works

- Preliminary Design
- Detailed Design
- Technical Assistance





TRANSPORT INFRASTRUCTURE

RAILWAY TERMINAL LEIXÕES

Country

Portugal

Scope of Works

- Feasibility Study
- Preliminary Design
- Detailed Design





TRANSPORT INFRASTRUCTURE

HIGH SPEED RAILWAY LINK POCEIRÃO – CAIA

Country

Portugal

Scope of Works

- Preliminary Design
- Detailed Design



EXPERIENCE

LOGISTICS AND INDUSTRIAL PROJECTS



LOGISTICS AND INDUSTRIAL PROJECTS

LOGISTICS PARK (GBA 35000 M²) JAGUARÍUNA

Country

Brazil

Scope of Works

· Engineering Detail Design





LOGISTICS AND INDUSTRIAL PROJECTS

IKEA STORE AND MAR SHOPPING LOULÉ LOULÉ

Country

Portugal

Scope of Works

· Engineering Detail Design





LOGISTICS AND INDUSTRIAL PROJECTS

CENTRAL MARKET KUMASI

Country

Ghana

Scope of Works

· Engineering Detail Design



EXPERIENCE

P M C A N D S U P E R V I S I O N



PMC AND SUPERVISION

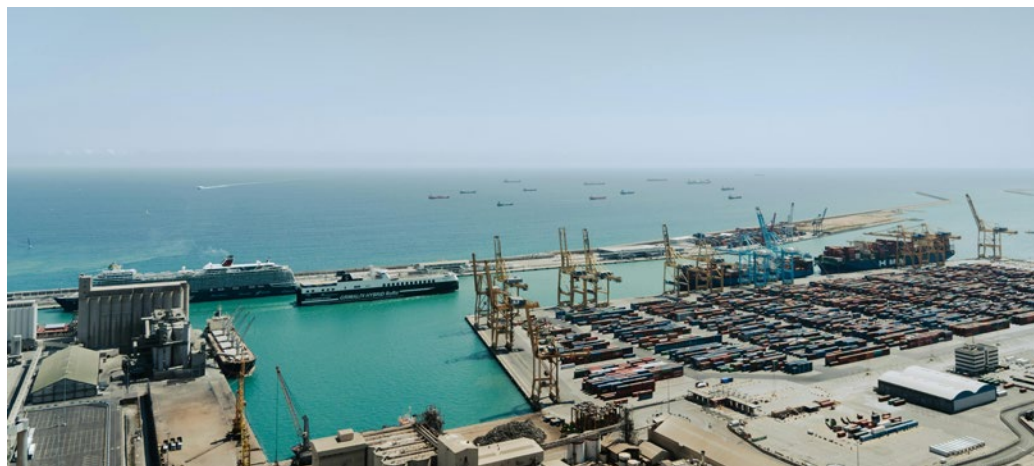
PORT OF BARCELONA BARCELONA

Country

Spain

Scope of Works

- Technical assistance for the construction works and quality control





PMC AND SUPERVISION

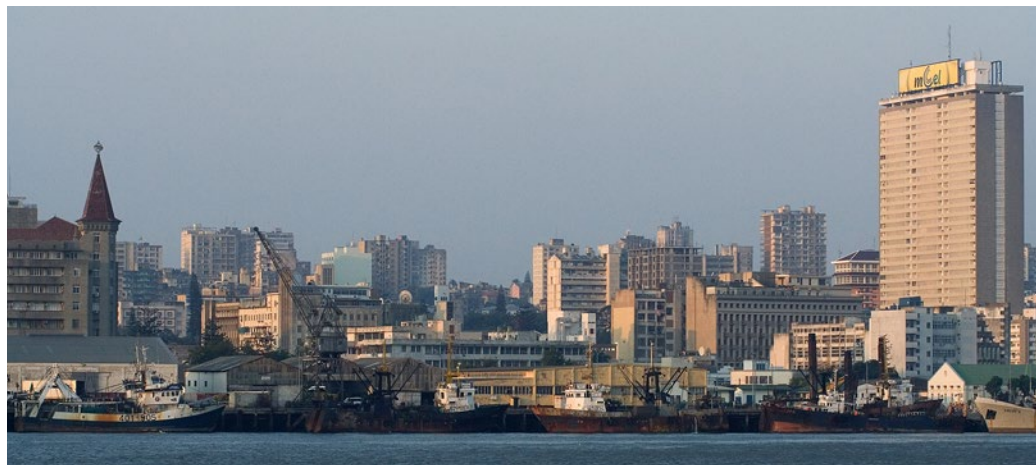
MAPUTO PORT EXPANSION PROJECT MAPUTO

Country

Mozambique

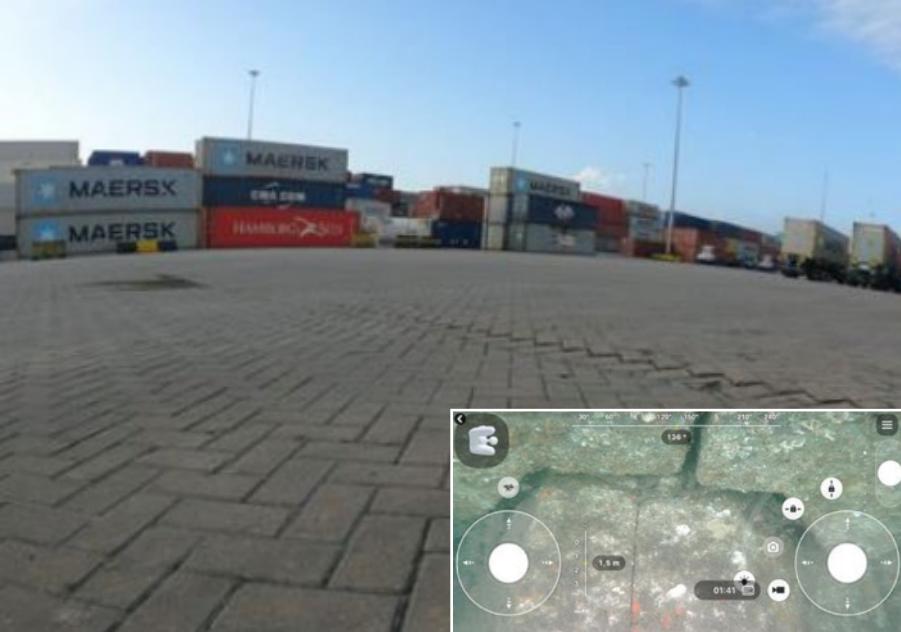
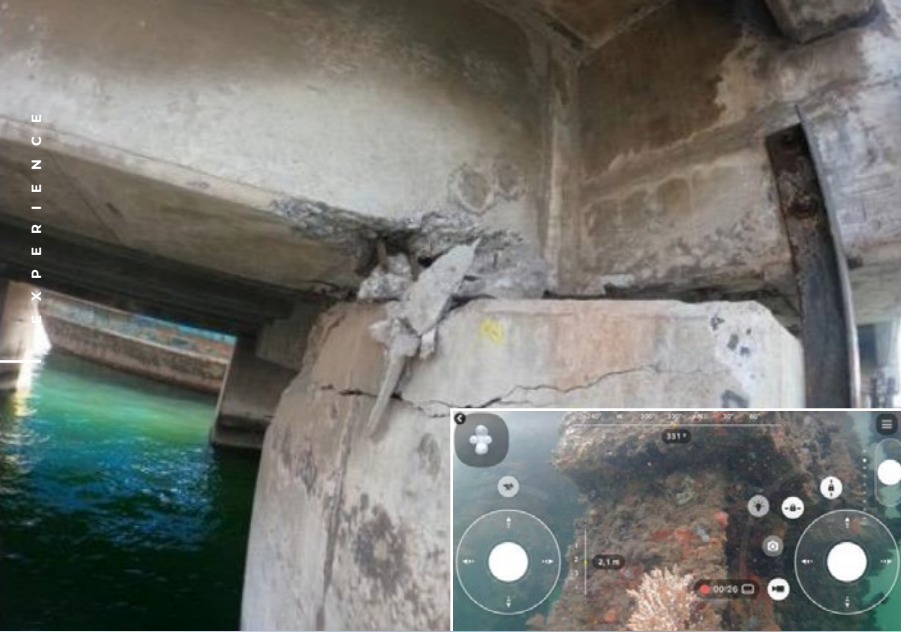
Scope of Works

- Concept Design
- Tender Support
- Design Review and Supervision



EXPERIENCE

DUE DILIGENCE



DUE DILIGENCE

Due diligence in quay inspections ensures structural integrity, operational safety, and compliance with maritime standards, safeguarding long-term functionality and investment

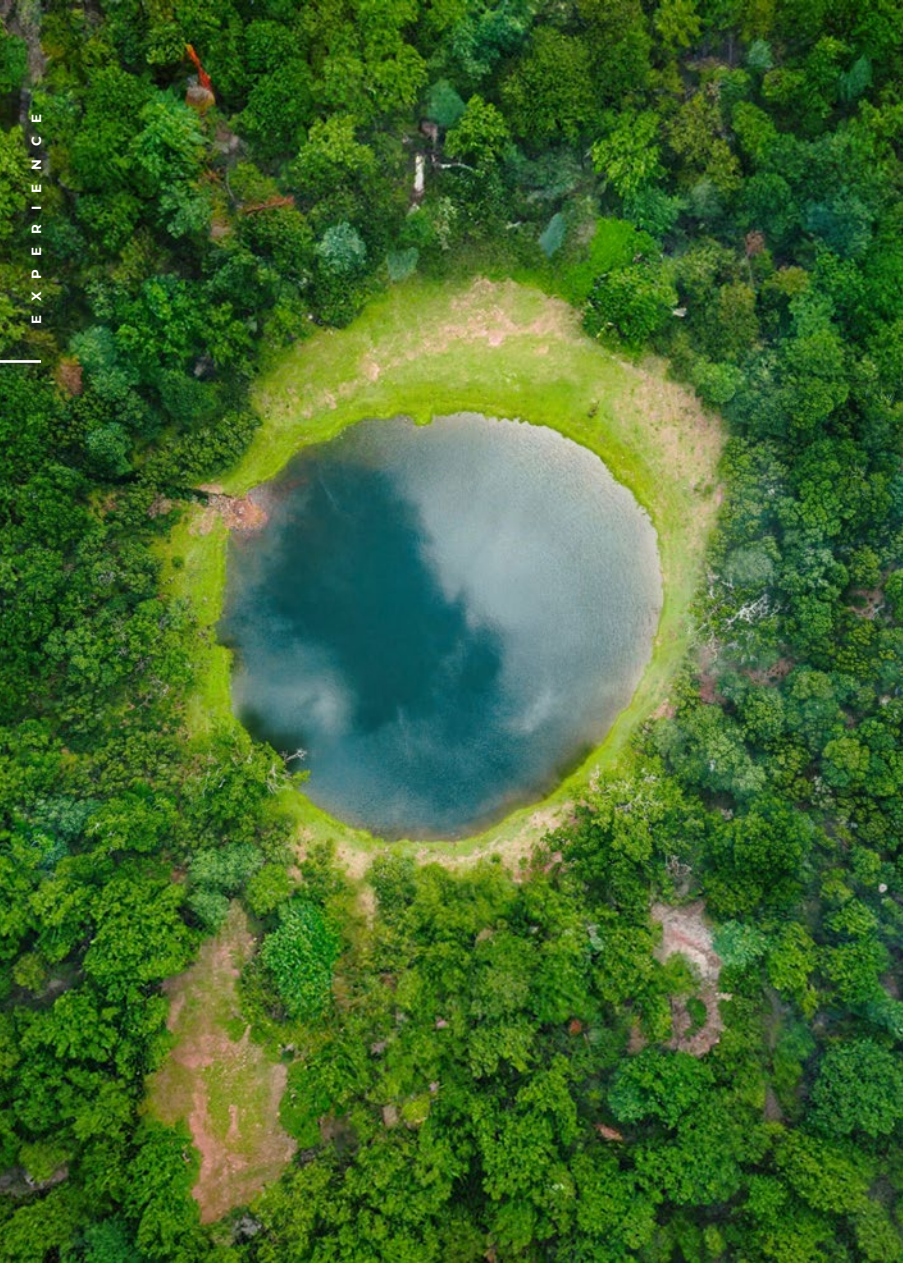
- Site Surveys
- Bathymetric, Topographic and underwater inspection
- Structural Inspection
- Site Surveys and investigation reports
- Preliminary designs and drawings for the refurbishment works
- BOQ
- Cost estimation
- Environmental Impact Assessment (EIA) Inputs for the soffit works
- Inputs for Permits and Licencing

Selected Experience

- Port of Paranaguá, Brasil
- Trombetas Port - MRN Mining Terminal, Brasil
- Salt Offshore Loading Terminal – Areia Branca, Brasil
- Djibouti Container Terminal, Djibouti
- LMC PIER, Monrovia Free Port, Liberia

EXPERIENCE

ENVIRONMENT & SUSTAINABILITY



ENVIRONMENT & SUSTAINABILITY

Services

- Capital Project Support – ESG / Sustainable Finance / EU Taxonomy
- Resource Efficiency and Climate Change
- Contaminated Land Management
- Operational Performance
- Risk Assessment
- Land Use Planning
- Digital

Capital Project Support - ESG / Sustainable Finance / EU Taxonomy

- Lenders / ECA Liaison
- Project Finance and EP advisory services
- EP/IFC PS E&S Due Diligence
- Siting, Project E&S Feasibility and Permitting Strategy
- Environmental Constraints and Alternative Analysis
- E&S Risk & Vulnerability Assessment
- E&S Scoping Assessment
- E&S Impact Assessment (ESIA)
- Physical Resettlement and Livelihood Restoration Plans
- Human Rights Impact Assessment
- ESAP Monitoring during Construction
- Post-finance E&S Monitoring
- EU Taxonomy
- Social Performance

LEADERSHIP



RUBENS SABINO

Managing Director
Civil Engineer, PIANC Member

Rubens Sabino is the founding partner of EXE ENGENHARIA. With over 40 years of experience in port and marine engineering, in Brazil, South America, Central America and Central Africa. With a degree in Civil Engineering from Universidade Federal Fluminense, his experience includes, among others, the development of container general cargo and bulk terminals, maritime foundations, special structures and shipyards.

During the last twenty years, Mr. Sabino has driven EXE ENGENHARIA to take part in several design and construction projects in many countries such as Djibouti, Peru, Ecuador, Colombia, Guine Bissau, Morocco, Namibia, Angola, Cuba, Chile, Mozambique, Argentina, Guatemala, Panama, Dominican Republic, Libya, Guatemala, Algeria, Venezuela, Brunei and Indonesia.

At EXE-QUADRANTE, Rubens is also responsible for the Latin American market.

Main projects

- Iron Ore Terminal Píer III - Ponta da Madeira – Brazil;
- Doraleh Bulk Terminal – Djibouti;
- Callao Container Terminal – Peru;
- Punta Catalina Port – Dominican Republic;
- Itapoá Pile Driving Barge – Brazil;
- Paranaguá Port - Píer “F” – Brazil



TIAGO COSTA

Managing Director
Structural Engineer, MBA

Tiago Costa is one of the founding partners of QUADRANTE and is responsible for the Transports Business Unit (Roads and Motorways, Railways, Structural Works, Ports and Tunnels) and for the markets in Ghana, Peru and Chile. Costa has 20 years of experience in Design and Coordination of major road subconcession projects, general construction and structural works, and urban infrastructure in Angola, Algeria, Brazil, Ghana, Mozambique and Portugal. He has recently been involved in railway projects in Portugal and the United Kingdom. He has a degree in Civil Engineering from IST and an MBA.

Main projects

- Railroad project Kano - Maradi / Kano – Dutse | 400km - Nigeria;
- Highway project Accra / Tema | 32km - Ghana;
- Panamericana highway project – Panamá;
- Project and contract management on several Highway projects - Portugal;
- Hassi Messaoud e Sidi Abdelah new city project – Algeria



ncorreia@exe-quadrante.com

M: +351 932 305 433

NUNO CORREIA

Commercial Manager - Business Developer

Civil Engineer, PMP, PMI

With over 15 years' experience in the maritime, harbour and urban infrastructure construction sector, Nuno Correia holds a Master's degree in Civil Engineering from FEUP and is PMP-certified by PMI. Throughout his career, he has accumulated vast experience in large-scale projects, from conception to execution, with a focus on technical-commercial coordination, strategic planning, contract execution and contract management. With a strong international track record, acquired in Tier 1 construction companies, Nuno has collaborated on projects in Europe, Africa and Latin America, leading teams in the drafting and negotiation of complex contracts. He stands out for his ability to promote collaboration in cross-functional environments, ensuring high standards of quality and safety. He currently works as Client Manager for the maritime projects at EXE-QUADRANTE.

A stylized map of the Atlantic Ocean. The landmasses of North America, South America, Europe, and Africa are shown in a light gray color. The ocean is white. A dashed orange line curves along the western coast of Europe and the eastern coast of South America, connecting two dark blue dots. One dot is located in Portugal, and the other is in Brazil.

P O R T U G A L

Alfrapark
Estrada do Seminário 4
Edifício C - Piso 1 Sul
Alfragide 2614-523 Amadora
+351 210 067 200

B R A Z I L

Avenida Candido de Abreu, 776
Centro Cívico - Sala 1604
Edifício World Business
CEP 80530-000 - Brasil
+55 41 3087-3100



WWW.EXE-QUADRANTE.COM