CRN Engineering

Brazilian company that utilizes strategic intelligence, value engineering, cutting-edge knowledge and the Just in Time engineering practices acting as strategic partner to develop services and innovations.
When

- Conceptual Design
- Feasibility Study
- Detailed Design
- Manufacturing Support
- Decommissioning
- Life Extension Study
- Integrity Management
- Commissioning
Where

Oil & Gas

Industry

Renewable
“We are an engineering knowledge cluster dedicated to the asset integrity management.”
Main Activities

Oil & Gas

SUBSEA ENGINEERING
Engineering of Mooring Lines; Engineering of Subsea Pipeline; Engineering of Subsea Umbilicals, Risers and Flowlines (SURF); Hydrodynamic Analysis; Structural Engineering.

NAVAL AND OCEAN ENGINEERING
Anchoring Operation; Hydrodynamic Analysis; Installation of Subsea Equipment; Planning and Analysis of Marine Operations; Structural Engineering.

ENVIRONMENTAL ENGINEERING
Chemical Monitoring; Contamination Analysis; Licensing and Environmental Auditing; Risk Analysis and Environmental Impact Study; Waste Management.

INTEGRITY MANAGEMENT
Engineering Critical Assessment; Failure Modes and Effects Analysis; Life Extension Study; Maintenance Plan and Structural Restoration; RBIM.

PROJECT MANAGEMENT
Engineering, Procurement and Construction Management; Front-End Engineering Design; Planning, Monitoring and Control; Selection and Qualification of Suppliers; 3rd Part Verification.

SOLUTIONS
Engineering Survey & Solutions Development; Clean Technologies Development; Experimental Model Testing; Software Development.
Main Activities

Industry

Structural Engineering
- Dynamic and Vibration Analysis;
- Fluid Dynamics and Flow Analysis;
- Mechanical Structural Analysis (FE);
- Structural Mechanical Design;
- Thermal Analysis.

Materials Engineering
- Characterization of Materials;
- Planning and Support for Non-Destructive Testing;
- Support for Mechanical, Chemical, Physical and Performance Testing of Products and Raw Materials;

Environmental Engineering
- Effluents Analysis and Treatment;
- Environmental Diagnosis;
- Environmental Monitoring;
- Licensing and Environmental Auditing;
- Pollution Assessment;
- Recovery of Degraded Areas;
- Risk Analysis;
- Waste Management.

Project Management
- Engineering, Procurement and Construction Management;
- Front-End Engineering Design;
- Planning, Monitoring and Control;
- Selection and Qualification of Suppliers;
- 3rd Part Verification.

Solutions
- Engineering Survey & Solutions Development;
- Clean Technologies Development;
- Experimental Model Testing;
- Software Development.

Integrity Management
- Engineering Critical Assessment;
- Failure Modes and Effects Analysis;
- Life Extension Study;
- Maintenance Plan and Structural Restoration;
- RBIM.
Main Activities

Renewable

**STRUCTURAL ENGINEERING**
Dynamic and Vibration Analysis; Fluid Dynamics and Flow Analysis; Materials Engineering; Mechanical Structural Analysis (FE); Structural Mechanical Design.

**OCEAN ENGINEERING**
Engineering of Mooring Lines; Engineering of Subsea PipelineS; Engineering of Subsea Umbilicals, Risers and Flowlines (SURF); Hydrodynamic Analysis.

**INTEGRITY MANAGEMENT**
Engineering Critical Assessment; Failure Modes and Effects Analysis; Life Extension Study; Maintenance Plan and Structural Restoration; RBIM.

**ENVIRONMENTAL ENGINEERING**
Environmental Diagnosis; Environmental Monitoring; Licensing and Environmental Auditing; Risk Analysis; Waste Management.

**PROJECT MANAGEMENT**
Engineering, Procurement and Construction Management; Front-End Engineering Design; Planning, Monitoring and Control; Selection and Qualification of Suppliers; 3rd Part Verification.

**SOLUTIONS**
Engineering Survey & Solutions Development; Clean Technologies Development; Experimental Model Testing; Software Development.
Softwares and Laboratory Infrastructure

Analysis Structure

INTEGRITY

ENGINEERING

LABORATORIES

TWI

Orcina

VIVANA

STAR-CCM+

CD-adapco

AcmeLabs

DeepLines™

shear

OpenFOAM

CTC

GT STRUDL®

MSC Nastran®
“The more we dedicate ourselves to working and to understand the day to day operations of our clients, the more knowledge we will acquire and the better the decisions we take will be.”
Experiences

Services performed by CRN team
CRN

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