# **Power &** Automation

## MARINE I OFFSHORE I ENERGY

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## Power & Automation

## **COMPANY OVERVIEW**



Delivering marine electrical, power & automation system and services to the maritime, offshore & energy sectors for over 25 years.

From new build assets & machinery to upgrade and retrofit with complete end to end engineered solutions.

Unit 85:

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### Unit 88:

- Design & Engineering •
- Software Development •
- Controls & Automation •
- Project Management
- R&D
- Administration
- Production Management Construction and Testing Electronic Repair Shop Installation Services Mobilisation & Demobilisation

DNV-GI

ClassN

After sales marine service











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## VESSELS

#### Heortnesse Dredger Life Extension Project



Electrical Power, Propulsion, Dredging & Integrated Control, Automation & Monitoring System Upgrade.

#### SS7 Normand Oceanic Back Deck Electrical Distribution



MJR Deliver Design & Construction of Electrical Power Distribution for Back Deck Equipment Spread

#### Havilla Phoenix Upgrade Project



Extensive electrical power systems upgrade for DeepOcean's multi-role offshore construction vessel Havilla Phoenix

#### Corystes Main Propulsion and Thruster Drive Upgrade



Successful upgrade and replacement of complete DC Variable Speed Drive and Propulsion Control Package

#### **Deep Energy Winch Upgrade**



Successful upgrade and reactivation of Deck Winch CT Control on Technip's Deep Energy

#### Installation for Kongsberg IAS System Upgrade



MJR Completes Successful Installation, Termination & Testing of over 2000 meters of Power, Communication & Fibre Cables On Board the MPI Resolution



## **EQUIPMENT**

SS7 Pipe Handling System Power & Automation
Upgrade



MJR Delivers Drive Train Solution with Design, Construction, Installation & Commissioning for PIP Handling System Upgrade

SMD Power & Automation Drive Train for 12te AHC Winch



MJR Delivers Low Harmonic Deck Mounted Power, Drive, Automation & motors Solution for 12te AHC Winch with Operating Depth of 6000m

JDR Cables HLM & VLM Umbilical Production Lines Upgrade



Replacement of all obsolete VSD System Installation & Commissioning of a new Centralised PLC Control System (Siemens S7-1500) & Datalogger. NOV Containerised Power & Control System for

#### 4000Te Carousel & Tensioner



DNV2.7-1 Offshore Drive & Control Containers Complete with Drive Switchboards; MCCs; Active Harmonic Filters; Control Desks & Vessel Interface Comms.

#### 400kW Subsea Excavator Power & Control Van



DNV2.7-1 Offshore Power Container Complete with AFE Drive Switchboard; Aircon; 3.3kV Step-up Transformers & Motors Protection Relays

Osbit /Jan De Nul - 1.2MW Power Vans for Subsea Trenching Vehicle



MJR Deliver  $2 \times 20$ ft DVG-GL Approved Power Vans for Innovative Osbit Subsea Trencher , Swordfish



### **ENERGY**

Fire Shutter Control, Trace Heating Electrical & Automation System



Delivery of Galloper OSP Platform Fire Safety Systems including Detailed Engineering Design, Class Approval, Installation, Commissioning &Acceptance Trials

Off-Grid System - Floating Offshore Power Conversion System for 500kW Tidal Device



Design, Engineering, Construction, Installation and Commissioning of 500kW Tidal Power Take off System with black Start and Off-grid Operation

Sheringham Shoal Inner-array and Export Cable
Packages



Engineering & Project Management for Export & Array load Out, Installation, Termination and Testing . Including Transition Piece Cable Design & Outfitting

## 1.5MW Power Take-off, Conversion and Control System For Wave Generator



Turnkey Delivery for Power, Electrical & Controls of Power Take-off System for Innovative 1.5MW Wave Power Generator





Preparation of offshore procedures for Export & Array Cable Load Out, Installation, Termination & Testing

## Offshore Microgrid System for Wave, Wind & Solar Power Generation



Design, Engineering, Control s and Integration of Power Generation and Energy Storage for Offshore Power Buoy



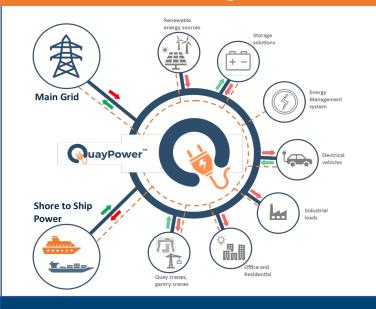
## Decarbonisation of the Maritime Sector

### **Hybrid & Electric Propulsion**



- Power train
- Energy Storage
- Power Management System
- Integration
- New Builds or Retrofit

## Shore Power & Microgrid Solution



- Shore to Ship Electrical Power
- Energy Storage
- Renewable Power Integration
- Energy Recovery
- Power & Energy Management

### Containerised Energy Systems



- Energy Storage System
- ISO & DNV-GL Containerised Solution
- Super Capacitors & Battery Systems
- Offshore and Port Applications
- Grid & Off Grid Systems

### **Authorised Marine Partners**









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The CTV On Turbine Charging Project is part of the Clean Maritime Demonstration Competition, funded by the Department for Transport and delivered in partnership with Innovate UK.

Announced in March 2020, and part of the Prime Minister's Ten Point Plan to position the UK at the forefront of green shipbuilding and maritime technology, the Clean Maritime Demonstration Competition is a £20m investment from government alongside a further c.£10m from industry to reduce emissions from the maritime sector. The programme is supporting 55 projects across the UK, including projects in Scotland, Northern Ireland and from the South West to the North East of England. As set out in the Clean Maritime Plan (2019), Government funding has been used to support early stage research relating to clean maritime. The programme will be used to support the research design and development of zero emission technology and infrastructure solutions for maritime and to accelerate decarbonisation in the sector.







## **E-SOV OFFSHORE CHARGER**



The SOV Offshore Charging System Project is part of the Clean Maritime Demonstration Competition Round 2 (CMDC2) which was launched in May 2022, funded by the Department for Transport and delivered in partnership with Innovate UK.

As part of the CMDC2, the Department allocated over £14m to 31 projects supported by 121 organisations from across the UK to deliver feasibility studies and collaborative R&D projects in clean maritime solutions. The CMDC2 is part of the UK Shipping Office for Reducing Emission's (UK SHORE) flagship multi-year CMDC programme. In March 2022, the Department announced the biggest government investment ever in our UK commercial maritime sector, allocating ±200m to UK SHORE, a new division within the Department for Transport focused on decarbonising the maritime sector. UK SHORE is delivering a suite of interventions throughout 2022-2025 aimed at accelerating the design, manufacture and operation of UK-made clean maritime technologies and unlocking an industry-led transition to Net Zero.



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