



## Electrical Services & Automation Division

### Key Benefits:

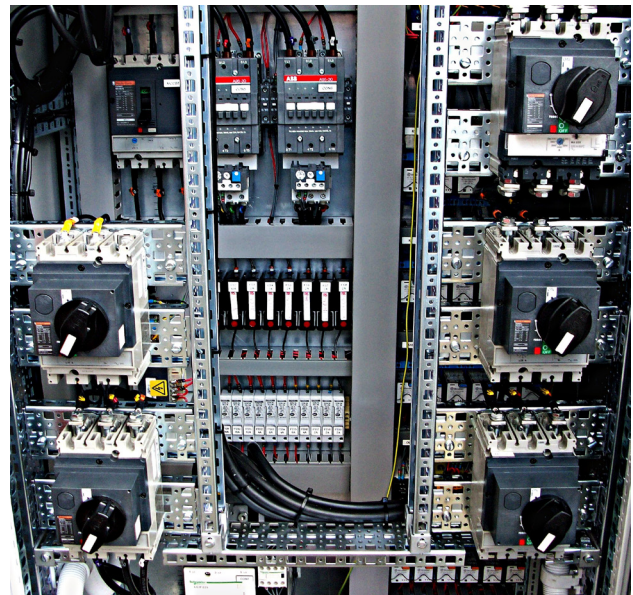
- Integrated cost effective solutions
- Value for money & Quality Assured
- 'One stop shop' provider

### Key Products:

- Electrical Control Panels & Consoles
- Power Distribution & Motor Controls
- Automation Systems
- Variable Speed Drive Systems
- ATEX Certified Electrical Equipment
- A60 Rated Containers
- Electrical & Fibre Optic Distribution Units  
for Offshore Renewable Energy
- CCTV & Intercom Systems
- Structured Cabling & Networks
- Installation Equipment & Cables
- Manpower & Services

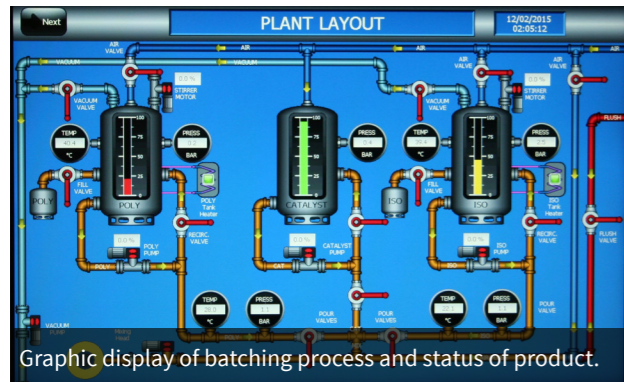
Fathom Systems have an established track record of providing turnkey systems and services to Clients across the Marine, Commercial Diving, ROV, Subsea specialist tooling industry and offshore renewables sectors. This work includes the supply, installation and commissioning of electrical control gear, control panels, automation systems and interface cabling designed and approved for the marine environment.

Recent expansion has allowed the company to establish an Electrical Services & Automation Division delivering a variety of electrical and



automation products and services to our Clients for applications onboard vessels, on offshore installations and at onshore facilities.

The Electrical Services & Automation Division is fully supported by the Fathom engineering, logistics and project management teams to provide a fully integrated solution.



## Case Study 1 – Pipe Blasting / Coating System

The client was encountering consistency issues with their existing manual process of pipe blasting and Fusion Bonded Epoxy (FBE) powder coating due to variations in the manual stages of their procedure.

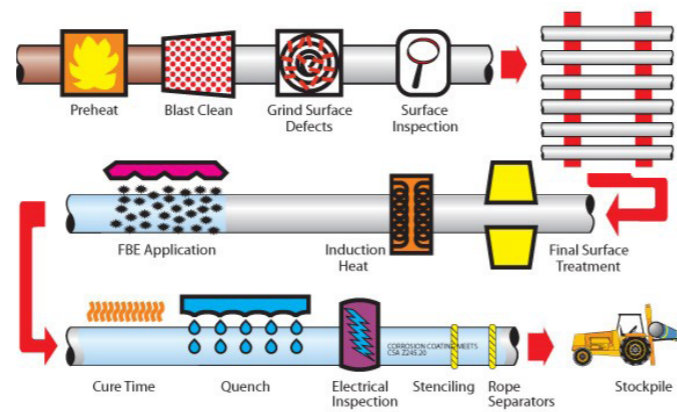
The solution was to use automation and take the human element out of the process.

Fathom Systems designed pipe blasting and FBE coating machines utilizing Programmable Logic Controller (PLC) based control to automate the process of grit blasting and powder coating welded joints on steel pipes.

A PLC controls the electric motors and valves that drive the blast and FBE machinery. The process parameters are accessed by a graphical user interface on the main control panels.

Through this intuitive interface, the Operator sets the optimal desired parameters initially on the Blasting Machine to automatically remove all traces of surface contaminants.

Through the same interface, the Operator can then automatically set the system to apply FBE coating of the pipes.



## Case Study 2 – Seven Eagle ECU Upgrade

Fathom Systems were contracted to upgrade various aspects of the Dive System for the Seven Eagle, including the chamber Environmental Control Units (ECUs) and associated control system equipment.

This upgrade was generally based on the proven and certified hardware and control software used in the recently installed and DNV certified Well Enhancer ECU control system.

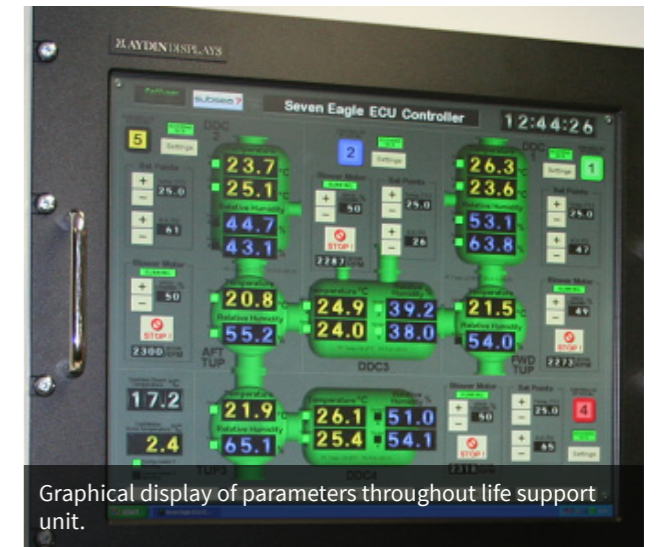
The Eagle's diving system is a 16-man twin bell 300MSW rated system whose main components come from a number of different manufacturers. The system has been installed on two other vessels prior to its installation on the Eagle, and thus much of the equipment that makes up the diving system dates back to the early 1980s.

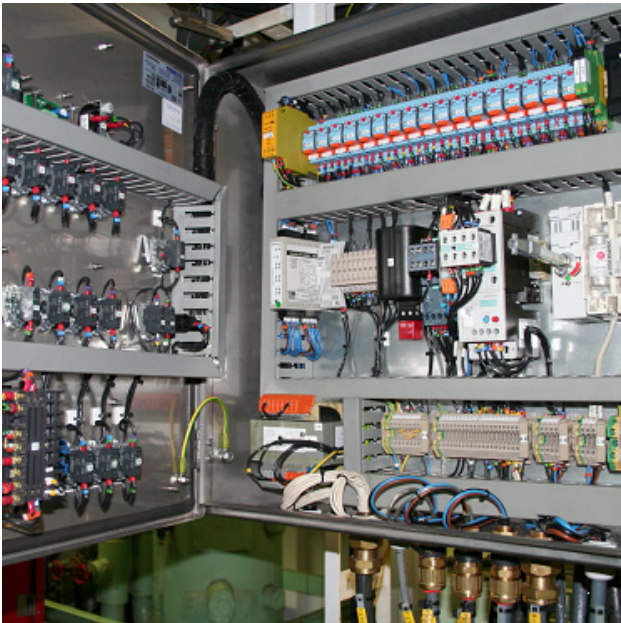
Owing to the age of the system, there were certain components that are no longer supported by the original equipment manufacturers. Locating spares and service items for these components was becoming a problem for the vessel operator.

The main reason for the proposed upgrade to the ECU control system was to replace obsolete equipment with a modern up to date solution that can provide greater reliability and performance, and which can be supported into the future.

The scope of supply from Fathom Systems included the control system hardware and software components for the ECUs, with much of the existing ECU hardware and machinery being retained – and in some areas upgraded by the Client.

The Fathom Systems equipment has proven to be reliable in operation for several years.





As part of the turnkey provision of integrated system products and services, the following activities and competencies are offered by Fathom Systems

- System Engineering Design, Certification & Approvals
- Electrical Manufacturing
- Bespoke Automation & Control Systems
- Project Management, Engineering Design & Product Delivery
- Onshore & Offshore CompEx Certified Electro-Mechanical Technicians
- Offshore Installation, Testing & Commissioning
- Asset Health Checking, Service & Support
- Plant Inspection & Maintenance
- Equipment Hire
- Global Support

## Approvals and Accreditation

- Fathom Systems is ISO9001 accredited with Lloyd's Register
- Certified system track record with DNV GL, Lloyd's Register, Bureau Veritas & ABS approval
- System & product design to comply with IMCA guidelines
- Onshore & Offshore certified personnel

## Key Clients

- Technip FMC
- Subsea 7
- Ultra Deep Solutions
- Flash Tekk
- JFD-LexMar
- Royal IHC
- N-Sea
- Helix Well Ops
- Bibby Offshore
- Mermaid Subsea Services
- Kreuz Subsea
- DOF Subsea
- Smulders
- Bladt
- Bi-Fab
- J2 Subsea
- Wachs Subsea
- Innospection
- Underwater Cutting Solutions