

GREEN TECHNOLOGY RETROFIT PROJECTS

3C Metal are specialists in turnkey in-service green technology retrofit projects, offering a variety of installation options aimed at reducing vessel off-hire. Our unique approach allows vessels to continue operating, providing a one-stop, cost-effective retrofit solution.

3C Metal is actively working on and can support you with the following projects:

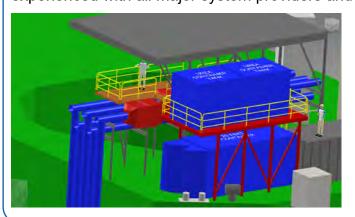
- · Exhaust gas cleaning NOx and SOx scrubbers
- CO² capture
- Electrical power optimization
- Vessel propulsion power reduction sail/ rotor integration
- Ballast water treatment system (BWTS) integrations

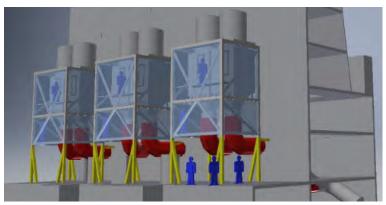
PROJECT MANAGEMENT

All projects are run by our dedicated in-house project management team. Our highly experienced and qualified teams ensure smooth communication and detailed project planning throughout the duration of each project.

DESIGN AND DETAILED ENGINEERING

3C Metal offers complete class-approved design and engineering packages, tailored to fit our clients' needs. Using our in-house engineering office allows for a smooth design process. Our team is experienced with all major system providers and class societies.





PROCUREMENT AND PREFABRICATION

3C Metal offers complete supply chain solutions through our global sourcing and logistics network. We work with all major system makers in order to provide competitive retrofit packages. All prefabrication is executed in-house, at any of our strategically located global facilities.



INSTALLATION AND COMMISSIONING

With a skilled global workforce, 3C Metal specializes in complex in-service retrofit installations. Our dedicated riding squads are available at short notice to mobilize anywhere in the world.



SERVICE OPTIONS

ENGINEERING AND DESIGN

ONBOARD SURVEY AND 3D SCANNING

3D MODELING AND DESIGN

FEASIBILITY STUDIES

DESIGN CALCULATIONS

CLASS REVIEW AND APPROVALS

PROCUREMENT AND PREFABRICATION

STRUCTURES, PLATFORMS, PIPING, SPOOLS AND MORE

VALVES AND INSTRUMENTATION

GALVANIZING, SURFACE TREATMENT AND PE LINING

GRE AND EXOTIC MATERIALS

LOGISTICS AND PACKAGING

ELECTRICAL

CONTROL SYSTEM INTEGRATION AND UPGRADES

POWER/ CONTROL CABLING

CABLE TRAYS AND MULTI Cable Transits

UPDATES TO LOAD BALANCE AND SINGLE LINE DIAGRAMS

INTEGRATION OF SWITCHBOARDS, DISTRIBUTION BOARDS AND TRANSFORMERS

INSTALLATION

EQUIPMENT FOUNDATIONS AND STRUCTURAL MODIFICATIONS

PENETRATIONS AND PIPE SUPPORTS

INTEGRATION OF ANCILIARY SYSTEMS

INTEGRATION OF NEW PIPING AND TIE-IN SPOOLS

INSTALLATION OF ALL COMPONENTS AND INSTRUMENTATION

SUPPORT

PRE-COMMISSIONING

INSPECTIONS AND TROUBLESHOOTING

EMERGENCY REPAIRS

MODIFICATIONS AND SYSTEM UPGRADES

SUPPLY OF SPARE PARTS

3C METAL GROUP



