

emc

CYBER
ESSENTIALS

CERTIFIED

Process

Our Process Engineering team has extensive experience supporting both brownfield modifications and greenfield developments across a range of complex industrial environments.

Our Engineers and Designers are highly proficient in a variety of specialist engineering tools, enabling the efficient, accurate, and consistent delivery of all process engineering and design activities.

Engineering Expertise from Concept to Completion

At EMC, we combine process engineering expertise with innovative thinking to deliver digital solutions from early conceptual studies through to detailed process design.

Our experienced team, backed by decades of success in cost-effective, schedule-focused execution, solves complex operational challenges with a proven track record of high-quality, reliable outcomes.

Whether supporting greenfield developments, brownfield upgrades, or asset life extension, we deliver practical, process-led solutions tailored to your specific requirements.

With a technology-agnostic approach, we apply the latest methods, standards, and best-fit tools, ensuring compliance, safety, and optimal performance are never compromised.

AVEVA
Partner Ecosystem

System
Integrator

MEMBER

Engineering Services

Process Engineering Capabilities

Our process engineering team has deep experience delivering both brownfield upgrades and greenfield developments across onshore and offshore projects.

Smarter Delivery Through Advanced Engineering Tools

Driving Precision and Performance in Process Design

At EMC, we deploy a powerful suite of industry-standard process engineering tools to deliver accurate, data-driven solutions. From early design concepts to detailed modelling and system optimisation, our digital workflows ensure every project is executed efficiently, compliantly, and seamlessly across disciplines.

Key Tools We Use:

- AVEVA Engineering – Centralised 1D data platform supporting process datasheets, equipment specifications, and tag management.
- AVEVA Diagrams – Intelligent P&ID creation and loop diagrams with live data links to engineering deliverables.
- Aspen HYSYS / Aspen Plus – Advanced simulation tools for steady-state and dynamic process modelling.
- AVEVA Everything3D (E3D) – 3D visualisation to support process layout and spatial validation across disciplines.

Why It Matters:

- ✓ Early identification and mitigation of process design risks
- ✓ Streamlined collaboration with mechanical, piping, and instrumentation teams
- ✓ Improved process accuracy, safety, and compliance
- ✓ Efficient data flow from simulation through to 3D model and deliverables

With EMC, you gain a process engineering partner focused on delivering optimised, efficient, and integrated process solutions, aligned with your technical, operational, and regulatory goals.



Commitment to Quality and Compliance

At EMC, the technical quality of our work is underpinned by our robust Quality Management System, Health, Safety & the Environment to the latest industry codes and standards.

Our structured approach, featuring Discipline Engineers, Technical Authorities, and Discipline Management, ensures all designs go through project multi-discipline reviews and approvals by qualified and experienced professionals, maintaining the highest standards of engineering integrity.



Aveva Systems Integration Partner

EMC Supports the full Engineering suite embracing EPC4.0 and ENG4.0 roadmaps with the release of EMC4.0™

- PRO/II Simulation
- Electrical
- Instrumentation
- Engineering for Process and Mechanical
- P&IDs
- ERM
- ISM/AIM-A
- PCM

Capabilities Snapshot

- Offshore and onshore oil & gas process design and optimisation
- Brownfield process modifications, debottlenecking, and capacity upgrades
- Process system design for FPSOs including separation, compression, and utilities
- Process simulation and modelling using tools such as HYSYS or Aspen Plus
- Development of PFDs, P&IDs, and process control philosophies
- Conceptual studies, feasibility assessments, and detailed process engineering & design
- Production of key process deliverables including line lists, equipment datasheets, and control narratives
- Process engineering support throughout construction, commissioning, and startup phases
- Onshore and offshore process surveys for system validation and upgrade planning
- On-site support for process system integration, testing, and handover

Let's Engineer, Design & Build something exceptional together.

Contact us today to learn how our engineering expertise can bring your project to life.

Contact EMC today! Email colin.fairweather@emcserv.com or gary.patterson@emcserv.com or call us on 020 363 363 03 (Option 2), and let's get started.