

eci group

ECI • Simon Carves • ITEC

World-Leading Technology and Engineering Solutions for Process and Industrial Sectors



ECI Group provides high quality services across the full project life cycle. From expert consultancy, multi-discipline engineering and design, to on-site support during operation and maintenance, ECI Group can adapt our services to suit your project requirements.

We work across a wide range of chemical and petrochemical processes, including:



Polymers & Petrochemicals

- High-Pressure Polyethylene Licensing & Project Delivery.
- Subject Matter Experts across the entire range of polyolefin technologies.
- World's most experienced high-pressure polyethylene specialist.



Other High-Pressure Processes

- Building on our experience in high-pressure polyethylene, we can provide services to a range of high-pressure processes including: ammonia, urea, etc.



Pharmaceuticals

- Engineers experienced with a range of pharmaceutical processes including multi-product bulk pharmaceuticals, R&D programmes, and finished pharmaceuticals.



Advanced Recycling & Net Zero

- Investing in state-of-the-art technologies to increase the recycling of plastics and solid municipal waste, including: biomass fibre & non-woody pellets; plastic dissolution.
- Experienced with a range of waste-to-energy and net zero processes including: biofuels, biomass, CCUS, and hydrogen.



Nuclear

- Over 70 years of experience in the nuclear industry.
- Experienced in all aspects of nuclear engineering project delivery including fuel enrichment, waste vitrification, and decommissioning.



Manufacturing & Process Technologies

- Our engineering skills and project delivery expertise can be leveraged across most chemical processes and manufacturing technologies including: glass making, catalyst production, specialist products, chlor-alkali, etc.




Our Experts

- Skilled engineers and designers across the full range of engineering disciplines, everything from: process to mechanical (static/rotating), piping and pipe stressing, plant layout, electrical, control and instrumentation, civil and structural.
- Experts with 40+ years of experience in the design and operation, and maintenance of processing plants.
- Varied backgrounds in manufacturing (producers), engineering, consultancy and projects delivery.
- Desktop studies and site-based support to suit your requirements.
- **Professional Technical Services:** Expert contract and direct-hire staffing solutions customized to your needs to support your operations or projects execution.

Contact us today to find the best solution for your plant:

 www.ecigrouponline.com

 info@ecigrouponline.com

 **USA:** +1(225)-293-7768

UK: +44(0)161-718-4400

Over 145 Years of Experience
200+ skilled personnel
across 3 global offices

Multi-Discipline Engineering & Design

Process

- Process Simulation
- Heat and Mass Balances
- P&ID development
- Safety & Environmental engineering
 - > Hazard Studies
 - > SIL evaluation
 - > Dynamic modelling
 - > Vapor cloud dispersion modelling

Mechanical

- Design, specification, review and inspection of static, rotating and packaged equipment
- Pressure vessels, pumps, compressors, mechanical handling, specialist package units
- Finite element analysis

Civil & Structural

- Drainage design
- Foundation and piling design
- Reinforced concrete
- Structural Steelwork
- Environmental loading, including wind and Seismic

Piping & Plant Layout

- Design to 3,600bar (>50,000psig)
- Material selection, component design and verification
- Thermal and Vibrational stress analysis of pipe and ducting
- 3D modelling and review

Electrical, Control & Instrumentation

- Control & safety systems
- SIL Verification of existing systems
- Electrical distribution design, MV&LV systems, lighting, earthing, fire alarms, telecoms
- Design for hazardous areas
- Large motor design expertise


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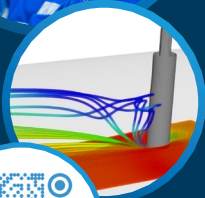
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Services Across the Full Project Life Cycle

Engineering services and technical solutions for all project types, including greenfield and novel project developments to brownfield plant improvements, operation and maintenance, plant studies, technical staffing, and consultancy support.

Concept and Front-End Engineering

- Project strategy
- Concept development
- Feasibility study
- Project planning
- Front-end design
- Estimate preparation
- Technology package (PDP)
- Plant definition
- Contractor evaluation
- Master planning

Basic and Detailed Engineering

- Finite element analysis
- Control systems
- Piping systems
- Relief analysis and verifications
- Flare systems and VOC abatement
- Vessel and equipment FFS
- Electrical systems modelling
- SIL/LOPA
- PHA facilitation/hazard studies
- PE review/sealing

Procurement

- Vendor qualification
- Technical and Commercial Bid analysis
- Pre- and post-order management
- Inspection and Expediting support

On-Site Services

- Commissioning support
- Construction management
- Shutdowns and turnarounds

Plant Upgrades

- Debottlenecking
- Process optimization
- Reliability improvements

Support Services

- Site selection
- Subcontract RFI/bid evaluations
- Project management
- Project controls
- Cost estimating
- Scheduling/planning
- Quality assurance/quality control

Technical Staffing

- Plant personnel needs for any facility worldwide
- No duration constraints - temporary project influx or turnarounds to long-term placements
- All roles in operations, maintenance and management

Consultancy

- "Zero-Capital" improvements
- Safety, Quality, and Environmental performance studies
- Plant Operability and reliability reviews
- Fitness-for-service evaluations
- Profitability Improvements
- Professional Engineering stamping

