Process engineering
Support for offshore assets

Are you always confident that your process designs are safe to operate?

Are you sure that proposed process changes will integrate fully with your existing processes and equipment?

Do you find it hard to find process engineering support that is flexible, competent to work onshore / offshore and considerate of your valuable time?

Process engineering is at the heart of all process industry operations: delivering safe, efficient and environmentally sustainable operations. Good process engineers play a vital role in improving operations, business performance and managing risk; supporting all parts of the operations lifecycle.

A good engineer needs very broad experience to independently investigate, analyse and provide pragmatic solutions for everyday operational problems. Good engineers also need to provide safe and compliant designs for new projects and existing process modifications. Increasingly they are difficult to find, train and develop.

Capabilities
ABB has a very strong team of chemical engineers with a broad range of design and operational experience in the offshore oil and gas industry. ABB has increased our presence in Aberdeen and Humberside, creating a pool of engineers competent to support clients with offshore operations. ABB’s flexible approach allows the team to support our customers direct at their offices onshore / offshore or from any of our regional offices.

ABB’s expertise allows us to offer practical and pragmatic advice to offshore operators and to turn recommendations into beneficial solutions. We can support all phases of operations; new projects and modifications, supporting and improving existing operations and the important area of improving the safety of operations.

In particular ABB offers:
- A deep operational understanding, based on our heritage and approach
- A broad experience of processes across all unit operations
- Specialist expertise in the safety related aspects of process design and support
- The backup of a range of uniquely experienced engineers from other functions to support our process work - including rotating equipment, vessels, control, electrical & instrumental, inspection, integrity and safety specialists
Our experience
We work flexibly with our customers across a broad spectrum of process engineering tasks. Some examples of the services we offer can be explained in 3 broad areas:

Process development and design - existing and new processes
- Inherent safety in design
- Concept studies
- Process option generation, screening and selection
- Scale up and risk evaluation
- Technology economic assessment
- Process control philosophy and safety case
- Front End Engineering Design (FEED and FEEP)
- Detailed design
- Process modelling (HYSYS)
- Safety critical elements identification, review and documentation

Process operational improvement and support (onshore / offshore)
- Onshore and offshore data collection, site survey, investigation and analysis
- Design assessment and 3rd party review
- De-bottlenecking studies and design
- Process modelling and optimisation
- Process control assessments
- Energy and utilities assessments
- Troubleshooting and technical support
- Engineering support
- Unit operations assessment
- Commissioning support and operating procedures
- P&ID, C&E, PFD and SRD as-built

Benefits
Working with ABB’s process engineering support brings a range of benefits including:
- Ready access to operationally focused experienced engineers competent to work onshore and offshore
- Link to specialists in other engineering disciplines
- Pragmatic approach
- Unparalleled experience in safety engineering
- Efficient and effective working supported by leading edge approaches and tools - including ABB’s PEL software for fast and reliable process calculations
- Pool of engineers based in the UK, competent to support clients operations onshore or offshore