



Engineering

We provide new and innovative solutions

Abalto provide new and innovative solutions utilising our core staff that have technical skills and wealth of experience. We have the ability to understand project requirements and translate them into clear and workable project specifications.

Detail Design

We outline and agree the design basis together with the deliverables acceptance criteria with our clients. This helps us manage the design and maintain control on cost and time and yet ensure an implement able realistic design. We further develop and validate equipment and instrument datasheets and clarify the customer specification to compile actionable Enquiry Requisitions that are floated to suppliers.

We develop detailed drawings such as General Arrangement, Layout Drawings, Loop Drawings. In Design HSE we facilitate and deliver workshops for hazard and operability studies (HAZOP), layer of protection analysis LOPA and SIL classification, quantitative risk assessment (QRA), Identification of safety critical elements and safety case development.

Other design deliverables that we have delivered include philosophies, narratives, quality plan, ITP, interface documents, operation and maintenance manuals, equipment and package specifications, method statements, project planning and change control procedures.

Abalto strength in engineering is drawn from its core team of engineers. We follow tried and tested engineering methodology and implement best practices to the highest quality and HSE standards gained from our successfully delivered projects. Our aim is to ensure that the best development solution is identified in order to provide maximum value to our customers.

Abalto capability extends to tender document preparations, technical and commercial bids evaluation services which are delivered independent of FEED.

Front End Engineering Design (FEED)

Abalto take the specifications further in details to produce data sheets utilizing process material balance. When our involvement starts at FEED we maintain an integrated design team with the client engineers to guarantee our quality and timely scope delivery.

To deliver FEED packages, we work closely with our clients and in large projects integrate the client engineers into our engineering team. With this approach the client continuously evaluates and selects options to approve the engineering deliverable to maintain their compliance.

Project uncertainties result in inflated execution cost if not managed during FEED, therefore at **Abalto** with our close client engagement we provide clear specifications and workable FEED packages minimising uncertainty as far as practically possible.

Abalto also provides EPC tender document preparation during FEED where the EPC or EPIC scope and deliverable are outlined with minimal uncertainty.

Conceptual Design

Abalto engineers work with our clients providing our engineering services in methodical Concept Selection, Analysis and Recommendation. We have the capability and experience to form multidisciplinary team to work on opportunity framing, identifying project risks and develop project objectives into actionable scope with outlined cost and schedule.

At this early project phase we develop preliminary Piping and Instrumentation Diagram, develop control and safeguarding philosophy defining equipment types and process packages that need specialist licensors. We ensure project front end loading would provide all data required by FEED team with minimised uncertainty.