

Front End Engineering Design (FEED)



FEED is an essential part of the project lifecycle after successful option identification and assessment during the concept phase. A robust FEED will deliver not just the final concept to be taken forward into construction, but will also provide the estimate for final sanction together with the documentation for the next contracting phases. Front-end engineering and design is the work required to produce quality process and engineering documentation of sufficient depth, defining the project requirements for detailed engineering, procurement, fabrication and construction of facilities and supporting a ± 10 percent project cost estimate.

This distinct project phase is typically used to:

- Develop the engineering design packages that can be used to bid a lump sum EPC scope and/or provide the foundation for the detailed engineering phase
- Finalise the selection of materials for plant and pipelines
- Perform operability and safety studies which include control strategy development, overpressure protection
- Long lead item identification which enables procurement activity to commence prior to the main contract award
- Address and resolve environmental and disposal issues
- Prepare cost estimates for scope definition and for project funding