



ENGINEERING PROCUREMENT AND CONSTRUCTION (EPC)

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ENGINEERING, PROCUREMENT, CONSTRUCTION

- ◆ Engineering, Procurement, Construction (EPC) contractors in Pakistan usually act as turn-key solution providers. The EPC contractor carries out the detailed engineering design of the project, procures related equipment and constructs to deliver a functioning facility or asset to their clients.
- ◆ EPC companies provides a wide scope of activities including Turnkey (EPC) Solutions, Industrial Construction (Civil, Mechanical & Electrical), plant Shutdown & Turnaround Maintenance, Plant Modification & Revamp, Process Equipment Manufacturing and design build Mechanical, Electrical, and Plumbing services (MEP Works).

TYPES OF CONTRACTS

1. Unit price contract – This contract type is based on anticipated quantities of items which are counted in the project in addition to their unit prices. The final price of the project depends upon the quantities required to carry out the work. Generally, this contract is suitable only for construction and supplier projects which involve accurate identification of different types of items, but not their numbers, in the contract documents.

2. Fixed Price Contract (Lump sum contract) – Under this contract type, the engineer or contractor agrees to perform the specified and described project for a fixed price. This type of contract is very often used in engineering contracts.

A Lump Sum or Fixed Price contract is appropriate where scope and schedule of the project are defined sufficiently thus allowing the contractor or engineer to estimate the costs of the project.

TYPES OF CONTRACTS

3. Cost plus contract – The cost plus contract is an agreement which involves the buyer's consent to pay the complete cost for material and labor in addition to the amount for contractor overhead and profit. This contract type is favored where the scope of work is highly uncertain in addition to the types of labor, material, and equipment being similarly uncertain in nature.

4. Incentive contracts – The incentive contracts feature compensation based on the contracting and/or engineering performance in accord with an agreed target – schedule, quality, and budget.

5. Percentage of construction contracts – This contract type is common for engineering contracts. The compensation involved in these contracts is based on a percentage of the cost of construction.

EPC CONTRACTORS – RISKS

- ◆ Starting a project in a geography without acquiring knowledge of all operational parameters
- ◆ Bidding a project which substantially exceeds your typical project value/size
- ◆ Contracting with a party who is financially or politically unstable
- ◆ Starting a contract that requires expertise for a type of work not previously performed by your firm
- ◆ Signing a contract with an incomplete project definition, incomplete work scope, or ill-defined performance requirements or Signing unbalanced contracts that place too much risk on one party
- ◆ Allowing project management team to deviate from the requirements of the contract

EPC CONTRACTORS – RISKS

- ◆ Unable to recognize changes to the contract which have an adverse impact on your EPC's operations
- ◆ Failing to document problems, delays, disruptions, and disagreements
- ◆ Failing to address at an early stage changes and disruptions in the work
- ◆ Failing to have well-defined changes and dispute resolution provisions

Bibliography

- The Engineering, Procurement and Construction Portal - www.epcengineer.com
- http://www.forum.rice.edu/wp-content/uploads/roundtables/RT_101210_Adams.pdf

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