ABSTRAK

Proyek EPC adalah salah satu bentuk konsep manajemen proyek yang melimpahkan tanggung jawab atas kegiatan perancangan/desain (*Engineering*), pengadaan material/peralatan (*Procurement*) dan pelaksanaan konstruksi (*Construction*) kepada kontraktor EPC. Proyek ini seringkali ditemukan pada proyek skala besar atau biasa dikenal dengan istilah proyek spesial, seperti pembangunan industri atau pabrik seperti kilang minyak, pabrik pupuk, yang membutuhkan dana besar dan mencapai ribuan item kegiatan. Sistem pengendalian mutu Proyek EPC sangat menarik untuk diketahui mengingat jumlah dan jenis kegiatan yang dihadapi kontraktor EPC begitu banyak melebihi kapasitas proyek tradisional. Untuk itu penelitian ini mengambil contoh studi kasus pada Proyek EPC 1 Banyu Urip, Blok Cepu.

Maksud dan tujuan penulisan tugas akhir ini adalah untuk mengetahui skema proses *engineering, procurement,* dan *construction* proyek EPC, membedakan karakteristik sistem manajemen mutu pada proyek EPC dengan proyek tradisional, serta untuk mengetahui fungsi mutu suatu proyek tradisional maupun EPC, apakah mengutamakan *Quality Inspection, Quality Control, Quality Assurance,* atau *Total Quality Management*

Dari hasil penelitian diketahui bahwa sistem pengendalian mutu proyek EPC lebih kompleks dibandingkan pada proyek tradisional, karena mempunyai penanganan yang khusus, serta setiap detail pekerjaan memiliki dokumen acuan sebagai bukti kualitas mutu telah terpenuhi, selain itu terdapat bermacam disiplin ilmu yang terlibat sehingga diperlukan suatu koordinasi yang baik pada tiap disiplin ilmu. Pada proyek EPC maupun proyek tradisional menerapkan fungsi mutu berdasarkan *Quality Inspection, Quality Control,* dan *Quality Assurance* agar *owner* benar-benar puas dengan hasil kinerja kontraktor EPC meskipun terdapat ribuan pekerjaan yang harus ditangani.

Kata kunci : EPC, *Owner, Quality Inspection, Quality Control, Quality Assurance,* Tradisional.

ABSTRACT

EPC Project is one form of the concept of project management delegate responsibility for the activities of design / design (Engineering), procurement of material / equipment (Procurement) and the construction (Construction) to the EPC contractor. These projects are often found in large-scale projects, commonly known by the term special projects, such as construction or manufacturing industries such as oil refineries, fertilizer plants, which require a large investment in the thousands of items and activities. EPC Project quality control system is very interesting to note given the number and types of activities that the EPC contractor faced so much beyond the capacity of traditional projects. For example, this research takes a case study in EPC Project 1 Banyu Urip, Cepu Block.

The purpose and objective of this thesis is to investigate the process scheme engineering, procurement, and construction EPC project, distinguishing characteristics of quality management systems in the EPC projects with traditional project, as well as to determine the function of the quality of a traditional and EPC projects, whether prioritizing Quality Inspection, Quality Control, Quality Assurance, or Total Quality Management

The survey results revealed that the control system is more complex EPC projects than in traditional projects, because it has special handling, as well as every detail of the work has reference document as proof of the quality of quality have been met, except that there are a variety of disciplines involved so we need a coordination good in each discipline. Either the EPC project or the traditional project implementing quality function based Quality Inspection, Quality Control, and *Quality Assurance that the owner was completely satisfied with the results of the EPC contractor's performance even though there are thousands of jobs that need to be addressed.*

Keywords : EPC, Owner, Quality Inspection, Quality Control, Quality Assurance, Traditional.