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TITLE OF DIPLOMA THESIS:

Concurrent Engineering

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ABSTRACT

Conception, planning and design, construction, operation, maintenance, rehabilitation, renovation and, in some cases, demolition, are the various phases within the life cycle of a construction project. Each of these successive phases, is performed by an independent manner within the existing professional "decks" and the deliverables of each phase are transferred to the next "as is". This traditional approach, usually leads to errors in the design of construction projects accompanied by revisions and redesign, construction failures, operational deficiencies, time delays and high final cost. Under these circumstances, the discontent of engineering companies' clients and owners of projects is more than "guaranteed". Concurrent Engineering is a design and engineering management philosophy, which supports the complete project life cycle analysis, setting from the beginning, under simultaneous examination all life cycle phases. Compiling and synthesizing in the initiation phase, the technical knowledge and information required by the whole life cycle processes and ensuring the active participation and the smooth cooperation of all professionals involved, potential risks are limited and expectations of the client/owner are precise determined. Thus, the construction of cost-effective facilities, of high engineering and functional quality standards, is absolutely possible for the benefit of engineering companies, their customers and the society.

KEYWORDS

Concurrent, Life cycle, Management