3.0 Research Methodology

Both primary and secondary data were gathered for this research project. Primary data are obtained by having information feedback from the representatives of each of the Bauer Far East locations, and secondary data was obtained from Bauer catalogues, manuals and literatures.

The exploratory research method [3] is used for this study. The purpose of exploratory research is intertwined with the need for a clear and precise statement of the recognized problem. Three interrelated purposes for exploratory research exist: 1) diagnosing a situation, 2) screening alternatives, and 3) discovering new ideas.

Diagnosing a Situation. Exploratory research helps diagnose the dimensions of problems so that successive research projects will be on target. It helps to set priority for research.

Screening Alternatives. Exploratory research is used to determine the best alternatives due budget constraints. Although this aspect of exploratory research is not a substitute for conclusive research, certain evaluative information can be acquired in exploratory studies.

Discovering new ideas. Exploratory research is often used to generate new ideas.

The following project development cycle [12] will be followed for this research project.

3.1 Preliminary Business Requirement which studies the current business conditions, the problems faced by the company based on secondary data and initial observation, and a proposed solution based on initial findings.

- 3.2 Survey Results which studies the current system used by each of the locations and also reviews the actual problems faced by the company based on feedbacks from the survey conducted.
- 3.3 Detailed Business Requirements which suggests alternative courses of actions for the business requirements, evaluates the alternative courses of actions, and recommends the best solution. System and manpower requirements based on the recommended solution will also be discussed here.
- 3.4 System Design, Development, Implementation and Installation which requires the design of the system, computer program development, implementation methods and installation of the system will not be discussed here due to the scope of the project and time constraint.
- 3.5 System Performance Review which measures the performance of the system after implementation against expected results.

4.0 Survey Results and Problems Encountered

A research by means of experience survey [3] was carried out on all the Bauer Far East locations to find out the following:

- i) how the equipment and tools inventory was managed,
- ii) how the spare parts inventory was managed, and
- iii) the problems faced by the location.