Kens System Consulting Co., Ltd.

Ship Repair Management System Ver.3

1. Forward

The main purpose of the system is to manage the ship repair by a few staffs.

The system assists for all fields of the repair business, such as making a prior estimate, work-list, a repair plan and schedule, an operation plan of the dock, a materials procurement check, work result check, and standard specifications management.

The principle of this system is to use standard specifications because the work efficiency is bad though it can operate even if standard specifications are not especially prepared.

- 2. Feature of version 3 systems
 - (1) Reduction in whole of standard specifications number

It proposes to change the idea here as follows though it made an effort to have standardized the specification to the detail up to now.

Standard specifications should be made the one of extent to which the content of work could be understood between the shipyard and clients.

For the job instruction, a necessary and detailed work breakdown should be expressed and recorded as a process of job, in the shipyard.

(2) Filing assistance in process table

A detailed plan concerning the job and the material should be described in the process table.

The job process and the material arrangements can be optionally described in addition to the standard or modified, or eliminated, if necessary.

The corrected content is collected automatically and the added one will be displayed from next time as a standard.

Although the changed text itself can be used to estimate in next time, there is a way that the content is examined closely once and its revised content will be used as a new standard process.

Besides, it is possible that the amplification not described in standard specifications can be filled in on the estimate by extracting it from the description of the process part if necessary.

(3) Idea on estimate work

Up to now, the system had aimed at a mechanical estimate that minimized the individual variation.

In this system, the person in charge shall be requested that he plans for how to complete the job and estimates the necessary man-hour and material in accordance with his own repair plan. That is, it is considered to use the skill and experience of engineers.

However, in the specification of the same job, there is a comparative amount about the minimum and the maximum scale in the shipyard, so that the difference of the estimate by the individual should not grow so much.



Note: Assistance for preparation of initial data

Kens System Consulting Co. will undertake the preparation task such as to make "Standard Specification", preliminary process table, coding of jobs, etc., if requested.

3. System Flow

The outline of process as follows:



4. Outline of System

4.1 Estimate

The System makes estimates for the internal control and for the client on the prior and completion estimates, and the work voucher.

When a similar past record is not appropriated, the estimates in detail are elaborated according to the standard specifications corresponding to client's specifications.

And they are summarized in one sheet so as to check up as a whole. Finally, the estimate is mechanically made from the summarized sheet.

There is an advantage that the instruction to the shop floor can be done more precisely because it uses process table when estimating.

4.2 Work results collection and analysis

The collection of the results on man-hours should be carried out by the man-hour collection system (option), and it is necessary to take the result into this system.

The result is separately input for the macro analysis and for a detailed analysis. A detailed analysis is described in the Excel sheet of the same form with the estimate, as it is easy to make comparative study.

4.3 Macroscopic observation

It is possible to retrieve records of used man-hours and/or quoted price as a whole by kinds of repair, kinds of ship, ages of ship, sizes of ship, classification society of ship, domestic or foreign, etc., so as to confirm an estimated value would be in a range of reasonable.

4.4 Master schedule of yards

It is possible to display graphically about the work schedule, operation, and the dock operation of the entire repair ship business. They are useful for the strategy and plan of the factory management by considering them.

4.5 Work schedule and load accumulation table

The work schedules on work-orders or shops can be issued with the unit of day or hour.

In addition, the work schedule can be issued for the planned period, such as for 2 days, so that the schedule may be used as a job order for a shop floor.

The work-load table is similarly output according to the work-order number and the unit of work organization in a scale of day or hour. The work schedule is made according to the milestones such as arrive, docking, undocking, and departure as well as a Master schedule of the yards. The work schedule is being written with the working hours, only the operation time in a day, for instance, eight hours is taken out.

4.6 Materials follow-up

The material planned should be followed up.

If the system could link up with the purchase system and cooperation with inventory control system, it becomes possible the management of the high degree (option).

This system checks and follows up the procurement situation of materials by using the information of estimating.

4.7 Master file management

Various master data that support systems such as standard specifications, register of work order, etc. are included in the menu of this supplementary system. The register of work order keeps the basic record such as main particular of ship, principal schedule, work budget, etc.



§ Schedule Sample by Work-Order



§ Work Load Sample by Work-Order

§ Sample of Master Schedule

