



4c Estimating and Planning for Ship Repair

Introduction

A special version of the powerful 4c project and programme management system has now been developed to meet the specific needs of ship repair companies, whilst retaining all of 4c's ease of use, extensive configurability and complete flexibility, as well as utilising 4c's standard task and resource scheduling facilities.

Ship details such as the Lloyds reference, dimensions, tonnage, owner, agent, etc., can be entered, and there are additional libraries holding details of drydocks/wharves, vessel types and stock (materials).

The extended Templates facility, called the "Black Book", comprises groups of resourced and costed tasks which make up the standard operations and sub-operations, as well as special areas for specifying coatings and pipework.

An optional Marketing Module has also been created, which allows you to monitor the movements of ships and their repair cycles.

The Estimating and Planning System

Creating an Estimate

By entering details of the required items, and selecting operations and sub-operations from the Black Book, an estimate can be rapidly produced. Having the "expert" data in the system reduces the need for highly-skilled staff to produce every estimate: your senior estimators can be used to review and refine estimates prepared by less experienced staff.

At all stages and levels, standard cost rates and charge values can be overridden. These can be further adjusted by applying various factors, as well as aggregation and rounding rules, to arrive at the final estimate, which can be as detailed as required.

Where necessary, details of materials and sub-contracts can be added, and designated suppliers selected.

To speed up the process even more, a whole estimate, or selected items in an estimate, can be copied into another estimate.

Requests for Quotes

As part of the sub-contracts and materials estimate, detailed requests for quotes can be prepared, grouped by item type, and sent out to multiple suppliers. When the quotes are received, the most advantageous ones can be selected: the estimate is automatically updated with the relevant costs.

Generating the Bid

Further adjustments may be made when converting the estimate into a bid. Different combinations of factors can be tried out to arrive at the most advantageous bid – this might include specifying a bid value or a desired contribution.

From Bid to Plan

If the bid is won, the estimate is converted into a project plan which is then used to monitor the actual job. The estimate tasks form the basis for the plan, but they can be broken down into more detailed sub-tasks: for instance, separate sub-tasks for each trade used on a task can be created. Milestones can be built into the plan to aid monitoring.

4c's built-in resource management facilities allow for the monitoring of workloads across the organisation, and the scheduling of effort to smooth the utilisation of resources.

Progress on tasks can be marked using simple percentage check boxes, or by entering the actual percent complete values, until the whole job is completed.

Invoicing

The standard 4c invoicing facilities have been extended to allow for changes to the original estimate – such changes can include complete and partial cancellation of items, extra items, and sub-contract transfers. Invoices can be quickly produced in any currency (currencies are user-defined).



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The Marketing Module

Using data from Lloyds, as well as allowing for the direct entry of marketing intelligence collected from other sources, the optional marketing module helps you track ships' movements and the nature of the repairs which are due. The information can be analysed by owner and location, allowing you to target specific groups of owners in a campaign.

The ship database holds categorised comments, ownership and repair history, and technical information.

Because the marketing module is fully integrated with the Estimating system, this information can assist in the production of highly specific estimates based on detailed ship data.

What are the benefits of using 4c?

The principal benefits can be summarised as:

- produce estimates accurately and rapidly – reported time savings range from 25% to over 200%
- ensure consistency, with all estimators in all yards using the same information, with less need for highly-skilled staff
- achieve optimum bid margins, by comparing multiple quotes for the supply of sub-contracts and/or materials, and by applying different cost and charge rate factors
- no need for re-keying - estimates are easily converted into plans
- cost and scheduling variances are quickly highlighted
- reduce invoicing delays by a factor of 2 to 4, from the full integration of cancellations and extras with the invoicing system
- using the marketing module keeps you ahead of the game

If you would like further information on how 4c can help your ship repair business, please contact us:

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