Product Features, Benefits and Deployment

Of

Fleet Management System

Prepared By:

Version 1.1
February 2, 2013

Revision History

Date	Version	Description	Author
May 15, 2012	1.0	Draft & Initial Version	Koushik Ghosh, Technical PM
February 2, 2013	1.1	Updated Version	Koushik Ghosh, Technical PM

SETUP AND ADMINISTRATION
MACHINERY MAINTENANCE MANAGEMENT
PURCHASE MANAGEMENT
INVENTORY MANAGEMENT
DRY DOCK MANAGEMENT
CREW MANAGEMENT
SHIP ADMINISTRATION
QHSE MANAGEMENT

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1. Integrated Fleet Management System (ATL's product)

The FMS is a user-friendly integrated web-based modular software application that covers the principal aspects of a vessel's operation and comes with an exclusive FMS package that caters to systematically tracking and managing of user needs specific to vessel operation. The FMS software is divided into the following modules as per needs of the Fleet Management:

- Machinery Maintenance Management Module
- Purchase Management Module
- Inventory Management Module
- Dry Dock Management Module
- Crew Management Module
- Ship Administration Management Module
- Quality, Health, Safety and Environment Management Module

1.1 Features

The features of the different modules are described as follows:

FMS Web Solution Module	Features
Machinery Maintenance Management	• Customizable Fleet-wide maintenance dashboard. • Generates Planned and Breakdown maintenance work details. • Creation of Calendar based/Periodical Maintenance work data using time-based scheduler as per Statutory as well as Non Statutory requirement. • Creation of Calendar based/Periodical as well as Running Hours based Maintenance work data using Manual Entry Form as per Statutory as well as Non Statutory requirement. • Continuous monitoring for assignment of maintenance work and completion of the same with popup message. • Captures Spares used for maintenance work from different location as per requirement (Ship as well as Warehouse). • Creation of history for completed maintenance work data. • Internal communication via intranet mail system. • Continuous monitoring maintenance job and completion of the same using popup message on maintenance dashboard.
	• Customizable Fleet-wide purchase dashboard. • Generation of Auto Indent for spares below the Re-order Level as well as Manual Indent as per requirement. • Captures Indent Approval process.

FMS Web Solution Module	Features
Purchase Management	• Floating of Quotation to different vendors via mail along with upload/download attachment activity or through interface to the vender for required information using download option (to be implemented later). • Receiving quotation via mail along with uploads and downloads attachment activity. • Automatic data updating in database based on quotation receive via mail. • Comparative statement for vendor selection. • Conversion of RFQ to Purchase Order etc. • Internal communication via intranet mail system. • Continuous monitoring of pending work using message on purchase dashboard.
Inventory Management	• Customizable Fleet-wide inventory dashboard. • Component-wise materials received based on Purchase Order. • Location-wise materials distribution at the time of receiving materials. • Stock Reconciliation for increase/decrease spares. • Materials inventory log for "Balance Sheet of components". • Internal communication via intranet mail system. • System remainder using message on inventory dashboard.
Dry Dock Management	• Customizable Fleet-wide dry dock dashboard. • Creation of Master data for Job Head, Jobs, Service and its activities, Yard details. • Creation of Repair Job Card. • Floating of Quotation to different vendors via mail along with upload/download attachment activity or through interface to the vender for required information using download option (to be implemented later). • Receiving quotation via mail along with uploads and downloads attachment activity. • Automatic data updating in database based on quotation receive via mail. • Comparative statement for vendor selection for dry dock job. • Continuous monitoring dry dock job and completion of the same with popup message.
Crew Management	• Customizable Staff category-wise (OFFSHORE / SHORE / WORKSHOP /SUPPORT) crew dashboard. • Creation of Crew details including Contract, Biological details and Certificates. • Provision for Leave details along with Approval Level. • Provision for Vacation/Exit details. • Provision for Loan details along with Approval Level. • Creation of Duty Roster and Attendance Details.

FMS - Product Features, Benefits and Deployment

FMS Web Solution Module	Features
	• Generation of Travel Details of Personnel along with Reliver Plan. • Creation of Pay Slip and register etc.
Ship Administration Management	• Customizable Fleet-wide ship admin dashboard. • Streamlining of ordering provisions. • Streamlining of ordering Bunkers and Lubes. • Captures Appraisal and Promotion process. • Captures Training and Certificate details.
Quality, Health, Safety and Environment Management	• Provision for Audit Reports, Incident Reports, Drills and Inspection Reports. • Provision for Corrective Action Requests associated with any Safety Management System. • Automatic generation of Corrective Action Request in the Planned Maintenance Calendar.

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1.2 Benefits

The benefits of different modules of FMS software are described as follows:

FMS Web Solution Module	Benefits
Machinery Maintenance Management	**Save Time** by organizing maintenance and repair tasks **Reduce Risks** by maintaining regulatory surveys and certificates **Save Money** by planning maintenance and coordinating parts availability **Improve Efficiency** by forecasting work to be performed and staffing needs **Eliminate** unnecessary maintenance task **Improve** Safety, Environmental impact, Economic return and understanding of relationship between component failures and overall system performance
Purchase & Inventory Management	**Save Time** with user-defined re-ordering levels for auto-requisitioning **Reduce Risks** by controlling purchasing authority per user **Save Money** by managing budgets per vessel and account **Improve Efficiency** by monitoring location-wise items and interfacing with accounts payable systems
Dry Dock Management	**Save Time** by standardizing the dry-dock administration process **Reduce Risks** by integrating dry-dock tasks with routine maintenance **Save Money** by reducing yard over-charges and duplicate billing **Improve Efficiency** by coordinating work activities
Crew Management	**Save Time** by reducing data entry duplication **Reduce Risks** by regulating user access to sensitive information **Save Money** by reducing of likelihood of reporting errors **Improve Efficiency** by interfacing with external accounts systems and replicating data between ship and shore
Ship Administration Management	**Save Time** by interfacing with external accounting and tax compliance systems **Reduce Risks** by preventing fines associated with reporting errors **Save Money** by controlling expenses per vessel based on budget **Improve Efficiency** by completing port clearance documents quickly
	Save Time by having a single data entry and control source for all QHSE issues

FMS Web Solution Module	Benefits
Quality, Health, Safety and Environment Management	• **Reduce Risks** by documenting and analyzing near miss reports • **Save Money** by maintaining records for internal, external or shipboard audits • **Improve Efficiency** by integrating data collected from other modules

FLEET MANAGEMENT SYSTEM

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2. FMS Deployment

Axsys has deployed FMS at Marine Services Co. Ltd. in Kingdom of Saudi Arabia as its first client. The pictures of MSCL Team and Axsys Team are given below:

Picture 1: MSCL Staff at Port Rabigh Office

Picture 2: Koushik Ghosh of Axsys with Capt. Rashid Zaman and Capt. Farrukh Usmani

Picture 3: Mr. Koushik Ghosh of Axsys working at MSCL Office for FMS Deployment

Picture 4: Mr. Koushik Ghosh of Axsys working at MSCL Server Room for FMS Deployment

3. Contact Details

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