

**SMMS:**

Ship Maintenance and Management System has been designed to provide a system for scheduling of Planned Maintenance Jobs onboard ships, Requisitions, Purchases and Inventory Control as well as ISM documentation, in a single software package. It is a Windows based software with unique User Friendly interface and high level of Data and Software Security. It is a multi-user software and can run on any type of Windows based Network and several users accessing it simultaneously.

Why is this Software required:

How often do you experience unexpected breakdowns? How often spares for important machinery have been urgently flown in to rectify the breakdowns? All these unexpected breakdowns cost a lot of money to the owners and as such upset budget. Most of these breakdowns occur because no planned maintenance was in effect. SMMS Software has been designed and developed to enable various Shipboard maintenance jobs to be scheduled and to carry out timely Maintenance for each and every Component in the Ship. Apart from features of Maintenance Planning, SMMS Software includes extensive modules for streamlining Requisitions and Purchases, Inventory control, Organizing Spare Parts and Consumables onboard, Budgets based on factual Reports and Charts analysis etc. The main objective of SMMS is to assist Owners in reducing operating costs, cut equipment downtime, and at the same time provides a very user-friendly and automated Job notification system.

SMMS is an essential tool as it provides all kind of factual Reports and Graphs on status of onboard Maintenance, Surveys, Certificates, Purchasing and Budgets.

The e-Documentation feature has the ability to incorporate all Company stationery forms along with the ISM documents. All kind of Excel or Word documents can be stored in this system. In addition, SMMS Software provides user with the facility of an inbuilt word processor with nearly all the functions of any powerful word processor.

Components (51)

Name	Component No	Status	Model
LUB OIL PURIFIER SYSTEM	712.00.00	Critical	ALPHA LAVAL
LUB OIL TESTS	003.00.00	Normal	
LUBE OIL SYSTEMS	713.00.00	Normal	ALPHA LAVAL
MAIN ENGINE	601.00.00	Critical	6UEC60LS II
MAIN GENERATOR ENGINE No1 MG1	651.00.00	Normal	6N260L-UN

My Work

Component	Job/WorkOrder	Due On
CAMSHAFT	ME INSPECT FUEL CAMS RUNNING SURFACE	29-Mar-2003
MAIN ENGINE	ME TEST LOCAL STATION START/STOP-T052	29-Mar-2003
F.O. PURIFIER No1	OVERHAUL PURIFIER-0720	30-Mar-2003
HYDRAULIC PUMP - HOIST	DECK CRANE INSPECTION OF PUMP/MOTOR	09-Apr-2003

Job Details

Job Code: 0720
 Name : OVERHAUL PURIFIER-0720
 12 MONTHS ROUTINE
 COMPLETE OVERHAUL.
 1) TAKE OUT THE HORIZONTAL AND VERTICAL SHAFT.
 2) ALL BEARINGS TO BE RENEWED.

User : SUPER Group : Admin SMMS (Trial Version) : Developed by - Vertex Infosoft Solutions 492 Job(s) 3/30/03

Main Screen view of SMMS

MAIN ENGINE (49)

Name	Component No	Status
ME AIR COOLER OUTLET TEMP ABNORMAL	111.10.57	Normal
ME ALARM SYSTEM LOW VOLTAGE (ALARM)	111.10.81	Normal
ME C/C OILMIST HIGH (LOAD REDUCTION)	111.10.70	Normal
ME CHANGE OVER OF CONTROLS BRIDGE -> ER	111.10.83	Normal
ME CONTROL SYSTEM AIR PRESS LOW - ALARM	111.10.76	Normal
ME COOL EACH CYL OUTLET HIGH TEMP-ALARM	111.10.33	Normal
ME CRANKCASE OIL MIST HIGH (ALARM)	111.10.69	Normal
ME CRITICAL SPEED ALARM	111.10.04	Normal
ME CYL COOL INLET LOW PRESS (ALARM)	111.10.31	Normal

My Work

Due On	Component	Job/WorkOrder	Last On
13-Mar-2002	AE F.O. ABNORMAL TEMP (VISCOSITY) ALARM	ABNORMAL VISCOSITY FUEL INLET-V010	13-Dec-2001
03-Oct-2002	CARGO HOLD OVERCOOLING ALARM	TEMPERATURE ALARM / TRIP - SIMULATION	03-Jul-2002
05-Oct-2002	BURNING PMP FOR BOILER	MANUAL SWITCH - PUT OFF-E000	05-Jul-2002
06-Oct-2002	WASTE OIL TANK NO.1 LOW LEVEL ALARM	TANK LEVEL (BY SIMULATION)-L030	06-Jul-2002
09-Oct-2002	AE REMOTE START/STOP AT CONTROL ROOM	MANUAL TEST-H000	09-Jul-2002
14-Oct-2002	NO.1 F.O.TANK(S) LEVEL ALARM	TANK LEVEL (BY SIMULATION)-L030	14-Jul-2002
16-Oct-2002	AE L.O.INLET LOW PRESS (ALARM) 1	CLOSE ISOLATING VALVE TO SENSOR-P020	16-Jul-2002

User: SUPER Group: Admin Developed by: Ve 205 Job(s) 04/18/2003

Automation Department with Jobs defined for EO/ECO requirements

Departments:

SMMS Software provides the facility of dividing the maintenance into various user defined departments like Engine, Deck, Electrical, Automation, etc. Jobs for various Components can be defined in these departments e.g. all EO/ECO class Jobs for Components consisting of testing of various alarms and trips can be allocated to Automation department.

Job Scheduling:

SMMS helps to plan and schedule all types of Maintenance Jobs in an effective way, thereby achieving better time, money and manpower management. Scheduling of Jobs includes a text view of the description of work to be done along with relevant procedure, Documents and Images, expected time duration and Person/Group designated for the Job. Re-scheduling of Jobs, if required, is also possible. **Automatic Notification of various pending jobs on screen is an exclusive feature of SMMS.** Status of all pending Jobs appears automatically, thus eliminating the need to print any kind of reports for

viewing pending Jobs. **My Work** window on the Main Screen is a powerful feature that lists the status of all pending Jobs. Filter option in this feature allows the user to view as desired. For example, user has a choice to filter various jobs on the basis of “**All Jobs**”, “**Overdue Jobs**”, “**In Window Jobs**” or just a “**Reminder**” of forthcoming Jobs on a click of the mouse button. Moreover, Jobs can be separately viewed on basis such as Critical, Work Orders, Deferred, Survey, etc. Unlimited view combinations are possible. The status for Pending Certificates, Surveys and Inspections can also be viewed in **My Work** window. This way SMMS ensures that no pending Job goes unnoticed. For knowing the scope of work to be done for particular Job highlighted in My Work Window, a simple press of **F12** key opens another window, which displays **Job Details** along with access to any relevant Documents and Images. Following is a section of screen shot that displays this option.

The screenshot displays the 'My Work' window with a table of pending jobs. The table has columns: Component, Job/WorkOrder, Due On, Due RunHours, and Group. The job 'ME OVERHAUL INDICATOR VALVE-0078' is highlighted. Below the table, the 'Job Details' window is open, showing the job code '0078', name 'ME OVERHAUL INDICATOR VALVE-0078', and safety precautions.

Component	Job/WorkOrder	Due On	Due RunHours	Group
Exhaust Valve No8	ME OVERHAUL EXHAUST VALVE-0075	29-Mar-2003		Chief Engineers
INDICATOR VALVE	ME OVERHAUL INDICATOR VALVE-0078	29-Mar-2003	42430	Chief Engineers
CAMSHAFT	ME CHECK FUEL CAM BOLTS/NUTS PRETENS	29-Mar-2003	41474	Second Engineers
CAMSHAFT	ME INSPECT FUEL CAMS RUNNING SURFACE	29-Mar-2003	41624	Second Engineers
MAIN ENGINE	ME DRAW PRESSURE CARDS-C141	29-Mar-2003	38396	Chief Engineers
MAIN ENGINE	ME INSPECTION OF CRANKCASE-I060	29-Mar-2003	37845	Second Engineers
MAIN ENGINE	ME TEST LOCAL STATION START/STOP-T052	29-Mar-2003	37890	Chief Engineers
F.O. PURIFIER No1	OVERHAUL PURIFIER-0720	30-Mar-2003		Other Engineers

Job Details

Job Code: 0078
Name : ME OVERHAUL INDICATOR VALVE-0078

NOTE: REFER TO INSTRUCTION MANUALS FOR DETAILED INSTRUCTIONS

MITSUBISHI MANUAL GROUP 1460 ITEM 01

SAFETY PRECAUTIONS:

- BLOCK THE STARTING MECHANISM
- SHUT OFF STARTING AIR SUPPLY

- “My Work” window on Main Screen displaying Pending Jobs.
- Highlighted Job row in “My work” window and corresponding Job details displayed with F12 key.

My Work					
Component	Job/WorkOrder	Due On	Last On	Group	
ENGINE ROOM CRANE TRAVERSING MOTOR	ELECTRIC MOTOR O'HAULING-E003	01-Apr-2003	01-Apr-2000	Elec. Eng.	
STEERING GEAR HYDRAULIC PUMP No1 MOTOR	ELECTRIC MOTOR O'HAULING-E003	07-Apr-2003	07-Apr-2000	Elec. Eng.	
AUX. COOLING SW PUMP No1 MOTOR/STARTER	ELECTRIC MOTOR O'HAULING-E003	11-Apr-2003	11-Apr-2000	Elec. Eng.	

Section of Deferred Jobs appearing in “My Work” window

Any jobs, which have been postponed, appear under Deferred Jobs section in the **My Work** window.

Report Work

For reporting work done for a particular completed Job, a double click on the highlighted Job row in **My Work** window opens up the **Report Work Wizard**. This Wizard allows the user to enter complete details of Dates, Status, Time and Expenses, History details and allows attaching any relevant Documents and Images. Spares and Consumables used for the Job are also entered in this form and this in turn updates the inventory. The screen that follows displays Report Work Wizard.

Planned Maintenance - [Edit] - DECK CRANE No2

Component: DECK CRANE No2 Date: 27-Mar-2003

Job: DECK CRANE INSPECTION WEEKLY-I552 INSPECTION

Due Date: 06-Jul-2002 Due Runtime:

Maintenance Details

Status: Completed Counter: Week(s)

Started On: 27-Mar-2003 Job Done Runtime: 0.00

Completed On: 27-Mar-2003 Defer: 2 Week(s)

Overdue

Window: 0 Day(s) Overdue: 264 Day(s)

Maintenance Logged by

User: Superintendent Group: Admin

Group Expenses

Estimated... Calculate Expenses

	Group	Hours	Expenses
1	Chief Engineers	2.00	60.00
2	Second Engineers	4.00	40.00
3			

Hours & Misc. Expenses

Total Hours: 4 Misc Expenses: 30.00 USD

Report Work Wizard

Report Work Wizard for reporting Jobs

Component:

The term Component represents an independent unit for which maintenance is carried out. Component name and details including Maker, Spare Parts and Vendors, Technical Description, associated Jobs, related Documents and Images, record of various Jobs done for the Component, etc. can be stored for all Components. SMMS allows creation of unlimited such Components in a hierarchical manner and they can be marked Critical or Normal as required. Complete record of service/shelf life of the Component along with movement details in and out of service are automatically recorded by SMMS. Jobs attached to the Component can be either Counter based or Calendar based. Few screens of Component and its details are given below:

Component - [Edit] - CROSSHEAD BEARING AND GUIDE No1 ME

Name: CROSSHEAD BEARING AND GUIDE No1 ME Status: Critical

Parent: ME CROSSHEAD BEARINGS AND GUIDES Component No: 601.12.01

Identity: CROSSHEAD BEARING AND GUIDE NO.1

Component Details | Job Details | Spares | Logs | Technical Description | Images | Documents | Charts

Maker: MITSUBISHI HEAVY IND., LTD (KOBE) Model: 6UEC60LS II

Maker Ref: CROSSHEAD AYX 3476 BCD Serial No.: 3728

Vendor: MITSUBISHI HEAVY IND., LTD (KOBE)

Other Details

Miscellaneous Information: ALWAYS REFER TO MAKER'S GUIDE FOR MAINTENANCE DETAILS FOR CROSSHEAD BEARING

Unexpected Maint. Layout: Crosshead_Guide_Clearance

Component Life

Installed On Vessel: 29-Mar-1998

Pre Install Runtime: 250

Component Life: 22900.00

Component Counter

Counter: MAIN ENGINE Current Value: 42700.00 Hour(s)

Component Linked to Counter on: 29-Mar-1998 Updated On: 22-Mar-2003

Counter Runtime when Component linked to it: 20050

Save Clear Exit

Component screen displaying various associated fields

Component - [Edit] - AUXILIARY ENGINE No1 AE1

Name: AUXILIARY ENGINE No1 AE1 Status: Normal

Parent: ... Component No: 653.00.00

Identity: AUXILIARY ENGINE No1 AE1

Component Details | **Job Details** | Spares | Logs | Technical Description | Images | Documents | Charts

	Job	Interval	Remind Before	Group	Previous On
1	AE CHECK VALVE TAPPET/TIMING CL	500 Hour(s)	50 Hour(s)	Chief Engineers	28-MAR-2003
2	AE ENGINE DRAW PRESSURE CARDS	500 Hour(s)	50 Hour(s)	Chief Engineers	28-MAR-2003
3	AE INSPECTION OF CRANKCASE-1230	1000 Hour(s)	70 Hour(s)	Second Engineer	28-MAR-2003
4	AE RENEW MAIN BEARING SHELL	30000 Hour(s)	2100 Hour(s)	Second Engineer	28-MAR-2003
5	AE RENEW BIG END BEARING SHELL	20000 Hour(s)	1400 Hour(s)	Chief Engineers	28-MAR-2003
6	AE RENEW CON ROD BOLT	20000 Hour(s)	1400 Hour(s)	Chief Engineers	28-MAR-2003
7					
8					
9					
10					
11					
12					
13					

Save Clear Exit

**User defined
Jobs for
Component
showing
Interval,
Group and
Last done
date**

Component - [Edit] - AUXILIARY ENGINE No1 AE1

Name: AUXILIARY ENGINE No1 AE1 Status: Normal

Parent: ... Component No: 653.00.00

Identity: AUXILIARY ENGINE No1 AE1

Component Details | **Job Details** | Spares | Logs | Technical Description | Images | Documents | Charts

	Previous On	Next On	Previous Runtime	Next Runtime	Job Duration	Total Expenses	Estimate
1	28-MAR-2003	22-May-2003	19027 Hour(s)	19527 Hour(s)	4.00	110.00	...
2	28-MAR-2003	22-May-2003	19027 Hour(s)	19527 Hour(s)	4.00	70.00	...
3	28-MAR-2003	17-Jul-2003	19027 Hour(s)	20027 Hour(s)	1.00	90.00	...
4	28-MAR-2003	12-May-2012	19027 Hour(s)	49027 Hour(s)	2.00	60.00	...
5	28-MAR-2003	27-Apr-2009	19027 Hour(s)	39027 Hour(s)	3.00	45.00	...
6	28-MAR-2003	27-Apr-2009	19027 Hour(s)	39027 Hour(s)	2.00	84.00	...
7							...
8							...
9							...
10							...
11							...
12							...
13							...

Save Clear Exit

**Continuation of
above screen:
Component Job
screen showing
other fields like
Next Due Date,
Next Runtime,
Estimates, etc.**

Component - [Edit] - AUXILIARY ENGINE No1 AE1

Name: AUXILIARY ENGINE No1 AE1 Status: Normal

Parent: ... Component No: 653.00.00

Identity: AUXILIARY ENGINE No1 AE1

Component Details | Job Details | Spares | Logs | Technical Description | Images | Documents | Charts

☒ Last 10 Logs ☐ Date From: 18-Jan-2003 To: 18-Apr-2003

	Done Date	Work	Runtime	Log Type	Status
1	26-Aug-2002	AE CHECK VALVE TAPPET/TIMING CLEARANCE-C2	17375	Planned	Completed
2	02-Aug-2002	AE ENGINE DRAW PRESSURE CARDS-C255	17069	Planned	Completed
3	13-Jun-2002	AE INSPECTION OF CRANKCASE-I230	16910	Planned	Completed
4	09-Jun-2002	AE ENGINE DRAW PRESSURE CARDS-C255	16825	Planned	Completed
5	29-Apr-2002	AE CHECK VALVE TAPPET/TIMING CLEARANCE-C2	16607	Planned	Completed
6	28-Apr-2002	AE ENGINE DRAW PRESSURE CARDS-C255	16607	Planned	Completed
7	04-Mar-2002	AE ENGINE DRAW PRESSURE CARDS-C255	16006	Planned	Completed
8	04-Mar-2002	AE INSPECTION OF CRANKCASE-I230	16006	Planned	Completed
9	04-Mar-2002	AE CHECK VALVE TAPPET/TIMING CLEARANCE-C2	16006	Planned	Completed

Work Done Counter Movement

Save Clear Exit

**Component
screen
displaying
past
Maintenance
Log**

Component - [Edit] - No.1 Cargo Pump


Name: No.1 Cargo Pump Status: Critical

Parent: Cargo Pumps Component No: 351.00.00

Identity: DNV-3351

Component Details | Job Details | Spares | Logs | Technical Description | Images | Documents | Charts

	Name
1	BHD Stuff Box
2	Cargo Pump
3	Cargo Pump Drawing
4	
5	
6	
7	
8	
9	
10	
11	
12	



Save Clear Exit

**Component
screen
displaying
attached
Images**

Job Description:

Job Description is used to provide instructions on the particular work to be performed with instructions on job procedures and person assigned to do the job. Jobs can be categorized, in general, like Lubrication, Inspection and Overhauling etc. In each category, individual jobs for various Components can be added. SMMS provides the facility to define both Counters based and Calendar based jobs. Details of Job Descriptions for any job can be entered while creating the job, and the relevant Documents and Images that assist in carrying out the job, can be attached to it. A screen shot in this regard is given below:

Job Description - [Edit] - AE OVERHAUL CYLINDER UNITS-0240

Name: AE OVERHAUL CYLINDER UNITS-0240

Job Code: 0240 Category: OVERHAUL

Details | Components | Images | Documents

Layout: AE_Decarb

Description

B I U [List Icon] [Align Left Icon] [Align Center Icon] [Align Right Icon] [Justify Icon] **A** [Font Color Icon] [Background Color Icon] [Text Color Icon] [Text Background Color Icon] Lucida Cons 10

Job Code: 0240
Name : AE OVERHAUL CYLINDER UNITS-0240

NOTE: REFER TO INSTRUCTION MANUALS FOR DETAILED INSTRUCTIONS

YANMAR MAINTENANCE MANUAL:
=====

M200L-UN		
CYLINDER HEAD CLAMPING NUT M27x2	83+
4kgf-m	814+39N-m	
M200L-UN		
CYLINDER HEAD CLAMPING NUT M48x3,0	
550±5kg/cm²		

Save Clear Exit

**Job
Description
form
displaying
details of
Job to be
done**

Counters:

In SMMS, Counters are divided into two types i.e. **Calendar Counters** and **Operational/Hourly Counters**. Calendar Counters are further divided into Days, Weeks, Months and Years. Operational Counters are user defined. Counters can be attached to any number of Components. During the life of a Component, Counters can be attached, detached or changed. This will not make any effect on the life of the Component or Planned Maintenance schedule of that Component. A screen shot describing the Counter details is given below:

Counter - [Edit] - Auxiliary Engine No1 AE1

Name: Auxiliary Engine No1 AE1 ☒ On ☐ Off

Category: Run Hour Counters ...

Counter | Description | Log | Components | Charts

Counter Unit: Hour(s) ...

Start Value: 0.00 Current Value: 19027.00

Started On: 02-Apr-1997 ... Total Value: 19027.00

Update Days: 2

Average for Forecasting

☐ Day Wise 0.00 @ 90 Day(s)

☒ Overall Average 8.01

☐ Custom Average 0 per day

Save Clear Exit

Defining Counter for a job

Work Orders:

Apart from all Planned and Unplanned work, SMMS Software provides the facility of recording and scheduling other kinds of maintenance Jobs, which are not part of PMS but are important and require scheduling. For example Repair specifications for forthcoming Dry Dock, reminder for pending Condition of Class, Surveys etc, any other miscellaneous Jobs which may be carried out during anchorage, heavy weather etc. Work Orders also have the option of attaching Documents, Layout and Images for reference. A screen shot of this feature is given below.

Work Order - [Edit] - ME OVERHAUL EXHAUST VALVE-0075

Title: ME OVERHAUL EXHAUST VALVE-0075

Component: Exhaust Valve No8

Work Order No.: W.O.-11

Creation Date: 28-Mar-2003

Work Order | Description | Images | Documents

Counter Information

☒ Days Due Date: 08-Apr-2003 ☐ Cancelled

☐ Operational Counter Counter:

Due On Runtime: 0.00

Remind Before: 2 Day(s) Window: 4 Day(s)

Priority: Maximum Status: Scheduled

Group: Chief Engineers User: SUPER

Overdue:

Started On:

Completed On:

	Estimated	Actual
Time	3.00	
Group Expenses	110.00	
Spare Expenses	100.00	

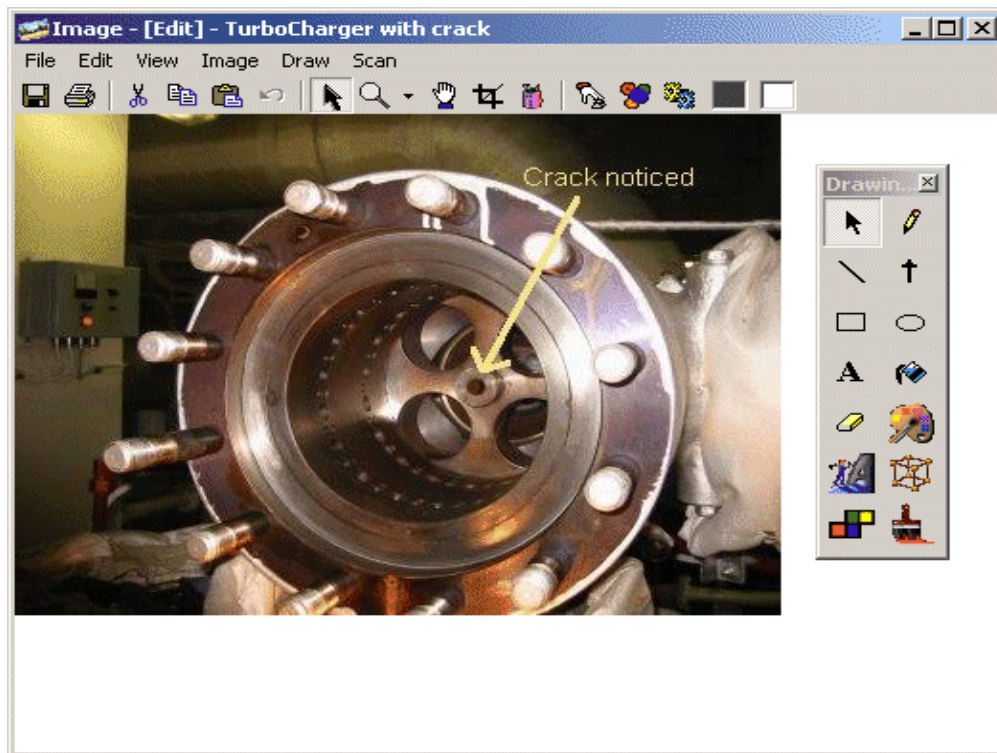
Estimate...

Save Clear Exit

Work Order form

Images:

SMMS gives the option of attaching unlimited Images with all its features. Moreover, an Image Designer has been incorporated for editing/writing captions on the images. One such screen shot with Image attached is shown below:



**Image Designer along with drawing/writing
& editing tools**

Hotspots:

Another unique feature of SMMS is the Hotspot facility. Hotspots are created for identifying Spare Parts on Images attached with Components or Job Descriptions. These Hotspots, once created can be linked with Spare Part details module and to any Document/Image that the user deems necessary. Hotspots also have a direct link with Requisition system and user has the ease of requisitioning any Spare Part by sending details of the required part with a click of the mouse. Hotspots are user created and the Image Designer provides this facility. A screen shot of this important feature is given on next page.

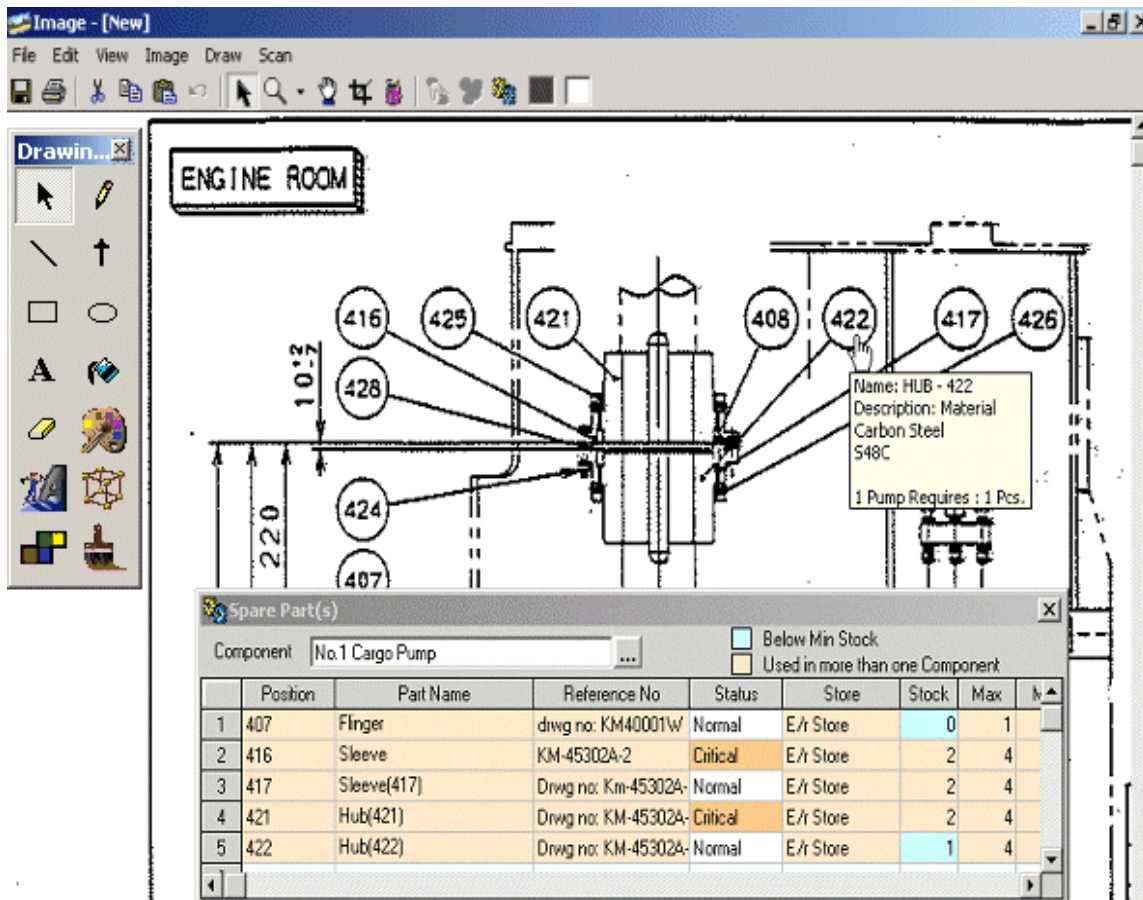


Image Designer along with drawing/writing, editing tools and Hotspots

Spare Parts:

Spare Parts for various Components are maintained under user defined categories. Spare Part details include Maker details, minimum and maximum stock, price update, Components using common Spare Parts, etc. Colour coding of rows indicates Spare Parts being used in more than one Component. Spare Parts can be classified as “Critical” or “Normal”. Spare Parts for a particular Component can also be viewed by using Hotspot facility on Images linked with Components, as mentioned above.

Spare Part - [Edit] - "O" RING C13

Name: "O" RING C13 Status: Critical

Category: NO 1 LUB OIL PURIFIER Part No.: 712.45.01.003

Details | Vendors And Components | Description | Transactions | Images | Documents | Charts

Maker: MITSUBISHI KAKOKI KAISHA, LTD. (TOKYO) ...

Maker Ref: A10031A

Item Unit: Pcs Average Price: 4.00

Opening Stock: 7 Opening Stock Value: 4.00 USD

Current Stock: 8 Current Stock Value: 32.00

Location: E/R STORE

Remarks: "O" rings should be protected from heat and abrasion. Store them in cool and safe place.

Stock: Min: 5 Max: 10 Economic: 6 EOQ: 7

Save Clear Exit

Spare Part details form

Consumables:

SMMS provides the facility of inventory for Consumable items from various Catalogs like IMPA, BP marine, Drew Chemical, Unitor products, etc. User also has the flexibility of creating his own Catalog and filling in Consumables as required.

Spare Parts and Consumable items, which, are below the pre-defined re-order/minimum status level, automatically appear in the Requisition system.

Consumable - [Edit] - 11/4V -123 2.3 X 10 MM\$ 10 ELECTRODE (602540)

Catalog: UNITOR Category: WELDING MATERIAL

Item Code: 602540 Status: Normal

Description: 11/4V -123 2.3 X 10 MM\$ 10 ELECTRODE (602540)

Consumable Transactions Images Charts

Item Unit: Kg Average Price: 40.00 USD

Opening Stock: 4.00

Current Stock: 4.00 Current Stock Value: 160.00

Location: RACK 6, Engine room Store

Remarks: These are low hydrogen electrodes and should be kept in dry location.

Stock Min: 4.00 Max: 8.00 Economic: 5.00 EOQ: 6.00

☐ Remarks required in Transactions

Save Clear Exit

Consumable details form

Store Transactions and Inventory Control:

SMMS includes total Inventory Control and Management System. All records for Spare Parts and Consumables Requisitioned, Purchase, Issue, Issue Returns, etc can be maintained.

Apart from reporting Spares and Consumables used when entering Report Work for a Job, Transaction forms are used for any items issued or returned to and from a store. This helps in keeping a proper account and record of various Spares and Consumables used onboard. Moreover, it automatically updates various store inventories, which in turn, assists in generating requisitions when stocks go below minimum/re-order level. A screen shot of this important feature is given on next page.

Purchase Transaction - [Edit]

Creation Date: 27-Mar-2003 Transaction Type: Purchase Series No: C-11

Component: User: SUPER Group: Admin

Details Transactions

Spare Part(s) ☐ Used in more than one Component ☐ Below Minimum Stock

	Name	Maker Ref	Quantity	Balance	Unit	Price	Currency
1	"O" RING C13	A10031A	2	8	Pcs	55.00	USD
2	AE GOVERNOR SPARES		3	3	Pcs	156.00	USD
3	AIR VENT PIPE ASSY	751602-49460	1	1	Pcs	75.00	USD
4	BEARING HOUSING	350013	2	2	Pcs	124.00	USD
5	FUEL INJECTION PUMP DRIVING GEAR	31300	2	2	Pcs	95.00	USD

Consumables

	Description	Item Code	Quantity	Balance	Unit	Price	Currency
1	ALKLEEN LIQUID(31473)	31473	5.00	5.00	LITRE	10.00	USD
2	TIP NUT GRACO 164T132, PCS (127014)	1270146	20.00	20.00	PIECE	2.00	USD
3							
4							
5							

Save Clear Exit

Screen displaying transaction of Spares and Consumables

		DECK CRANE (20)					
Name	Maker Reference	Part No	Status	Location	Stock	Unit	
AUXILIARY RELAY	SRD-K4, DC24V, 2a2b	331.89.00.003	Critical	"B" Dk Store	5	Pcs	
AUXILIARY RELAY	SR-K4, AC110V, 60Hz	331.89.00.004	Normal	"B" Dk Store	2	Pcs	
BACK UP RING	GN1033/ A0	331.42.02.005	Normal	"B" Dk Store	5	Pcs	
BACK UP RING	GN0943/ A0	331.42.02.007	Normal	"B" Dk Store	6	Pcs	
CELLO-LITE FUSE	UC1, 5A	331.89.00.020	Normal	"B" Dk Store	12	Pcs	
CELLO-LITE FUSE	UC1, 10A	331.89.00.021	Critical	"B" Dk Store	24	Pcs	
CELLO-LITE FUSE	UC1, 15A	331.89.00.022	Critical	"A" dk store	24	Pcs	
CONTACT SPRING	S-K125	331.89.00.011	Normal	"A" dk store	2	Pcs	
CONTACT SPRING	S-K21	331.89.00.015	Normal	"A" dk store	2	Pcs	
FUSE NIPPER	30-60A	331.89.00.024	Normal	2/E Store	3	Pcs	
HI-TORQUE MOTOR SPARES_1		332.81.01.000	Critical	2/E Store	5	Pcs	
OIL SEAL, ø115x90x15	YA9101-038-0	332.81.01.001	Normal	2/E Store	3	Pcs	

Section of screen displaying Spare Part Inventory details for a Component

Certificates and Surveys:

This feature allows a user to enter and maintain all the details of ship Certificates and Class Surveys. The **My Work** window of the Main Screen gives automatic Notification of various expiring Certificates and forthcoming Surveys. It also includes features for reminding status of pending Condition of Class. Overall, this feature helps in efficiently clubbing various pending Certificates and Surveys, which a surveyor can attend to during a single call, thus reducing surveyor's frequent visits. A screen shot of this feature is given below:

Certificates (33)

Name	Status	Issue Date	Place	Expiry Date	Extended
Cargo Gear Wire/ Block Hooks	Temporary	10-Mar-2003	Houston	24-Mar-2004	
Certificate of Registry	Permanent	22-Mar-1998	Brussels		
CO2/Halon Bottle Press. Test/Internal	Short Term	23-Mar-2002	Ceyhan	02-Apr-2003	
CO2/HALON System Test Certificate	Conditional	25-Mar-2003	Durban	25-Mar-2004	
Compass Calibration	Temporary	10-Mar-2003	Houston	24-Mar-2004	
Deratting Exemption Certificate	Short Term	02-Feb-2003	Brussels	04-Aug-2003	
Engine Room Crane Test Certificate	Short Term	25-Mar-2000	H'Kong	25-Mar-2003	
F.M.C. Certificate	Full Term	25-Mar-2000	Miami	25-Mar-2002	25-Mar-2003
Fire Extinguisher Pressure Test	Conditional	25-Mar-2003	Miami	25-Mar-2004	
Fire Extinguisher Test Report	Full Term	27-Aug-2001	Donges	27-Aug-2003	
Foam System Certificate	Full Term	27-Apr-2002	Ceyhan	01-Apr-2003	
G.M.D.S.S. Certificate	Short Term	13-Jan-2002	St Rose	31-Mar-2003	

My Work

Name	Issue Date	Expiry Date	Place	Extended
CO2/Halon Bottle Press. Test/Internal Exa	23-Mar-2002	02-Apr-2003	Ceyhan	
Engine Room Crane Test Certificate	25-Mar-2000	25-Mar-2003	H'Kong	
F.M.C. Certificate	25-Mar-2000	25-Mar-2002	Miami	25-Mar-2003
Foam System Certificate	27-Apr-2002	01-Apr-2003	Ceyhan	
G.M.D.S.S. Certificate	13-Jan-2002	31-Mar-2003	St.Rose	

Critical / Deferred / Certificates / Conditions / Continuous Surveys / Inspections / Surveys / Forms / All C

User : SUPER Group : Admin SMMS (Trial Version) : Developed by - Vertex Infosoft Solutions 6 Certificate(s) 4/1/03

Screen displaying validity details of various Certificates and those requiring renewal; appear in "My Work" window

Surveys (24)

Name	Status	Survey Date	Place	Due Date	Extended
Annual Cargo Gear Survey	Annual	22-Mar-2002	Miami	22-Mar-2003	
Annual Class/General Survey	Annual	22-Mar-2002	Brussels	22-Mar-2003	
Annual Safety Construction Survey	Annual	01-Mar-2003	Hamburg	01-Jan-2004	
Cargo Gear Survey	Renewal	21-Mar-2002	Nantali	21-Jan-2007	
Drydock Survey	Renewal	22-Mar-2002	Nantali	22-Mar-2005	
EO/UMS Annual Survey	Annual	22-Mar-2002	Rotterdam	22-Mar-2003	23-Apr-2003
EO/UMS Survey	Renewal	22-Mar-2002	Nantali	22-Mar-2007	
Exhaust Gas Boiler	Renewal	12-Feb-2002	Hamburg	12-Jan-2003	12-Apr-2003
Flag, Safety Annual Survey	Annual	14-Nov-2002	Porvoo	14-Nov-2003	
I.O.P.P. Certificate Marpol Ann. Survey	Annual	14-Mar-2002	Odessa	14-Mar-2003	
I.O.P.P. Certificate Marpol Inter Survey	Intermediate	12-Oct-1999	Kochi	12-Oct-2004	

My Work

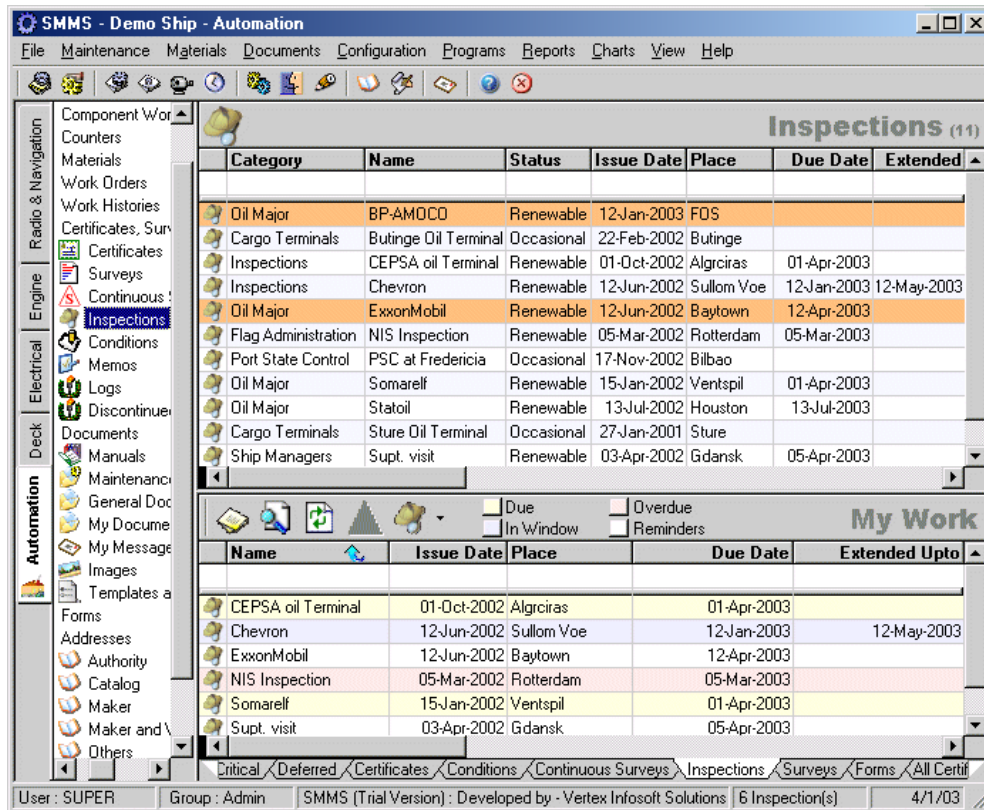
Name	Survey Date	Place	Due Date	Extended Upto
Annual Cargo Gear Survey	22-Mar-2002	Miami	22-Mar-2003	
Annual Class/General Survey	22-Mar-2002	Brussels	22-Mar-2003	
EO/UMS Annual Survey	22-Mar-2002	Rotterdam	22-Mar-2003	23-Apr-2003
Exhaust Gas Boiler	12-Feb-2002	Hamburg	12-Jan-2003	12-Apr-2003
I.O.P.P. Certificate Marpol Ann. Survey	14-Mar-2002	Odessa	14-Mar-2003	

User: SUPER Group: Admin SMMS (Trial Version) : Developed by - Vertex Infosoft Solutions 5 Survey(s) 4/1/03

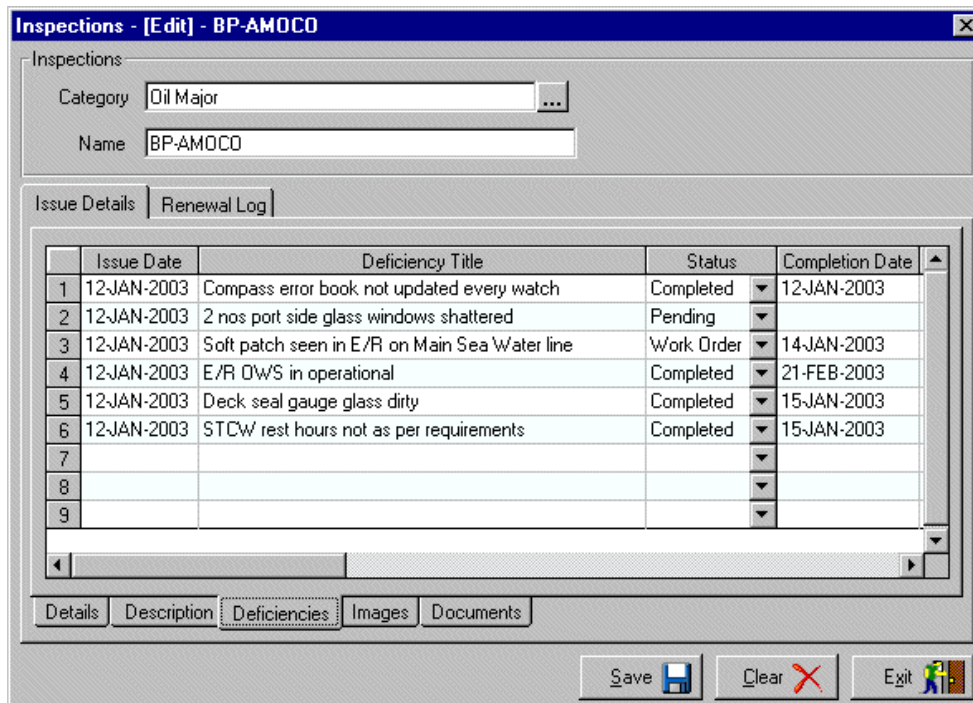
Screen displaying validity details of various Surveys and those falling due; automatically appear in “My Work” window

Inspections:

Various Inspections and Vettings from Oil Majors, Terminals, Port State Control, etc. can be recorded in this section. Special care has been taken to keep reminding ship staff of all pending Deficiencies/comments until proper rectification and reporting is done. **My Work** window of the Main Screen gives automatic reminder of any Inspections prior approaching due date. A screen shot displaying Inspection Deficiencies reporting form is given on next page:



Screen showing validity status of various Inspections/ Vettings



Screen showing Status of Deficiencies given during an Inspection

e-Documentation:

SMMS software has been provided with an inbuilt, user-friendly Layout designer for creating various shipboard forms and documents as per Company requirements. These layouts/templates once created can be attached and used with any number of forms. This feature attempts to make Ship and Office completely paperless organizations. The forms can also be scheduled, as required, to get an automatic Notification in the **My Work** window of the Main Screen. A screen shot displaying this feature is as follows:

Category	Form	Template	Template Type
Unscheduled	Cargo related Notes of Protest	Note of Protests	Word Document
Monthly	Inert Gas Operation Log	Inert Gas Operational Lo	Excel WorkBook
Quarterly	Lub Oil Analysis Report	Onbd_Test_Oil	SMMS Layout
Quarterly	Master's Review of SMS	Master's Review - Form D45	Word Document
Monthly	Monthly Deck Abstract	Monthly Deck Abstract - Form D255	SMMS Layout
Monthly	Monthly Engine Abstract	Monthly Engine Abstract - Form E 451	SMMS Layout
Unscheduled	Removal Report Form DE155	Removal Report Form DE155	SMMS Layout

Category	Form	Due On	Group	Counter
Quarterly	Master's Review of SMS	01-Apr-2003	Masters	Month(s)
Quarterly	Lub Oil Analysis Report	01-Apr-2003	Chief Engineers	Month(s)

Forms Management with scheduling of various forms in “My Work” window

Name	Stored with/at	Issued By	Issue Date
Approved Loadicator Manual	Master's Office	Kokumation, Sweden	27-Mar-2002
Bridge Procedures manual	Bridge	ABC Ship Management	01-Mar-2001
Cargo Gear Register, Australia	Master's Office	DNV	27-Dec-2002
Cargo Gear Register, Class	Master's Office	DNV	27-Dec-2002
Cargo Gear Register, India	Master's Office	DNV	27-Dec-2002
Cargo Gear Register, Other_1	Master's office	DNV	27-Dec-2002
Cargo Gear Register, Other_2	Master's Office	DNV	27-Dec-2002
Cargo Gear Register, Pakistan	Master's Office	DNV	27-Dec-2002
Cargo Gear Register, USA	Master's Office	DNV	27-Dec-2002
Damage Stability Manual	Master's Office	Hyundai Ship Yard	01-Mar-2001
Loading Manual	CCR	Hyundai Ship Yard	01-Feb-2002
Safety Training Manual	Bridge, CCR, ECR	ABC Ship Management	12-Jun-2002

Record keeping and Management of various Shipboard Manuals

Reports and Charts:

Information logged into the SMMS system can be presented in a number of ways, supplying vital information about the management of Spare Parts, Work Orders and Reports for each job carried out. The system tracks the consumption of Spare Parts and gives a complete overview of spending-to-date and remaining budget. Superintendents can compare history and statistics for specific machinery across the fleet. All kinds of user defined Reports, Charts and Graphs are available in SMMS. Reports can be configured according to requirements and previewed on the screen or printouts taken and can be customized as per user's requirements.

One of the many useful reports in SMMS is Spare Part Requirement Forecasting Report. This report forecasts Spare Part requirement for any particular period in future. The report is created after taking into account the Spare Part estimates filled in by the user/current Spare Part stock/stocks requisitioned/approximate date of delivery for the Spare Parts. This report is very useful, as one can know the Spare Part requirement of any Vessel for a particular period ahead and plan the Budget accordingly in the office only.

Forecast Report

Forecast For: ☒ Jobs ☐ Work Orders ☐ Forms ☐ Certificates

Selection Type: ☒ Components ☐ Component WorkShop ☐ Counters ☐ Groups ☐ Jobs/Work Orders

Job Status: ☒ Critical ☒ Normal

Forecast Period: From 01-May-2003 To 31-May-2003

☒ Use Remind Before Period ☒ Use Defined Remind Before ☐ Use Remind Before As 10 % of Interval

Component	Job	Next Due	Due Runtime
HYDRAULIC PUMP No2 STEERING GEAR	CHECK HYDR. PUMP OF	01-May-2003	
MAIN ENGINE	ME TEST LOCAL STATIC	01-May-2003	42820 Hour(s)
FLYWHEEL TURNING DEVICE AE	AE CHECK FLYWHEEL C	01-May-2003	19050 Hour(s)
CRITICAL SPARES	CHECK CRITICAL SPARE	02-May-2003	
LUB OIL TESTS	TEST GENERATOR LUB	03-May-2003	
LUB OIL TESTS	TEST M/E & STERN TUE	03-May-2003	
SAFETY VALVE No1 BOILER	BOILER SAFETY VALVE	03-May-2003	

Send to: ☒ Preview ☐ Print Selected Job(s) : 202/202

Right click on any node to Select/Deselect the whole hierarchy under that node

A screen for Forecast Report for various Jobs related to Components

Pending Work Report

Schedule for:
☒ Jobs ☐ Work Order ☐ Forms ☐ Certificates

Selection Type:
☒ Component ☐ Component WorkShop
☐ Counter ☐ Group
☐ Job/Work Order

Job Status:
☒ Critical
☒ Normal

Work Order Priority:

Due Date Period:
 From: To:

Deferred ☐ All ☒
☐ Due ☐ Overdue
☐ In Window ☐ Reminders

Components

- ☒ ALL GENERATORS
- ☒ AUXILIARY BOILER
- ☒ AUXILIARY ENGINE No1 AE1
- ☒ AUXILIARY ENGINE No2 AE2
- ☒ BACK UP AMOSD D
- ☒ BILGE & BILGE/BALLAST SYSTEMS
- ☒ BOILER FEED SYSTEMS

Refresh

	Component	Job/WorkOrder	Due	Due Hour(s)
	HYDRAULIC MOTOR No2 - HOI	DECK CRANE INSPECTION OF PUMP	18-Mar-2003	
	HYDRAULIC MOTOR - LUFFING	DECK CRANE INSPECTION OF PUMP	18-Mar-2003	
	MAIN ENGINE	ME CHECK CRANKCASE BOLTS/NUT	22-Mar-2003	38606 Hour(s)
	STARTING AIR AND REVERSING	ME OVERHAUL STARTING AIR DISTRIBUTOR	22-Mar-2003	41054 Hour(s)
	CYLINDER LUBRICATORS	ME LUBRICATE CYLINDER LUBRICATORS	22-Mar-2003	38165 Hour(s)
	CYLINDER LUBRICATORS	ME CLEAN CYLINDER LUBRICATORS	22-Mar-2003	38606 Hour(s)

Send to:
☒ Preview ☐ Print

Selected Job(s): 490/490

Options Generate Exit

A screen for Pending Jobs Report for various Components

Work Done List

Wednesday, April 02, 2003 11:57:35AM

Report for last 10 job(s)

Main Component

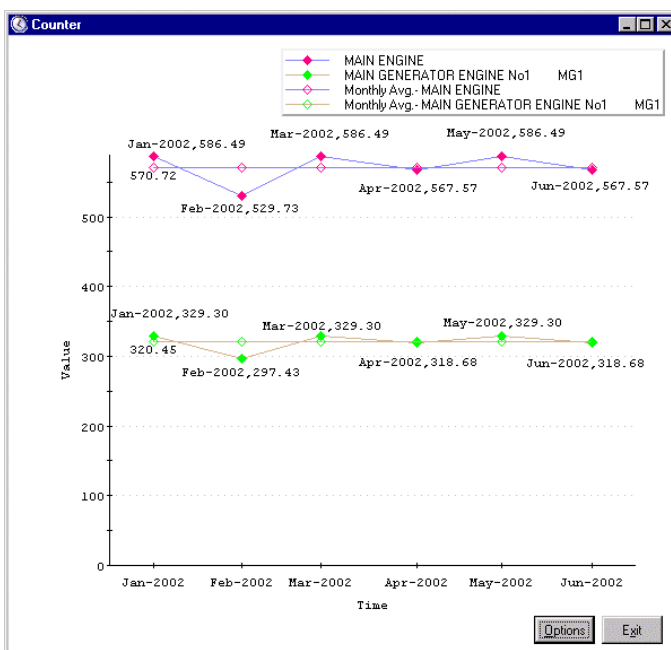
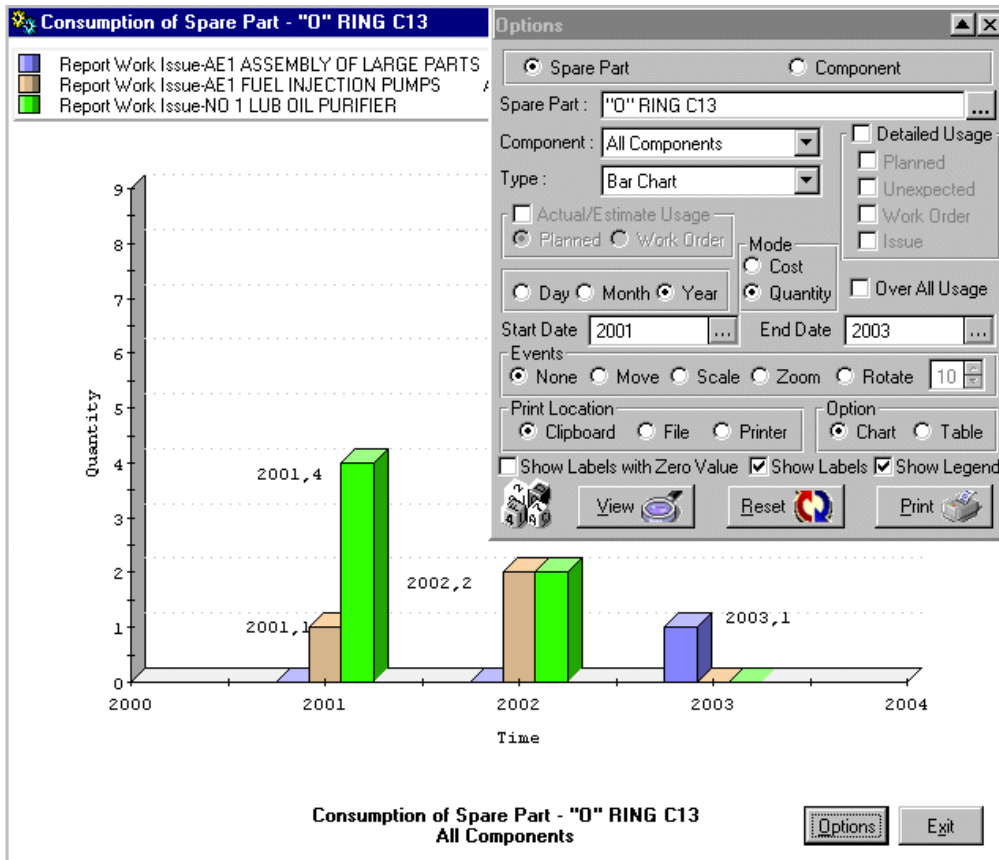
Parent Component

Component

S.No	Work	Done Date	Done Hour(s)	Log Type	Group
		Due Date	Due Hour(s)	Status	
AUXILIARY ENGINE No2 AE2					
CRANKSHAFT AE2					
FLYWHEEL TURNING DEVICE AE2					
1)	AE CHECK FLYWHEEL COUPLING BOLTS TIGHT-C234	14-Mar-2002	18,296.00	Planned	Chief Engi
		14-Mar-2002	18,530.00	Completed	
2)	AE CHECK FLYWHEEL COUPLING BOLTS TIGHT-C234	24-Mar-2001	14,530.00	Planned	Chief Engi
		24-Mar-2001	16,251.00	Completed	
3)	AE CHECK FLYWHEEL COUPLING BOLTS TIGHT-C234	09-Jun-2000	12,251.00	Planned	Other Eng
		09-Jun-2000	11,863.00	Completed	
4)	AE CHECK FLYWHEEL COUPLING BOLTS TIGHT-C234	11-May-1999	7,863.00	Planned	Admin

Section of
Work
Done
Report

Charts enable the user to compare performances, expenditures and forecast expenses and thus assist in preparing future budgets.



Charts for:

1. Spare Part Consumption over a defined period
2. Counter over a defined period

Key Performance Indicators

An important feature of SMMS is the KPI Report. KPIs are segregated according to the Departments of the vessel. As the KPI takes data from both the My Work window as well as the Maintenance Log, it can display not only Done Jobs, but also those Jobs that are Due, Pending and Overdue.

Although the KPI report is shown by default for the latest month, it can be configured to a specific, user-defined time period through the 'Due Date' Calendar setting. The main advantage in the use of a KPI is that it offers a concise and accurate account of all Jobs that are pending, done, etc. at any period, without the user having to sift through the Maintenance Logs. As Maintenance Logs list all the details of a Job, the KPI saves a lot of time, as well as reducing the workload of the user. Along with the above, data can be sorted by Ascending / Descending order, columns may be configured, and custom reports can be created.

Department	Job(s) Due	Done Job(s)	Pending Job(s) As on 22-May-2008	Overdue Job(s) before 22-Apr-2008	Job(s) Done-Overdue before 22-Apr-2008	Overdue Jobs(s) as on 22-May-2008
ALARMS	5	1 (20 %)	2	4	1 (25 %)	3
BMH	31	4 (13 %)	1	115	4 (3 %)	111
DECK	5	3 (60 %)	2	245	4 (2 %)	241
ENGINE	63	5 (8 %)	3	482	5 (1 %)	477
RADIO	5	1 (20 %)	2	15	5 (33 %)	10

**A screen for
KPI Report
for the
various
Departments**

Key Performance Indicators

Thursday, May 22, 2008 12:44:17PM

SMMS Version 1.3

Period From 22-Apr-2008 to 22-May-2008

Dept Name	Job(s) Due	Done Job(s)	Pending Job(s) as on 22-May-2008	OverDue Job(s) before 22-Apr-2008	Job(s) Done - OverDue before 22-Apr-2008	OverDue Job(s) as on 22-May-2008
ALARMS	5	1 (20 %)	2	4	1 (25 %)	3
BMH	31	4 (13 %)	1	115	4 (3 %)	111
DECK	5	3 (60 %)	2	245	4 (2 %)	241
ENGINE	63	5 (8 %)	3	482	5 (1 %)	477
RADIO	5	1 (20 %)	2	15	5 (33 %)	10

Section of KPI Report (Key Performance Indicators)

Group/User Security:

A high level of security for Data and Operation is given in SMMS. Following screen shot gives an idea of User Level security: -

Group - [Edit] - Chief Officers

Name:

Permissions | Salary

The following permissions apply to this group

Allow...

☒ Department wise Permissions
☐ Same Permissions in all Departments

Data Permissions

☐ Backup
☐ Import
☐ Export
☐ Full Import
☐ Full Export for Data Recovery

☐ Grid Layouts

	Department	Access
1	Automation	<input checked="" type="checkbox"/>
2	Deck	<input checked="" type="checkbox"/>
3	Engine	<input checked="" type="checkbox"/>
4	Safety	<input checked="" type="checkbox"/>

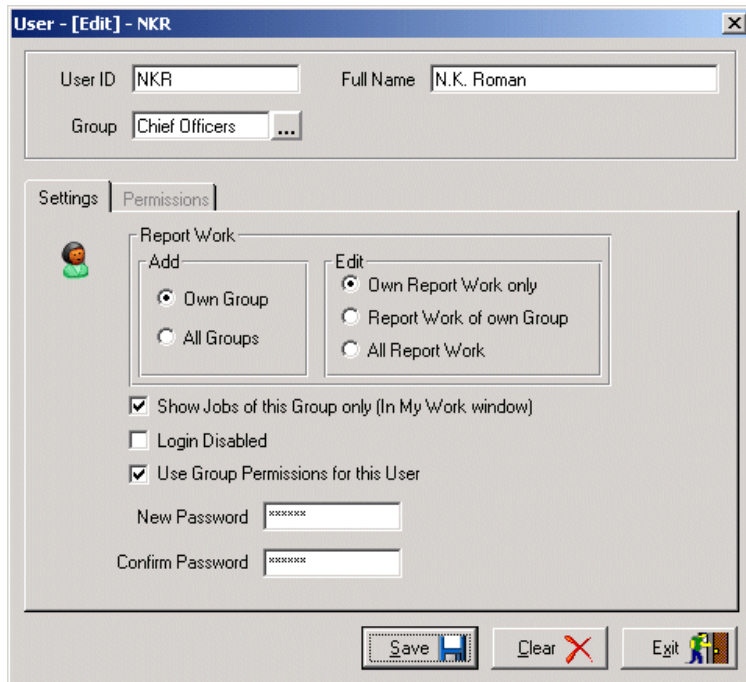
Group Permissions and Security

Automation Permissions

Forms | Reports | Charts | Grid

	Name	View	Add	Edit	Delete
1	Address Book	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Address Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Catalog Types	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Certificates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Common General Document(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Common Image(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Common Maintenance Document(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Component	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Component Workshop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Compose Message	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	Consumable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	Continuous Surveys	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Department's detailed
Permissions**

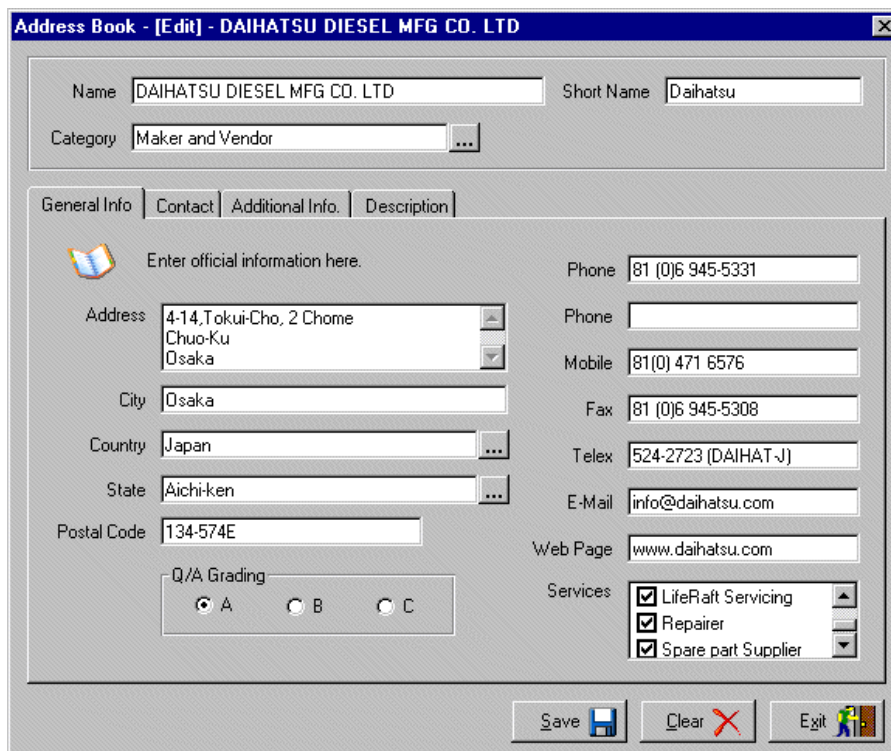


The screenshot shows a window titled "User - [Edit] - NKR". It contains fields for "User ID" (NKR), "Full Name" (N.K. Roman), and "Group" (Chief Officers). Below these are two tabs: "Settings" and "Permissions". The "Permissions" tab is active, showing "Report Work" options: "Add" (Own Group, All Groups) and "Edit" (Own Report Work only, Report Work of own Group, All Report Work). There are also checkboxes for "Show Jobs of this Group only (In My Work window)", "Login Disabled", and "Use Group Permissions for this User". At the bottom are fields for "New Password" and "Confirm Password", and buttons for "Save", "Clear", and "Exit".

**User settings form
along with
Permissions**

Address Book:

SMMS also gives facility to maintain complete Address Book for storing the details and contact information of various persons, Companies, Manufacturers and Vendors etc. Given below is one of the screens of Address Book.



The screenshot shows a window titled "Address Book - [Edit] - DAIHATSU DIESEL MFG CO. LTD". It contains fields for "Name" (DAIHATSU DIESEL MFG CO. LTD), "Short Name" (Daihatsu), and "Category" (Maker and Vendor). Below these are four tabs: "General Info", "Contact", "Additional Info", and "Description". The "General Info" tab is active, showing a form with fields for "Address" (4-14, Tokui-Cho, 2 Chome, Chuo-Ku, Osaka), "City" (Osaka), "Country" (Japan), "State" (Aichi-ken), "Postal Code" (134-574E), "Phone" (81 (0)6 945-5331), "Mobile" (81(0) 471 6576), "Fax" (81 (0)6 945-5308), "Telex" (524-2723 (DAIHAT-J)), "E-Mail" (info@daihatsu.com), and "Web Page" (www.daihatsu.com). There are also checkboxes for "Q/A Grading" (A, B, C) and "Services" (LifeRaft Servicing, Repairer, Spare part Supplier). At the bottom are buttons for "Save", "Clear", and "Exit".

**Address Entry
form**

Office Version of SMMS

Like the Ship version, Office version of SMMS is very powerful and user-friendly Software. It allows the managerial staff ashore to have a two way Data Communication between Ship and Shore. The Main Screen of the Software gives the user a bird's eye view of the status of various Critical and pending Jobs, Spare Parts below minimum required level, pending Certificates and Surveys, date of last back up taken on ship, date of last export, etc. The Spare Part status helps in planning budgets and assists to avoid stock piling of expensive spares.

A screen shot of SMMS (Office version) is given below which is self-explanatory.

	M.T. Faith	M.T. Noble
Ship	M.T. Faith	M.T. Noble
Master	L. Pang	O. Boucher
Chief Engineer	B. Macow	H.H. Honwe
Normal Jobs	35	9
Critical Jobs	8	2
Work Orders	1	3
Forms	6	4
Certificates	1	1
Inspections	3	3
Deficiencies	2	1
Surveys	5	1
Conditions	0	5
Continuous Surveys	2	5
Normal Spares (Below Min)	13	10
Critical Spares (Below Min)	2	9
Normal Consumables (Below Min)	1	10
Critical Consumables (Below Min)	12	10
Previous Month's Cost	32311	25320
Year Till Date Cost	423417	298650
Last Backup Taken On	10-Jun-2003	30-Apr-2003
Data Import from Ship on	15-Jun-2003 (12)	05-May-2003 (10)

User has the facility of viewing individual ship's complete SMMS by simply double clicking the required ship's name. This allows the user to scrutinize a particular ship in details.

New Ship creation:

SMMS allows creation of new Ship Database in the office. In case of a new Ship entering into the fleet, the Database of Components, Jobs, etc can be created or copied from Sister Ships in the Office and then exported on email as attachment to the new Ship where SMMS software is installed without any Database. This exported file from the office automatically gets imported into the SMMS software

onboard, from the email received. Scheduling of the jobs commence after user inputs initial start date/run hours onboard. Ship Staff can do modifications to the Database to make it completely Ship specific. This feature eliminates the need of manual data entry on board for the creation of Database.

Data Transfer:

A special feature of SMMS is the ease of importing and exporting data between ship and shore. User has the option of selecting data that needs to be exported. Images and documents, which may not be important to send via email, can be sent via CDs with the monthly office mail packet. In the Office, SMMS Software automatically updates all the images and documents from the CD and places them in respective location. All other data from ship to shore and vice versa can be exchanged as compressed files via email. SMMS Software also has the facility of attaching its automatic Export/Import module to any existing email system that may be in use onboard or in office. This feature allows SMMS database files exported from the Ship to the Office via email to be automatically stored in a User defined folder in the Office Computer. Further, this module updates the Office Database from the received files automatically without any human intervention. This feature thus ensures that the Office database for various ships is always updated with the last file received. This way SMMS takes full control of the data transfer without actually bothering the already busy user.

To sum up SMMS has been created to give ship staff/owners and management organizations an environment where all shipboard and office documentation can be compiled together with a complete control of planned maintenance to help keep the ship, sea worthy at all times.

Technical features:

Following are the technical features of SMMS:

- ✓ User Friendly
- ✓ Multi User
- ✓ Client/Server based
- ✓ Ship to Office and Office to Ship Data Transfer and Updation
- ✓ Centralised Database of all the Vessels in SMMS Office version
- ✓ Logging of all types of Activities
- ✓ Planned and Unplanned maintenance
- ✓ Automatic Notification of Pending Jobs, Certificate and Inspections Renewals
- ✓ M.I.S. (Management Information System)
- ✓ User Defined Counters and Meters
- ✓ Address Book to store all kind of Details and Contact Information
- ✓ Multiple level Hierarchy for Components, Spare Parts, Consumables, Address Book, etc.
- ✓ All type of Manufacturers and Vendor information
- ✓ Condition-based maintenance depending upon Period or Counters
- ✓ Work Orders
- ✓ Docking, modification and repair specifications
- ✓ Breakdown reporting
- ✓ Surveys and Certificates (Along with facility to store images also)
- ✓ Drawings, Images and linked graphics
- ✓ Facility to attach MS-Word, MS-Excel and PDF documents

- ✓ Technical Details
- ✓ Maintenance history
- ✓ Spare Parts Transactions
- ✓ Import/Export of data
- ✓ Complete Requisition System of Spare Parts and Consumables
- ✓ Budgeting
- ✓ Documents, Forms, Layouts
- ✓ Risk Assessment
- ✓ All type of Reports, Charts and Graphs
- ✓ Screen Preview of all the Reports and Graphs
- ✓ Configurable Reports and Graphs
- ✓ Edit Multiple machinery items
- ✓ Data Security and Integrity
- ✓ User level Security
- ✓ Facility to transfer data from one Ship to another (like Vendor Details)
- ✓ Copy Company Management Forms from one Ship to another
- ✓ **Inventory**
 - Department wise Inventory Management System
 - Inventory control for both Spare Parts and Consumables
 - Stock Level Management
 - User Definable Units
 - Reservation of Spares for future Maintenance
 - Spare Parts Transactions and History.
 - Linking of Spare Part with more than one Component
 - Import Spare Parts and Consumables from Excel
- ✓ And many more.....

The system links with Ship/Shore communication for updating of Databases and integrates with E-Mail and Internet for communication to third parties.

SMMS is a Window based Software and can run on following platforms: -

Windows 2000

Windows 2000 Server

Windows XP

Windows 2003 Server

Windows Vista