The Complete Maintenance Management Solution

Keep your maintenance department updated!

Minimise Maintenance
Maximise Production

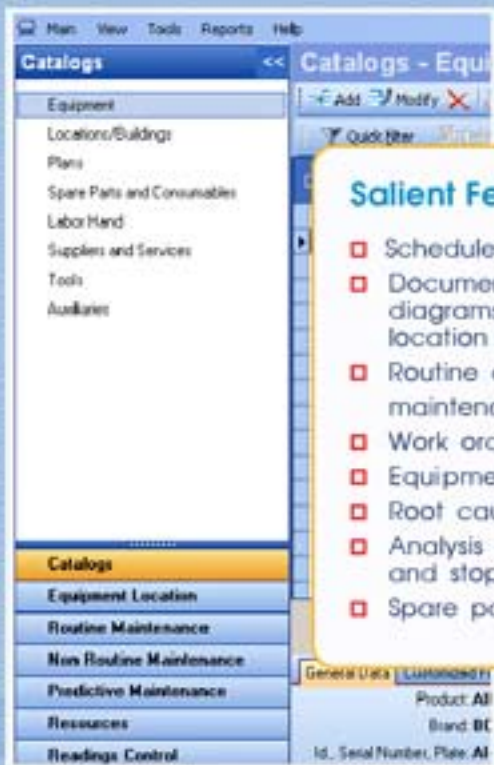**MP software**

Comprehensive Maintenance Management Solution

One of the many reasons for the industry's best performance would be on the best side the company's maintenance policy. The high maintenance costs, increasing down time, non-availability of spare parts on time are the causes of concern that lead to the productivity loss. Successful companies, whose equipment down time is minimal attribute the reason to the planned and scheduled maintenance, controlled spending on equipment, tracking of maintenance activities and optimization of spare parts and inventories.

Based out of the strong experience in the industries' maintenance management and understanding the pain areas, the MP is designed to exactly match the requirement of maintenance departments.

Catalogs

Equipment
Locations/Buildings
Plans
Spare Parts and Consumables
Labor Hand
Suppliers and Services
Tools
Auxiliaries

Catalogs
Equipment Location
Routine Maintenance
Non Routine Maintenance
Predictive Maintenance
Resources
Readings Control

Catalogs - Equi

+ Add ⯈ Modify ✕

▼ Quick filter

General Data | Customized
Product: Al
Brand: BO
Id., Serial Number, Plate: Al

Salient Features

☐ Scheduled jobs
☐ Documentation of plans, diagrams, specification, location etc.
☐ Routine and Non routine maintenance management
☐ Work order management
☐ Equipment History
☐ Root cause analysis
☐ Analysis of cause, failure and stoppages
☐ Spare parts and tools
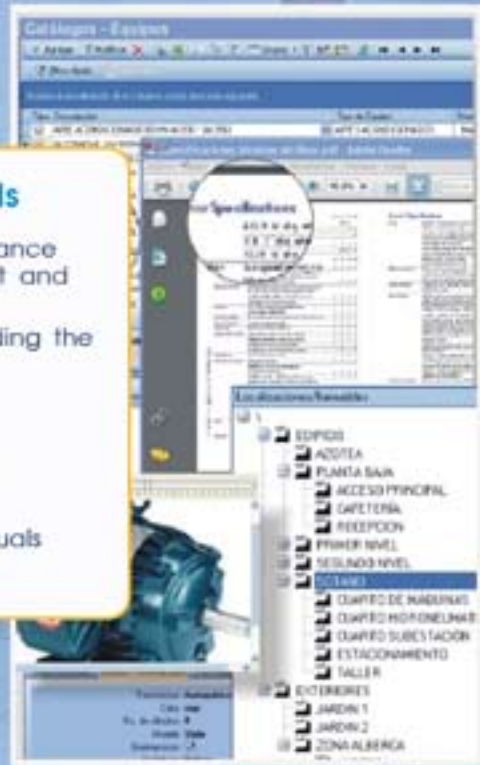
Equipment Details

☐ Allotting Maintenance jobs to equipment and locations
☐ Information regarding the equipment
  Photographs
  Diagrams
  Specifications
  Drawings
  Technical Manuals
  Supplier Data

PARTS	ACTIVITIES	FREQUENCY
Electric Pump	Review anchor	every 6 months
Motor	Measure temperature	every 15 days
	Evaluate vibration	once a month
	Major maintenance	every 2 years
Connections	Review	every 6 months
Ball bearings	Lubricate	every 3 months
Pumb	Review leaks	every 3 months
Ball bearings	Lubricate	every 3 months
Bands	Review tension	every 3 months
Pulleys	Align	once a year

Maintenance Plans

- Creation of Maintenance Plans
- Determination of parts of the equipment and assigning maintenance plans and activities based on the user experience and manufacture recommendation
- Dynamic character of plans

Non Routine Maintenance

- Corrective Maintenance
- Improvement Maintenance
- Predictive Maintenance
- Request manager through web

Calendar

- Automatically calculates the maintenance calendars
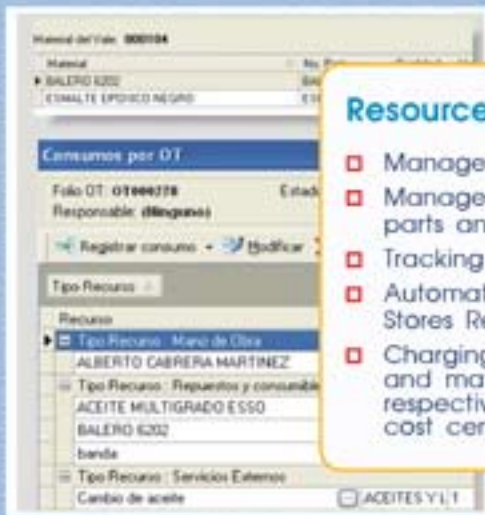- The calendar is updated as per the routine and non routine maintenances

Work Orders

- Updated list of jobs to be done everyday
- Creation of work orders
- Balancing of resources
- Grouping of jobs according to
- Priority
- Area of expertise
- Days and delays

Resource Management

- Management of manpower
- Management of spare parts and inventories
- Tracking of tools
- Automatic generation of Stores Request
- Charging of manpower and materials to the respective equipment and cost centre

Root Cause Analysis

- All information regarding the job performed and resources used is available
- Root cause analysis to identify the equipment with more failures
- Impact of failures
- Types of frequent failures
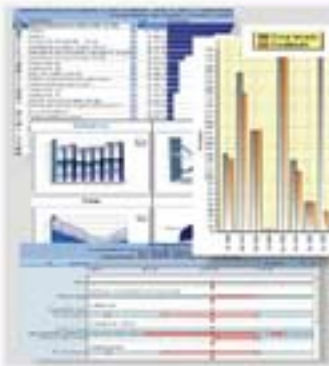
Maintenance Index

- Failure charts
- Cost charts
- Activities chart
- Down time
- Activity History
- Reduction of failures
- Identify the most recurrent problems
- Vulnerability of equipments

Routine Maintenance		Non routine maintenance	
⇨ Initial protected period		🟥 Corrective Event	🟩 Support Event
⇨ Protected period		🟦 Preventive Event	🟩 Improvement Even
⬌ Unprotected period		🟦 Predictive Event	
⬍ Out of service period			

1. MP Introduction

The MP is a professional computerized Maintenance Management System (CMMS).

The MP helps you organize the maintenance management of your company, keeping all the information of your Maintenance Department documented, updated and organized.

- Document all information related to equipment and facilities, for example, plans, diagrams, specifications, localization, supplier data, etc.
.
- Document maintenance plans or routines of each equipment, and automatically create maintenance schedules with the MP.

- Automate and simplify the generation, control and follow-up of work orders with the MP.

- Maintain full control of the spare parts inventory and reduce inventory levels through the purchase of spare parts just as they are needed.

- Keep all historical information related to works performed and used resources organized and available.

- Generate a large number of reports, indexes and charts related to maintenance management.

2. Where can this be implemented

The versatility of the MP allows implementing it in any place where there are equipment, machines and facilities subject to maintenance, no matter the size of the company.

- Process Industries
- Construction Companies
- Hotels
- Hospitals
- Fleets
- Service Companies

3. Benefits:

- Reduce unexpected shut downs and emergencies
- Extended equipment's useful life
- Reduction of corrective maintenance costs
- Scheduled and timely procurement of spare parts elimination of stock outs.
- Increase in reliability and uniformity in production
- Improve maintenance personnel performance
- Avoid accidents
- Organize, standardize and documentation of company's maintenance management
- Improve job request control
- Centralized maintenance data storage
- Quick access to historical data
- Measure Maintenance performance

4. Salient Features:

EQUIPMENT- Details of equipment such as images, locations, drawings, attached files, specifications, notes, guarantees, supplier data, etc. The MP offers great versatility since it allows the user to set his own customized fields to capture the equipment detail.

LOCATIONS- The location facilitates to document the location of every equipment. With the tree structure of the locations catalog, one can establish filters to locate the equipment in any level of the tree.

ROUTINE MAINTENANCE- Document routine maintenance plans for equipment and locations in the MP and indicate the routine activities that must be performed and their frequency. The MP allows establishing maintenance plans based on time or on a reading, such as kilometers, hours used, etc. You can even set combined plans with dates and readings, whatever occurs first.

AUTOMATIC PROGRAMMING OF ROUTINE MAINTENANCE- Once the user defines the maintenance plans or routines, the MP automatically estimates the dates in which each activity must be carried out, based on the date of the last maintenance job and on the frequencies established in the maintenance plans.

AUTOMATIC ESTIMATION OF THE MAINTENANCE CALENDARS- In the maintenance calendars, the MP marks the dates when the different maintenance jobs must be performed and the MP keeps those calendars up to date. Due to the several activities that must normally be controlled and due to the fact that calendars must be continuously updated, you can have all the information updated with only one computer based system such as the MP

REQUESTS OVER THE INTERNET- Report maintenance requests over the Internet. Maintenance requests over the Internet go directly to maintenance personnel. Each time a person reports a maintenance request over the Internet, a window opens in the maintenance managers' screen and indicates the jobs reported or requested by personnel. On the other hand, the persons who make a request can consult the status of their request over the Internet, i.e., if it was read, the date scheduled to perform the job, if the job has already been performed, etc. WORK ORDERS.- The MP analyzes the scheduled job dates and reports the jobs that must be carried out during the period. Select the jobs and automatically create the work orders from the MP. The MP assigns a consecutive folio number to each work order created by the user. The same work order may include one or several routine or non-routine maintenance jobs. You can also include one or several equipment or locations in the same work order.

DISTRIBUTION OF WORK LOADS- The MP has tools to help you distribute the work orders among the maintenance personnel according to the area of expertise and estimated duration of each order.

JOBS UPDATE- Once the jobs are performed, the user must report the jobs performed in the MP. When the user reports in the MP any routine maintenance job performed, the MP automatically creates the following date to carry out that job again. As the jobs are marked as performed, a graphic control shows the progress of each WO.

PREDICTIVE MEASUREMENTS- There are maintenance jobs which imply taking a measurement, such as temperature, vibration, wear and tear, etc. Document the value of the measurements from your equipment in the MP. The MP shows those values in a graph and provides alerts for all equipment with a measurement near or close to the limits.

SPARE PARTS AND CONSUMABLES INVENTORY- The Professional and Entrepreneurial MP include a very complete inventory program called Spare Parts Inventory, which allows efficiently controlling materials and spare parts stock, input and output movements, Kardex, valuing the inventory with different methods, estimating the supply, suppliers and purchases, etc. Another feature is the option to manage multi-warehouses and equivalent brands for the same product and bar code. Although the inventory is a program independent from the MP, the user can connect from the MP to the Inventory database to consult stock, automatically create output vouchers for the materials and determine the spare parts and consumables necessary to perform the different activities.

LABOR CATALOG- In the MP, the user captures the Labor Catalog where the names, areas of expertise, hourly costs and extraordinary costs of the personnel involved in the maintenance tasks are registered. The information of this catalog will allow designating persons in charge of the work orders as well as registering the time spent working on each work order.

SUPPLIERS AND EXTERNAL SERVICES CATALOG- The MP has an equipment and services suppliers catalog. The equipment registered in the MP can be related to its respective supplier. The user can consult the supplier's information online, such as contacts, telephones, etc.. He can also create a catalog with the services offered by each supplier and document the services consumed in the MP.

TOOLS RECEIPT AND RETURN CONTROL- The Professional and Entrepreneurial MP include a program called Tools Control. This program allows controlling the receipts and returns of all tools issued to workers. The program allows consulting online who has or where each tool is. Before performing a maintenance job, the user can consult the availability or the warehouse stock of the tools to be used to perform the jobs assigned from the MP.

RESOURCES AND ACTIVITIES ASSOCIATION- The association of resources with activities consists in establishing the material resources (spare parts and consumables), labor, external services and tools necessary to perform each routine maintenance activity.

RESOURCE FLOW- Based on the resources necessary to carry out each activity and the dates scheduled to perform them, the MP estimates the quantities of each resource to be used in the following days or months and the scheduled costs.

WAREHOUSE VOUCHERS- Automatically create warehouse vouchers in the MP and download them when creating your output movement from the spare parts inventory.

CONSUMPTION- The MP allows documenting the consumption of spare parts, labor services and external services used in the performance of the maintenance jobs. This allows us to query the resources used on each equipment and to analyze maintenance costs.

AUTOMATIC SUPPLY CALCULATION- The Spare Parts Inventory consults the MP to calculate the just in time supply of spare parts and consumables which must be acquired to comply with the maintenance programs. The calculation is based on the stock and the scheduled resources.

HISTORY OF CONSUMPTION AND JOBS PERFORMED- The MP keeps all the history information related to the jobs performed and the resources used in an organized, updated and available manner for review.

SCHEDULED VS. PERFORMED GRAPH- Graph in which the number of scheduled activities is compared with the number of performed activities on a monthly basis.

FAILURES AND ROOT CAUSE ANALYSIS- Identify the equipment with the most failures, the most frequent types of failures and their root causes.

GRAPH HISTORY- The history of the maintenance jobs performed for each equipment is presented in a graph for a certain time period, indicating the protected and unprotected periods. This graph is an indicator to assess the equipment vulnerability and shows how close the performance of the maintenance jobs has been to the scheduled jobs. It also allows relating failures with maintenance plans, helping to make the necessary adjustments in maintenance plans to avoid repeating a specific failure.

GRAPH OF COSTS, STOPPAGES, ETC- Create many different queries, graphs and reports related to maintenance management such as costs graphs, stoppages graphs, etc.

MAINTENANCE INDEXES- The MP calculates three maintenances indexes (Average Time between Failures, Average Time for Repair and Availability)

GUARANTEES CONTROL- The MP allows documenting the guarantees of the equipment, whether it is the equipment guarantee, a spare part guarantee or even a service guarantee. You can query all the guarantees in effect for equipment in this module.

LIBRARIES- A library is a file with several prefabricated maintenance plans from different typical equipment. The MP includes libraries with a wide variety of prefabricated maintenance plans which will make the MP implementation easier.

SECURITY- For the security of your maintenance system, the MP allows adding the users who will have access to the MP. The registered users can access the program with an access code and may have total or limited authorization to access different modules and execute specific functions.
Hardware/Software Requirements

Network version

CLIENT	
32 bits Operating System	Windows 2000/XP/Vista/Windows 7
Processor	Pentium III 800 MHz or higher
Memory RAM	Windows 2000/XP: 256 MB (512 MB or higher recomended)
	Windows Vista: 1 GB (2 GB or higher recomended)
Space on Hard Drive	470 MB (when installing the video courses) 100 MB (without installing the video courses)
Monitor	1024x768 pixels resolution, high density color (16 bits)

SERVER	
Operating System	Windows 2000 Server/2003 Server
Processor	Pentium III 500 MHz or higher
Memory RAM	512 MB (2 GB or higher recomended)
Space on Hard Drive	240 MB

Database compatibity
- Microsoft Access
- Microsoft SQL Server 2000/2005
- Oracle 9i/10g

5. Comparison among different versions

FEATURES	Basic	Professional	Enterprise
Modules			
MP Maintenance Module	x	x	x
Spare Parts Inventory Module		x	x
Tools Control Module		x	x
Module to Report Maintenance Requests over the Intranet/Internet			x
Databases			
Microsoft Access Databases	x	x	x
Microsoft SQL Server 2000/2005			x
Oracle 9i/10g Databases (Only MP Module)			x
Catalogues			
Equipment Catalogue	x	x	x
Locations Catalogue	x	x	x
Plans Catalogue	x	x	x
Spare Parts and Consumables Catalogue		x	x
Labor Catalogue		x	x
Suppliers and Services Catalogue		x	x
Tools Catalogue		x	x
Definition of Customized Fields for Equipment		x	x

Images Association		x	x
Attachment of files		x	x
Equipment Location			
Locations and Equipment Association	x	x	x
Locations History	x	x	x
Routine Maintenance			
Equipment and Plans Association	x	x	x
Initial Maintenance Dates Registry	x	x	x
Automatic Dates Scheduling	x	x	x
Out-of-service Equipment	x	x	x
History of Routine Maintenance Jobs Performed	x	x	x
Non Routine Maintenance			
Registry of Non Routine Maintenance Jobs	x	x	x
Damages Query	x	x	x
History of Non Routine Maintenance Jobs Performed	x	x	x
Query of Eliminated Jobs	x	x	x

Predictive Maintenance			
Measurements Registry		x	x
Out-of-limit Measurements Alert		x	x
Measurements History Graph		x	x
Resources			
Resources and Maintenance Activities Association		x	x
Query of Associated Resources		x	x
Resource Flow		x	x
Readings Control			
Registry of Readings	x	x	x
Monthly Use Averages	x	x	x
Readings History	x	x	x
Work Orders, Vouchers and Supplies			
WO Generator	x	x	x
Voucher Generator		x	x
Supplies Registry		x	x
History of Closed Wos	x	x	x

Equipment Open WOs Query	x	x	x
Distribution of WOs Graph (based on the workload assigned to each worker)			x
Vouchers Query		x	x
Consumption Query (grouped by WO)		x	x
Consumption Query (grouped by equipment)		x	x
Consumption Query (Grouped by resources)		x	x
Calendars			
Condensed (by Equipment)	x	x	x
Extended (by Equipment)	x	x	x
Extended (multiple Equipments)	x	x	x
Scheduled Stoppages			x
Information Analysis			
Failures and Root Cause Analysis	x	x	x
Comparison among Equipment	x	x	x
Scheduled Jobs vs. Performed Jobs Graph	x	x	x
Costs, Failures, Stoppages Graph	x	x	x

History Graph of Maintenance Jobs performed	x	x	x
Maintenance Indexes			x
Guarantees, Documents and Links			
Follow-up and Control of Guarantees			x
Shortcuts to Internet files and sites		x	x
Others			
Information Export			x

For further Details and a **Real Time Demonstration**, please feel free to contact us at

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