OPTILOG

KARABO® Product Brochure

Asset and Maintenance Management Solution

Product Overview

Introduction

Business success depends on an organisation's ability to deliver excellent results consistently. This oils down to being able to get maximum performance from every asset. Managing such an organisation requires nothing but the best information for tactical and strategic decisions.

First and foremost, **KARABO**® is designed to track and manage productive assets to the highest standards. **KARABO**® translates transactional data into information, and information into the knowledge required for highly effective decision making.
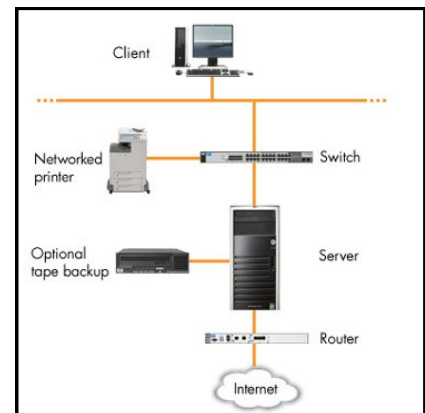
Architecture

The **KARABO**® modular architecture provides a world-class transactional system. It caters for the management of assets, materials, work orders, warranties, feedback and much, much more. All this information can be seen and managed by means of detailed status displays and reports, all highly relevant to their required purpose.

Technology

KARABO® uses state-of-the-art technology to achieve ease of use by the user. Remote access can be obtained by the use of standard Internet browsers, mobile application and bar-coding interfaces. Standard– as well as customised features allow you to have information at your finger-tips, leaving precious time available for your core business. Data synchronisation between remote sites ensures accuracy.

Services

Optilog offers comprehensive implementation support. A highly effective asset verification process, based on the **LogV** toolset, can be implemented. This sets a quick and clean departure point for implementation with high-integrity data.

KARABO® employs a dynamic, process-driven transactional system that enforces best practice work flow. It guides the user to ensure maximum long-term benefits for the organisation.

Formal training, assisted implementation and product support ensures Integration peace of mind.

The Application

- Has great flexibility by allowing user defined codes and terms for easy incorporation with the organization's current set-up.
- Validates and tracks all user actions via a secured audit trail.

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Value

KARABO® is not loaded with superfluous features. Optilog ensures that the solution remains cost-effective and affordable for a wide range of small to medium manufacturing companies.

Login and database selection

System access and the level is controlled by using user identification and encrypted passwords.

- Application on-line kelp
  The on-line help function guides the user to realise the full potential of the application.

- Support
  Free telephonic support available during office hours, and a full support service is available to customers with a Web based call centre.

User Interface

An easy-to-use graphical user interface (GUI) with multi-language capability promotes rapid implementation.

- Keyboard, and scanner is based on MS Office applications:
  - Lookup, filter, find, sort and other data selections.
  - Navigate functions.
  - Process functions with prompts guide the user through out the application to perform best industry practices.
  - Auto population of certain fields and user defaults greatly enhances effectiveness.

The use of "electronic signatures" for approval and stock adjustment ensures control of expenditure and data integrity.

Base or Lookup Information

User-defined base or lookup information is structured in such a manner that it leads the user in populating only those files that are actually required. Registration processes allow for setting base information - these default values save time.
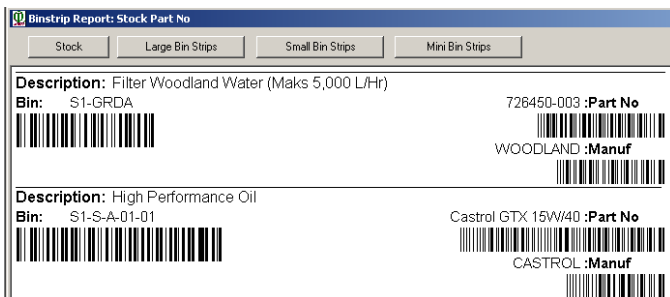
Reporting

Various standard reports (91) are available that include graphs and trends. Reports can be customised/added according to customer requirement.
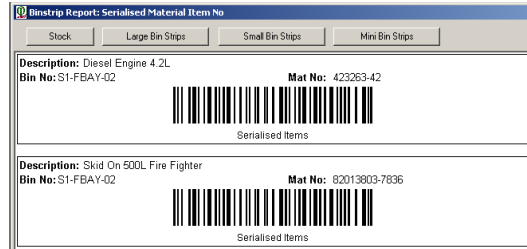
Printing of Asset Barcode Labels

Barcode labels can be printed on a barcode printer, or aluminium-type barcode tags can be used.

Typical Bin strip Examples

Printing of Bin Labels

Two types of bin strips of three different standard sizes can be printed for stores application and stores re-organisation. This is performed directly from the database.

Stock Control provides for:

- Issuing/returning of stock.
- Replenishment.
- Stock levels (min/max).
- Batch/shelf life.
- Over/under stock control.
- Slow moving stock.
- Stock taking.

Asset Management

Asset management includes the following:

Organisation and Personnel

- Structuring of the organisational and personnel environment.

Asset Register

The Asset Register allows management of the following:

- Asset structure.
- Asset tracking.
- Asset deployment.
- Asset ownership.
- Asset warranties.
- Asset meters (calendar & registered utilisation).
- Age and remaining life monitoring.
- Accident / incident history.
- Asset status history.
- Asset failures & reviews.

Asset Configuration Management

- Part number configuration – establish configuration base Lines.
- Asset configuration – manage physical asset structures by the established part number configuration baselines.

Material Management is Support of Asset Management

- Assets and consumables.
- Stock control.
- Bar-coding.

Maintenance Management

- Works order management.
- Task cards.
- Job cards.
- Scheduled events (preventative maintenance).
- Ad-hoc events (standard repair tasks).
- Condition based maintenance.
- Work-In-Progress (WIP).

Depreciation

Asset Depreciation process [3 Methods]:
- Straight line.
- Reduced balance.
- Production.

Logistics Support

Logistics support module encompasses the following:

Document Management

The document manager caters for documentation (and software) management. This covers:
- Document development.
- Document distribution tracking.

The following typical data elements and functions are covered:
- Document types or groupings.
- Document classification.
- Document status.
- Revision control.
- Associated documentation links.
- Date registered and expiry dates (software licences etc).
- Images and file links in various formats.
- Document copy management.
- Concept document electronic routing.
- Document structures (multi-parent / child relationships, parts, chapters, pages, and appendices etc.).
- Documents and Images can be widely linked within the system.
- Master record indexes.

Documents can also be routed using process windows or bar code and scanning functions.

Modification Management and Directives

The modification management function allows the user to implement and manage modifications and related detail per serial number by:
- Modification types or groups.
- Modifications applicable per part number.
- Embodiment status, dates and indicators.
- Modification document links, files and images.
- Events or tasks with resource requirements.

The directives management function manages the incorporation of directives and bulletins and their applicability to specific assets.

Contract Management

The contract manager allows users to monitor and manage support contracts and service agreements:
- Contract and contractor Details.
- Assets per support contract.
- Contract renewal dates and costs.
- Job history per contract.
- Contract services.
- Contract suppliers.

Procurement

The procurement capability includes the following in terms of purchasing orders, repair orders and services contracted:
- Order requisitions.
- Order requisition approval.
- Order registration.
- Order placement.
- Order line cancellation.
- Goods receiving (non-serialised / batch control and serialised items).

Provision is made for purchases, repairs, services, shipping, Sundries etc. This function streamlines parts and material management.

Logistics Engineering

Failure Analysis

KARABO allows the user to do failure analysis by filtering, sorting and selecting data by means of 14 various failure, cause, MTBF and remedial action reports.

IT and Related Interfaces

Barcode and Scanner Interface

Barcode Technology is an optional feature, using Barcode Labels and Scanners for Processes. Keyboard wedge-type barcode scanners as well as batch scanners can be used and most barcode types can be read.

```
ASP0092
[barcode]
AUTOSPRUE VALVE
# 1948
S/N:ASP0092
LRU
```

Barcodes are produced in Code BAR128 format limited to unaccented Latin characters ([a-z] [A-Z] [0-9]). Cyrillic characters are translated to Latin characters for barcode output and re-translated back to Cyrillic when read.

Barcode Labels can be printed for:

- Assets
- Stock Items and Bin Inventory
- Batches
- Consumables and Batches
- Documents
- Personnel
- Job Cards and Task Cards
- Condition Monitoring Routes

Web Interface

Our Web architecture is PHP (Programmable Hypertext Pre-Processor) based which is widely used for Web development, and can be embedded into HTML. The Web application uses ODBC to connect to the database and the Works Order Request environment is Web based.

Mobile Devices

Our application allows total mobility for:

- Asset status changes.
- Failure registration.
- More functions can be added.

The mobile application was written with assistance from a leading mobile application developer and is able to connect directly to the live database for real time update.

The mobile application can be customised to suit the need of the user.

Minimum/Preferred Hardware Requirements

Server Specification:

- Pentium 4, 2 Ghz/Core 2 Due 3 Ghz CPU.
- 4Gb RAM.
- Windows XP/Server 2008 or latest.
- 500Gb hard disk.
- 1024x768/1280x800 screen resolution.
- 100 megabit Ethernet TCP/IP network connection.
- UPS and back-up device and routines ensure smooth operation.

Workstation Specification:

- Pentium 4, 2 Ghz/ Core 2 Due 2 Ghz CPU.
- 2 Gb RAM.
- Windows XP or latest.
- 500Gb hard disk.
- 1024x768/1280x800 screen resolution.
- 100 megabit Ethernet TCP/IP network connection to server.

System Administration

Client System Administration Functions

Different user environments and roles can be set-up by the customer allowing:

- Custom menu access and set-up.
- Data field options to:
    - View data only.
    - Edit, create and save, or.
    - No visibility or access to sensitive fields.
- User specific configuration Set-Up.
- Client specific defaults.

Data Import and Export Functions

Data can be imported and exported using the import and export functions and menu detail can be saved in various formats e.g. tab delimited, MS Excel etc.

Multimedia File Attachments

A full range of multimedia formats is supported. Word files, spreadsheets, graphic images, automated test results, CAD diagrams, electronic IPCs, or audio and video clips can be linked to:

- Documents.
- Assets.
- Parts in the part base.
- Events.
- Job cards.
- Personnel.
- Permits and related documents.

System Requirements

Operating Systems and Databases

The following operating systems are supported:

- Windows XP or latest.

The following Databases are supported:

- MS SQL Server 2000 and 2002 .
- Sybase Adaptive Server SQL anywhere version 9 – Conversion can be done on request.
- Oracle 8i and 9 – Conversion can be done on request.

General

Technical Support

Technical support is available 24/7 via the web or by telephone or email during working hours.

Functional Implementation Assistance

Functional implementation support is available to clients requiring a "Quick-Start" solution and is quoted separately.

Training

We offer standard training courses at our offices in Centurion and can also present training at the client's premises.

Prices

Prices for seats, database, technical support, functional implementation and development of new requirements are available on request.