

# EAM

## Enterprise Asset Management



GALION Solutions offers applications to manage preventive and remedial maintenance processes to help its customers with a maintenance management tool.

Already benefitting from inventory flow management, purchasing and control of supplier invoices tools, the GALION Automotive software added EAM (Enterprise Asset Management) functions.

Preventive routings are described in the system and propose preventive orders of action. These orders enable the planning of interventions and the procurement of the components associated to the routings for substitution.

The technical staff intervenes on the machine, eventually replaces some parts and declares their activity: amount of time spent and used pieces. When a machine breaks down, remedial maintenance can be triggered and validated. When the technical staff then intervenes, it indicates time spent and the eventual replaced pieces, as well as the history of breakdowns, causes and so on. The database on the company thus gets richer and is destined to be useful for future breakdowns.

The maintenance manager or any other analyst can then study the causes of breakdown, the cost and the effectiveness of the maintenance department.

## Database repository

### Routings

Operations of routing  
Hierarchical on 6 levels

Extra information: time, workforce, category of staff

### Components

Components are associated to operations of routing.

### Types of machines / tools

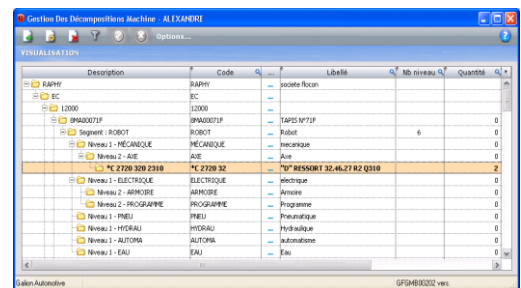
Types of machines / tools enable to group them.

### Machines

They are linked to one or several production means (production islands,...) which are determined beforehand in the technical database of GALION Automotive (Production Management System).

Hierarchical decomposition of machines on 6 levels,

Components (articles) are linked to the different predefined levels



Description	Code	Libellé	Nb niveau	Quantité
BAPHY	BAPHY	jacotte Rcon		
EC	EC			
L2000	L2000			
SHAN001TF	SHAN001TF	TAPIS M71F		0
Segment - ROBOT	ROBOT	Robot	6	0
Niveau 1 - MECANIQUE	MECANIQUE	meccanique		0
Niveau 2 - AIS	AIS	Ais		0
Niveau 2 - AIS	TC 2728 92	TOP ASSORTI 30.46J27 92 Q318		2
Niveau 1 - ELECTRIQUE	ELECTRIQUE	electrique		0
Niveau 2 - ARMURE	ARMURE	Armure		0
Niveau 2 - PROGRAMME	PROGRAMME	Programme		0
Niveau 1 - PNEU	PNEU	Pneumatique		0
Niveau 1 - HYDRAU	HYDRAU	Hydraulique		0
Niveau 1 - AUTOMA	AUTOMA	automatisme		0
Niveau 1 - EAU	EAU	Eau		0

### Tools

They can be described and they undergo the same treatments as machines regarding EAM.

## Applications to intervene

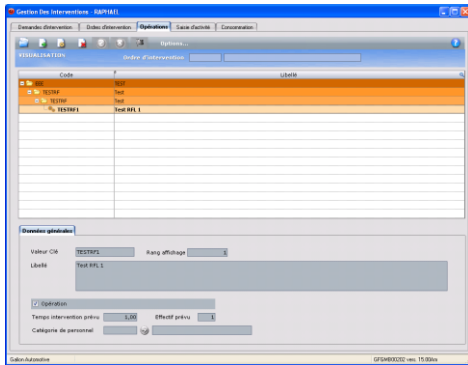
Applications to intervene are generated or recorded as preventive or remedial measures. They are optional assuming it is a specific organization or an urgent intervention.

An application to intervene includes one or several speaking orders.

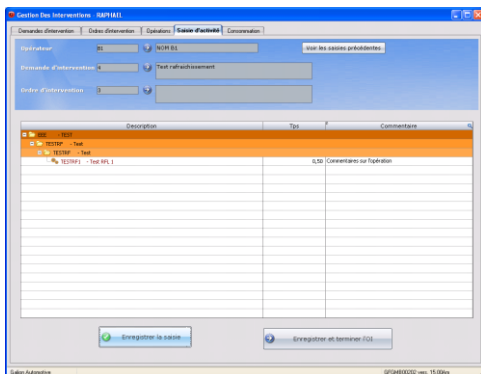
### Speaking orders

The list of operations, the entry of activity time period and the consumption of components are specified. The consumption of components made in "keyboard-screen" mode or "mobile" mode broadens the database of knowledge of the machine.

### Liste of operations

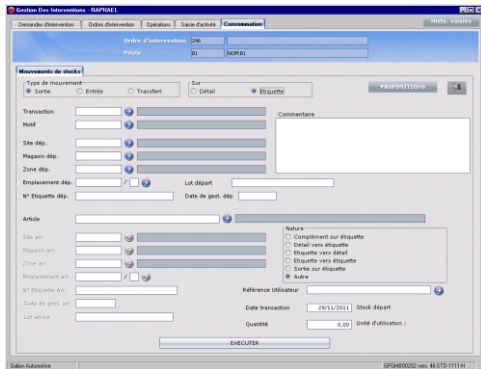


### Entry of activity time



### Consumption of components

During consumption, the article can be automatically created in the tree of the machine if it does not exist.



The consumption of components is also made in mobile mode by scanning labels.

## Planning of action – Preventive measures

Planning allows setting up series of interventions every:

- x hours
- week
- month

- manufactured piece
- x number of machine moves

The production monitoring and production functions of GALION Automotive (specified in Production Management System) fuel execution and thus the actual wear of components and machines.

The requirements calculation (for lines) of the software (MRP) enables planning, in order to foresee upcoming interventions. Planning is based on frequencies linked to the number of actual production hours and to the number of production hours yet to do.

## Purchasing – Supplier scheduling

The consumption of components for maintenance is integrated in the processes of resupplying and purchasing of GALION Automotive.

A process of resupplying, based on actual consumptions, can be activated.

Line requirements calculation (MRP) processes the consumption of components and suggests resupplying according to rules defined by GALION Automotive.

The maintenance department can submit an application to purchase which will be integrated in the GALION Automotive standard workflow of dealing with applications to purchase.

## Inventory

Stock structure with GALION Automotive enables to manage the general warehouse.

The warehouse is usually divided in zones, locations or in cupboards and lockers for the storing of sharp tools for instance. The software allows to manage lots and the date of management, in order to take into account FIFO and FEFO issues.

Articles can be pre-addressed. It makes storing easier. The reception process identifies products by creating labels which can be re-used for inventories and consumptions.

The suggested processes ensure the good management of the general warehouse.