



## Maintenance Module Overview

Whether you are an experienced CMMS (Computerised Maintenance Management System) user or a company moving from a paper or spreadsheet based maintenance system, Shire’s FrontLine Maintenance Management Module is well worth taking the time to explore.

We have put this guide together to allow you to get on with evaluating the system quickly - rather than having to learn the basic system functions and navigation from typical computer system “help files”.



Frontline Maintenance Module toolbar icons

Above we see the main FrontLine Maintenance module tool bar. The number of buttons can be reduced depending on how much of the system you wish to implement.



**Clients:** This is an optional level in the system and allows users such as Contractors to group together a collection of Sites under a single Client. The system will also allow you to create multiple Clients. Against each client you can hold key information. (See Fig. 1)

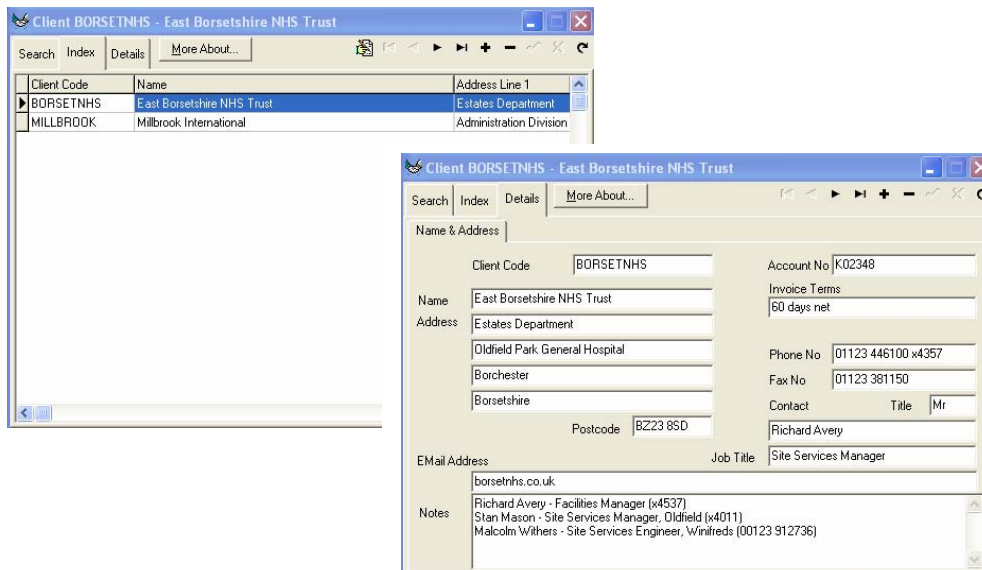


Fig 1

## Shire Systems – FrontLine System Overview



**Sites:** It is essential to create at least one site under which you record your assets. The system will allow you to create multiple Sites and link them to Clients (if required). Like 'Clients', you can hold key information such as address, telephone number, contact and service details (optional). (See Fig. 2)

The screenshot displays two windows from the 'Site MILLBROOK - Millbrook International' application. The top window shows a list of sites with columns for Site Code, Name, and Address Line 1. The bottom window shows the detailed view for the MILLBROOK site, including fields for Site, Site Type, Name, Address, Client, Phone No., Fax No., Contact, Title, Job Title, Postcode, Email Address, and Notes.

Site Code	Name	Address Line 1
MILLBROOK	Millbrook International	Site Services Division
OLDFIELD	Oldfield Park General Hospital	Oldfield Park
REDBRIDGE		

Name & Address		Service Details	
Site	MILLBROOK	Client	MILLBROOK
Site Type	INDUSTRIAL-L	Phone No.	01234 1234546
Name	Millbrook International	Fax No.	01234 123888
Address	Site Services Division	Contact	Barry Hopkins
	Blackwall Road	Title	Mr
	Oakwood Industrial Park	Job Title	Maintenance Engineer
	Westbourne		
	Postcode	WB12 6ZX	
Email Address	hopkinsb@millbrook.co.uk		
Notes	Jack Watson (Admin division) must be advised in advance of all site visits		

Fig 2

# Shire Systems – FrontLine System Overview



**Assets:** Assets are at the centre of the FrontLine Maintenance system and are key to all the activities you wish to carry out. Anything you plan, schedule, record or create will relate directly to a unique asset record. From the asset register you will be able to view and set planned work, look at job history, documents and other details etc. The Asset detail screen holds the key information on the assets within each site. This screen can be customised to reduce or increase the number of visible fields or to change the field labels. Through the “Documents” tab you can set up links to other electronic files (databases, Word documents, spreadsheets, CAD drawings, digital photos, scanned documents etc). See Fig. 3

The screenshot displays two windows from the FrontLine Maintenance system. The top window, titled 'Assets', shows a search and filter interface with fields for Site Code (MILLBROOK), Register, Asset No (COMP-120), Serial No., Account No., Department, Asset Category, System, Location, Service Category, and Maker. The bottom window, titled 'Assets at MILLBROOK: COMP-120 Compressor - Hydrovane 120 Pump', shows the 'More About...' tab with a list of assets and a detailed view of the selected asset.

Site Code	Asset No	Location	Description (line 1)
MILLBROOK	COMP-120	UNIT 3/PRESS HALL	Compressor - Hydrovane 120 Pump
MILLBROOK	COMP-200	UNIT 3/PRESS HALL	Compressor - Atlas Copco 200
MILLBROOK	COMPCABLE	UNIT 1	Computer Cabling Network
MILLBROOK	CONV-01	UNIT 3/DESPATCH	Conveyor Roll-Line - Outside
MILLBROOK	CONV-A	UNIT 3/PRESS HALL	Conveyor Accumulation - A Line
MILLBROOK	CONV-B	UNIT 3/DESPATCH	Conveyor Long - B Line
MILLBROOK	CONV-PB	UNIT 3/DESPATCH	Conveyor Push-Out - B Line
		UNIT 3/DESPATCH	Conveyor Belt - A Line - PSS
		UNIT 3/DESPATCH	Conveyor Slip Torque - A Line
		UNIT 3/DESPATCH	Conveyor Slip Torque - B Line
		UNIT 3	Conveyor All - Dummy record
		UNIT 3/PRESS HALL	Air After Cooler
		UNIT 3/PRESS HALL	Distribution Cubicle
		UNIT 2/RESTAURANT	Dishwasher in Kitchen Unit 2 - Hobart
		UNIT 3/WORKSHOP	Drill - Pillar
		UNIT 3/WORKSHOP	Drill - Richmond
		UNIT 3/PRESS HALL	Air Dryer
		UNIT 3/PRESS HALL	Extractor Fan
		UNIT 3/STORES	Fork Lift Truck - Lansing Frer 5

The detailed view of the selected asset (COMP-120) shows the following information:

- Site Code: MILLBROOK
- Asset No: COMP-120
- Description: Compressor - Hydrovane 120 Pump
- Department: PRODUCTION
- Asset Category: HEATING
- System: COMPRESSOR
- Location: UNIT 3/PRESS HALL
- Register: EQUI
- Service Category: COMPRESS
- Maker: HYDROVANE
- Model: [Blank]
- Serial No.: 20HV386170/2

The 'TASKS' table for this asset is as follows:

Task	Freq	Unit	Last	Next	Hold	PM	PM-RT
COMP-10w	10	W	26/01/04		H	Y	F
COMP-1200	0		09/05/03			Y	
COMP-2000	0		18/12/02			Y	
COMP-4w	4	W	06/09/04		Y	F	
PAT	6	M	01/01/04	30/06/04		N	V

MOTOR: Brook Crompton  
RATING: MCR INSUL CLASS: B DESIGN: 40X2

Fig. 3

# Shire Systems – FrontLine System Overview



**Tasks:** Under this section a “library” of planned and frequently done tasks is created. Against each task the details such as; Description, job notes, readings/condition monitoring, trade, number of men, permits etc can be stored. This information is transferred through to the work orders/job sheets generated by the system. Again, through the “Documents” tab you can set up links from the task to other electronic files (databases, Word documents, spreadsheets, CAD drawings, digital photos, scanned documents etc).

See Fig. 4

The screenshot displays two overlapping windows from the FrontLine system. The top window shows the 'Task Details' for 'Task BOILER-1M - Boiler checks - monthly'. The bottom window shows the 'READINGS' table for the same task.

**Task Details:**

- Task Code: BOILER-1M
- Task Description: Boiler checks - monthly
- Service Category: BOILER
- Std Freq Unit: 1 M
- Repeat Type: F
- Included In Task: DESCALE
- If within (days): 15
- Std Meter Freq: 0
- PM (Planned Maintenance): Y
- Available for Work Request: N
- Available for HelpDesk: N
- Permit: CHEM
- Work Type: P
- Priority: 3
- W/O Format: 01C
- Risk/Consequence: 1
- Risk Assessment Status: L
- Trade: T
- No. of Men: 1
- Estimated Total Man Hours: 6

**READINGS Table:**

Seq	Test Category	Test Name	UOM	DecPlace	Lower Limit	Upper Limit	Fail Task
1	BOILER	Alkalinity	mg/kg	0		1000.000	
2	BOILER	Alkalinity C	mg/kg	0	350.000		
3	BOILER	Conductivity	mohs/Cm2			7000.000	
4	BOILER	Des Solids	mg/kg			3500.000	
5	BOILER	pH at 25 deg	pH	1	10.500	12.000	
6	BOILER	Phosphate	mg/kg		30.000	60.000	
7	BOILER	Sodium Sulph	mg/kg	0	30.000	70.000	
8	BOILER	Sus Solids	mg/kg			200.000	

Fig. 4



**Inspection & Test Scheduling:** Within this area, you can schedule items such as safety checks, instrument calibration, ladder inspections, lifting gear inspections, fire extinguishers etc. (See Fig. 5)

The screenshot displays two windows from the 'Inspection and Test Scheduling' software. The top window is the main search interface, and the bottom window is a 'Create Check-List' window showing a table of tasks.

**Inspection and Test Scheduling - Search Filters:**

- Site Code: MILLBROOK
- Reg: [Dropdown]
- Asset No.: [Dropdown]
- To Asset No.: [Dropdown]
- Status: [Dropdown]
- From: // To: //
- Service Category: [Dropdown]
- Department: [Dropdown]
- Asset Category: [Dropdown]
- System: [Dropdown]
- Location: [Dropdown]
- Team: [Dropdown]
- Task: [Dropdown]
- Sequence: Site / Dept / Location / Asset Desc

**Include/Exclude Options:**

- Include overdue checks
- Include items with no 'next' date
- Exclude checks 'on Hold'
- Include full checks
- Include intermedia
- Include both full e
- Exclude intermedia

**UNIT-SITE General Site Works - METERSFLT Meters - ta... - Create Check-List**

Site Code	Asset No.	Task															
MILLBROOK	UNIT-SITE	METERSFLT															
MILLBROOK	UNIT-SITE	TRUCKBATT															
MILLBROOK	OVEN-01	PAT06															
MILLBROOK	OVEN-01	PAT06-V															
MILLBROOK	COMP-120	PAT															

Fig. 5

## Shire Systems – FrontLine System Overview



**Events:** This is the “history pot”. An event is created automatically when a Work Order is signed off as complete or one can be created, ad-hoc (without a full work order being raised).

Events are the basis for most of the reports generated by the system. Within this section the details of each event (stored in date & time order) can be opened and viewed on the screen or through the reporting section printed to hard copy. (See Fig. 6)

The screenshot displays two windows from the FrontLine system. The left window shows a list of events, and the right window shows the detailed view of a selected event.

R	Description	Date	Time	Site Code	Asset No.
	Weekly Battery Maintenance	26/11/04	15:35	MILLBROOK	BTR1-01
	Class 1 230V Hand Held Tools/Dom Appl	27/11/04	:	OLDFIELD	E1006
R	Intermediate visual check	27/11/04	:	OLDFIELD	E1006
	Fluid Leak	27/11/04	:	MILLBROOK	BOIL-01
R	Bed - Full Check	29/11/04	:	OLDFIELD	B0001
	Clear old racking and prepare floor	29/11/04	15:57	MILLBROOK	
	Install stores racking	29/11/04	16:14	MILLBROOK	
	Restock as per plan	29/11/04	16:22	MILLBROOK	
R	Class 2 230V Electronic Equipment	06/12/04	:	OLDFIELD	E0051
R	Intermediate visual check	06/12/04	:	OLDFIELD	E0051
R	Class 1 230V Hand Held Tools/Dom Appl	10/12/04	13:41	OLDFIELD	E1009
R	Water Tank Visual check	15/12/04	:	OLDFIELD	W0002
	Exhaust - Rear pipe mount failed	26/07/05	1		
	Blade too slack	26/07/05	0		
	Replace faulty tube	26/07/05	0		
	Check malfunctioning computer	26/07/05	1		
	Fluid Leak	29/09/05	1		

The detailed view of the 'Fluid Leak' event shows the following information:

- Site Code: MILLBROOK
- Asset No.: AIRCON
- Asset Description: Air conditioning unit
- Work Type: B
- Date Time: 29/09/05 11:33
- Person: A DRIP
- Task: LEAK
- Fault Area: PUMP
- Fault Code: 77
- Event Description: Fluid Leak
- Downtime (Hrs): 0

Readings: Notes | Other Costs | Labour

Tighten union on inlet valve  
All work completed satisfactorily and plant returned to normal operations.

Use F3 for tab      Use F4 to pick up standard text

Fig. 6

# Shire Systems – FrontLine System Overview



**PM Planner:** The planner shows the status of all assets that have scheduled tasks and calendar reminders allotted (over a "rolling" 2 year period).

From this screen you can view the progress of a planned task, reschedule it, release work to the maintenance staff/contractors and even close completed jobs/work orders. (See Fig. 7)

The screenshot displays the 'Plans' application window. On the left, there are search filters for Site Code (MILLBROOK), Reg, Department, Asset Category, System, Location, Task, Team, and Primary Trade. A 'Sequence' dropdown is set to 'Site/Asset'. The main window shows a table of tasks for 'MILLBROOK' with columns for Site Code, Asset No., Task, and Flag. To the right of the table is a calendar grid with days of the week (S, M, Tu, W, Th, F, Sa, Su) and months (J, A, S, O, N, D, J, F, M, A, M, J, J, A, S, O, N, D). The grid contains various characters (X, C, S, W, D) indicating task status and scheduling.

Site Code	Asset No.	Task	Flag
MILLBROOK	ARCON	BOILER-TW	1 \
MILLBROOK	ARCON	BOILERDAILY	1 \
MILLBROOK	ARCON	DESCALE	1 \
MILLBROOK	ASTRA VAN	12000-SERV	
MILLBROOK	ASTRA VAN	8000-SERV	
MILLBROOK	ASTRA VAN	MDT	1 \
MILLBROOK	ASTRA VAN	TAX	1 \
MILLBROOK	BDIL-01	BOILER-TW	1 \
MILLBROOK	BDIL-01	BOILERDAILY	1 \
MILLBROOK	BDIL-01	DESCALE	1 \
MILLBROOK	BDIL-02	BOILER-TW	1 \
MILLBROOK	BDIL-02	BOILERDAILY	1 \
MILLBROOK	BDIL-02	DESCALE	1 \
MILLBROOK	BDIL-03	BOILER-TW	1 \
MILLBROOK	BDIL-03	BOILERDAILY	1 \
MILLBROOK	BDIL-03	DESCALE	1 \
MILLBROOK	BDIL-04	BOILER-TW	1 \
MILLBROOK	BDIL-04	BOILERDAILY	1 \
MILLBROOK	BDIL-04	DESCALE	1 \
MILLBROOK	BDIL-05	BOILER-TW	1 \
MILLBROOK	BDIL-05	BOILERDAILY	1 \
MILLBROOK	BDIL-05	DESCALE	1 \
MILLBROOK	BDIL-06	BOILER-TW	1 \
MILLBROOK	BDIL-06	BOILERDAILY	1 \
MILLBROOK	BDIL-06	DESCALE	1 \
MILLBROOK	BOILERHOUSE	BOILER-1M	1 \
MILLBROOK	BOILERHOUSE	BOILER-TW	1 \

Fig 7



**Work Requests:** This form allows a quick and simple entry of "Work Requests" into the system. The quality of the data received can be improved by using the selectable mandatory field entry - **shaded blue**. As an added measure of control, work requests will need to be authorised before they become active work orders. The "Work Request" screen can be shared out over a network and used to replace and automate an existing job request docket system. (See Fig. 8)

The screenshot shows two windows from the FrontLine system. The top window, titled 'Work Orders R0113 - Fluid Leak', displays a table of work orders. The bottom window, titled 'Enter Work Request', shows the form for creating a new work request.

Work Order	Pty	Trade	Asset No	Job Description	Raised	Time	Start D
R0108	1	E	BAND-01	Loss of power/ power failure	25/07/05	09:10	
R0109	1	F	BTRT-01	Fluid Leak	25/07/05	09:11	
R0112	1	E	BTRT-01	Electrical Fault	04/10/05	12:51	
R0113	1	F	BOILERHOUSE	Fluid Leak	04/10/05	12:51	
R0110	3	E	ASTRA VAN	Electrical Fault	26/11/04	10:59	

The 'Enter Work Request' form contains the following fields and values:

- W0 No./ Request No.: R0113
- Site: MILLBROOK
- Requested by:
  - Person: SUPERVISOR
  - Phone: 02380 224111
  - Department: PRODUCTION
- Asset No.: BOILERHOUSE
- Asset Description: Boiler House - Containing 3 boilers
- Task: LEAK
- Job Description: Fluid Leak
- Notes:
  - Attend breakdown ASAP and Isolate
  - Contain and clean up spillage
  - Confirm leak and try and establish the cause
  - Repair or replace as required
  - \* In the event of a hydraulic pipe failure - see "Supplier" section for call out number for the "Hose Doctor"

Buttons at the bottom of the form include 'Print & Save', 'Save', and 'Close'.

Fig 8



**Work Control (Help Desk):** This section shows details of all jobs within the system (PM work orders, corrective work orders and work requests – both open and closed). There is a comprehensive search and select menu, allowing you to locate particular jobs easily. Detailed information is shown for existing jobs and you can create new work orders, authorise work orders, assign and prioritise the work for team members or contractors and sign off completed jobs. See Fig. 9

The screenshot displays the 'Work Orders' application interface. It is divided into several sections:

- Search Filters:** Includes options to show open or closed work orders, and various dropdown menus for Site (MILLBROOK), Department, System, Location, Tag, Requested By, and Sequence.
- Search Criteria:** Fields for Person, Team, Trades, Statuses, Priorities, Work Type, CostCentre, and Asset.
- Work Orders R0113 - Fluid Leak:** A table listing multiple work orders with columns for Work Order, Pity, Trade, Asset No., Job Description, Raised, Time, and Start Date.
- Work Orders R0113 - Fluid Leak (Details):** A detailed view of a specific work order (R0113) with fields for No./Type, Priority, Status, Dept, System, Location, Person, Department, Asset No., Task, and Planned resources.

Work Order	Pity	Trade	Asset No.	Job Description	Raised	Time	Start D
P1546	2	F	COMP-200	Compressor - Full Service - 6 months	26/09/05		26/09/05
P1549	2	T	IND-42D	Index GE 42/65 - Mechanical - 3 months	26/09/05		26/09/05
P1532	3	T	AIRCON	Boiler weekly checks	26/09/05		26/09/05
P1533	9	T	AIRCON	Boiler daily checks (issued weekly)	26/09/05		26/09/05
P1535	9	T	BOIL-01	Boiler daily checks (issued weekly)	26/09/05		26/09/05
P1536	9	T	BOIL-03	Boiler daily checks (issued weekly)	26/09/05		26/09/05
				Boiler daily checks (issued weekly)	26/09/05		26/09/05
				Boiler daily checks (issued weekly)	26/09/05		26/09/05
				Boiler daily checks (issued weekly)	26/09/05		26/09/05
				Boiler daily checks (issued weekly)	26/09/05		26/09/05
				Compressor 1200 hour maintenance	26/09/05		26/09/05
				Underwrapper - Electrical - 2 months	26/09/05		26/09/05
				Boiler weekly checks	27/09/05		27/09/05
				Loss of power/ power failure	29/09/05	12:07	29/09/05
				Boiler weekly checks	29/09/05		29/09/05
				Boiler weekly checks	29/09/05		29/09/05
				Boiler weekly checks	29/09/05		29/09/05
				Fluid Leak	03/10/05	21:12	03/10/05
				Compressor 2000 hour maintenance	03/10/05		03/10/05

Fig. 9



**Personnel:** The personnel section holds a comprehensive record of people who may either request work to be done or actually carry out the work (contractors or maintenance staff members). For the latter, you may wish to assign them to a team and include their trade and rate of pay (for job costing). Through the “documents” tab, you can attach training records and accreditation by setting up links to other electronic files (databases, Word documents, spreadsheets, CAD drawings, digital photos, scanned documents etc).

See Fig. 10

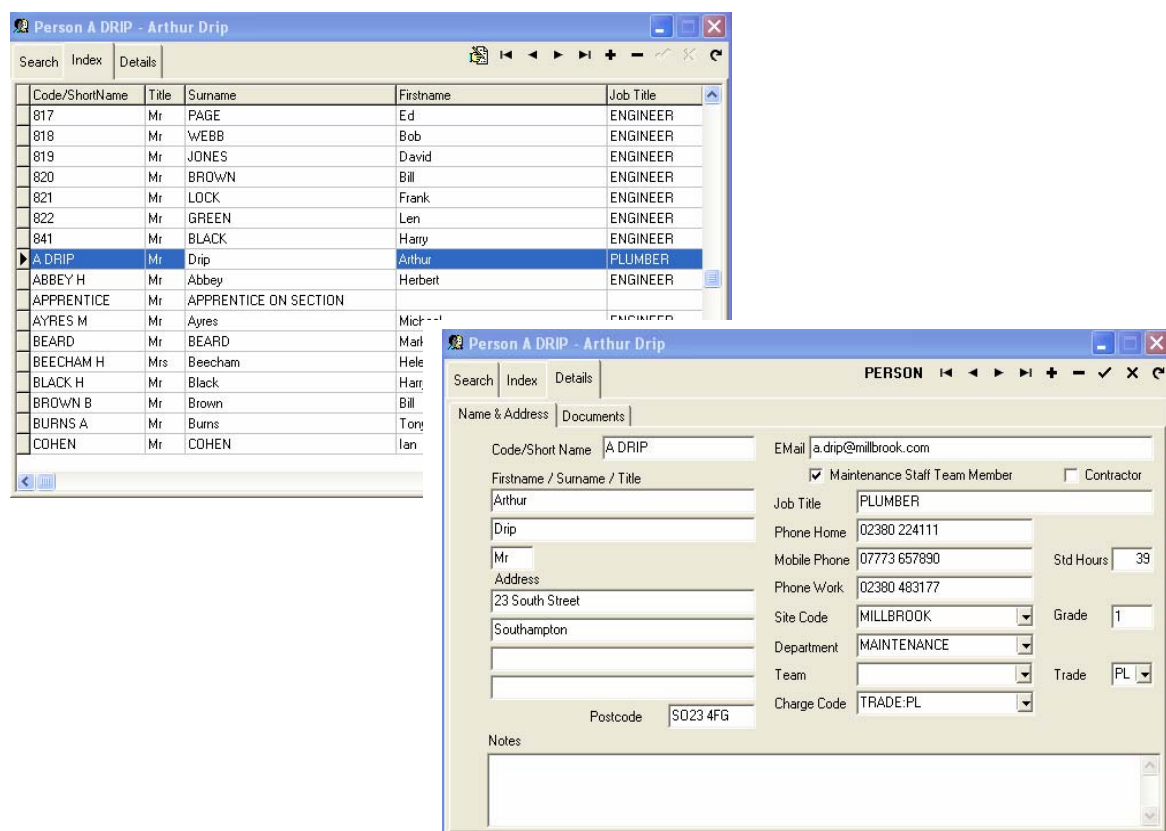


Fig. 10

# Shire Systems – FrontLine System Overview



**Suppliers:** The Suppliers section keeps a record of those people who provide equipment, spare parts and services to your business. The screen holds full contact details - names, addresses, phone numbers etc. Again, through the “Documents” tab you can set up links from the task to other electronic files (databases, Word documents, spreadsheets, CAD drawings, digital photos, scanned documents etc and files and even link to their web site). See Fig. 11

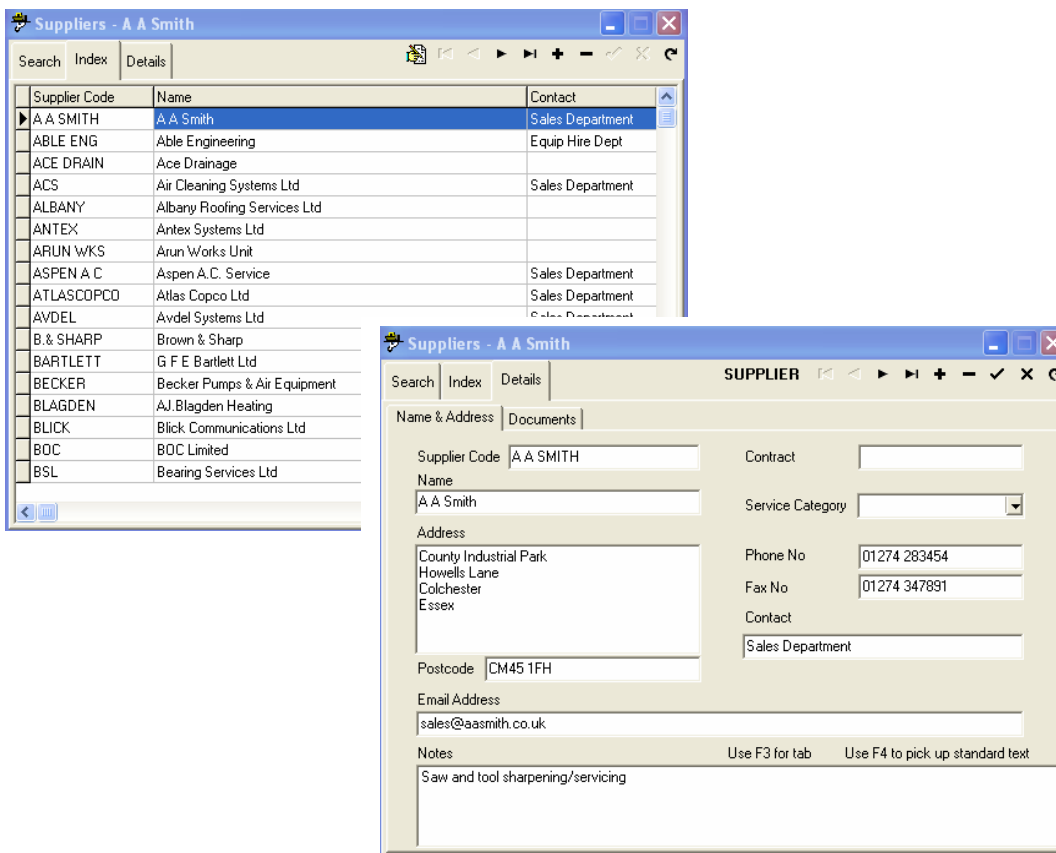


Fig 11



**Code Tables:** The Code Tables hold lists of YOUR predefined values for many of the "look-up" fields seen in the various sections of the system. By loading these tables as part of the initial set-up process, you will save time and also improve the quality and integrity of your data by ensuring a consistent approach – this is especially important when you come to analyse the data through reports. See Fig. 12

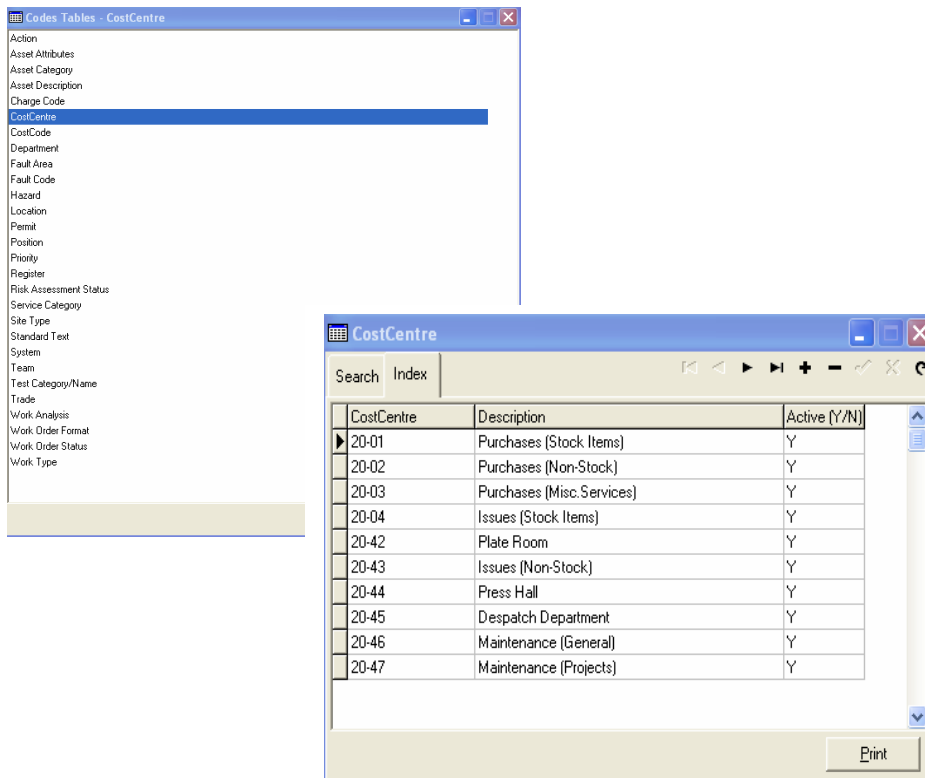


Fig 12

# Shire Systems – FrontLine System Overview



**Reports:** The 90+ standard reports are held in 10 specific groups, within this section. Each report has its own selection and sort criteria screen. In addition to the standard reports, the end user has an option to create their own variations adding things such as barcodes, logos, pictures etc to both work orders and standard report formats. (See report selection and examples below)

**Assets Listing - Concise** MILLBROOK Millbrook International Page 1 of 2  
04/10/05 12:41:32

Data Selection: Sequence = Site/Asset  
Site Code = MILLBROOK

Asset No	Department	Location	Description
ARCON	ADMINISTRATION	UNIT 1/OFFICES	Air conditioning unit
ASTRA VAN	MAINTENANCE	MAINTENANCE	Site services vehicle
BAND-01	MAINTENANCE	UNIT 3/WORKSHOP	Band saw in Workshop
BOIL-01	MAINTENANCE	EXTERNAL/BOILER HOUSE	Boiler 1
BOIL-02	MAINTENANCE	EXTERNAL/BOILER HOUSE	Boiler 2
BOIL-03	MAINTENANCE	EXTERNAL/BOILER HOUSE	Boiler 3
BOILERHOUSE	MAINTENANCE	EXTERNAL/BOILER HOUSE	Boiler House - Containing 3 boilers
BTRT-01	PRODUCTION	UNIT 3/RESS HALL	Reel Truck
COMP-120	PRODUCTION	UNIT 3/RESS HALL	Compressor - Hydrovane 120 Pump
COMP-200	PRODUCTION	UNIT 3/RESS HALL	Compressor - Atlas Copco 200
COMPCABLE	PRODUCTION	UNIT 1	Computer Calling Network
CONV-01	DISTRIBUTION	UNIT 3/DESPATCH	Conveyor Roll Line - Outside
CONV-A	PRODUCTION	UNIT 3/RESS HALL	Conveyor Accumulation - A Line
			Conveyor Long - B Line
			Conveyor Path-Out - B Line
			Conveyor Belt - A Line - FSS
			Conveyor Slip Torque - A Line
			Conveyor Slip Torque - B Line

**Completed Work - Costs** Page 1 of 88  
03/10/05 22:49:12

Data Selection: Sequence = Work Order  
Site Code = MILLBROOK  
All Work Orders

Site Asset Task	Department	Location	W/O	Completed	Work Type	Analysis	Qty	Factor	Unit Cost	Total Cost
MILLBROOK UNIT-1	Main Building	UNIT 1	C0014	23/09/04	B					
	Power failure									
	24/09/02	Electrician Grade2					2.00	1.00	47.47	£14.94
MILLBROOK MAIN BLDG	MAIN BUILDING	UNIT 1	C0015							
	INSTALLED RADIATOR IN COMPUTER MAINT									
	07/09/02									
MILLBROOK FWDST-B	PRODUCTION	UNIT 3/RESS HALL	C0016							
	Ferag Forward Station - B Line									
	Forward station infeed belts stopped									
	11/09/02	Electrician Grade1								
MILLBROOK FWDST-B	PRODUCTION	UNIT 3/RESS HALL	C0017							
	Ferag Forward Station - B Line									
	18 new infeed belts									
	12/09/02									
	12/09/02	Materials ex. Store								

**Meter Reading List** MILLBROOK Millbrook International Page 1 of 11  
04/10/05 12:43:49

Data Selection: Sequence = Site/Asset  
Site Code = MILLBROOK

Reading Date:

Asset No	This Reading	Unit	Last Reading	Date	Location
ASTRA VAN	mile	4795	27/06/05		MAINTENANCE Site services vehicle
BOIL-01	litres	3345	30/09/04		EXTERNAL/BOILER HOUSE Boiler 1
BOIL-02	litres	1895	30/09/04		EXTERNAL/BOILER HOUSE Boiler 2
BOIL-03	litres	2405	30/09/04		EXTERNAL/BOILER HOUSE Boiler 3
BTRT-01	HOURL	451	30/09/04		UNIT 3/RESS HALL Reel Truck
COMP-120	HOURL	16890	30/09/04		UNIT 3/RESS HALL Compressor - Hydrovane 120 Pump
COMP-200	HOURL	19564	30/09/04		UNIT 3/RESS HALL Compressor - Atlas Copco 200
FILT-03	HOURL	724	30/09/04		UNIT 3/RESS HALL
FWDST-A	HOURL	12874	30/09/04		Fork Lift Truck - Lancing
FWDST-B	HOURL	12874	30/09/04		UNIT 3/RESS HALL Ferag Forward Station - A Line
FWDST-B	HOURL	11649	30/09/04		UNIT 3/RESS HALL Ferag Forward Station - B Line
WASTEWATER	GALLS	625904	30/09/04		UNIT 3/SLANT ROOM Meter measuring plant room waste water