

CAUTION !! All new procedures and processes should be checked in the 'Test' environment before being applied to the 'Live' business system.

WORKS ORDER SCHEDULING Ver 5
(MACHINE OR RESOURCE LOADING)

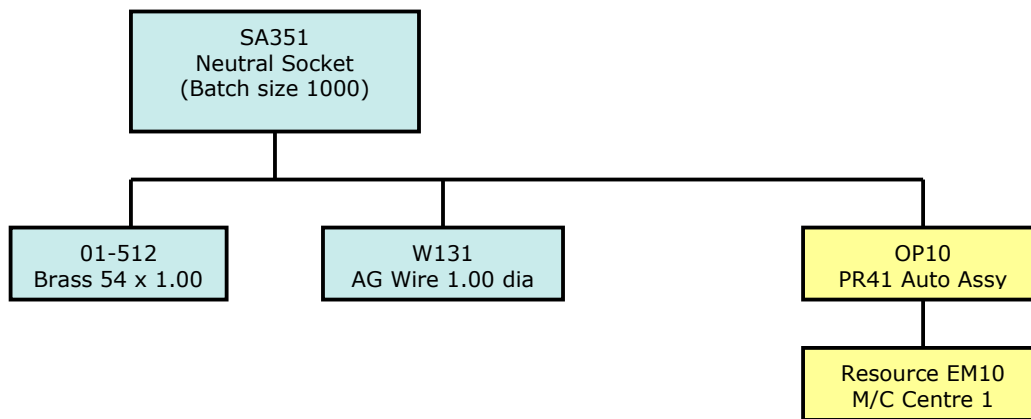
1. Introduction

This document describes the functionality to allow users to

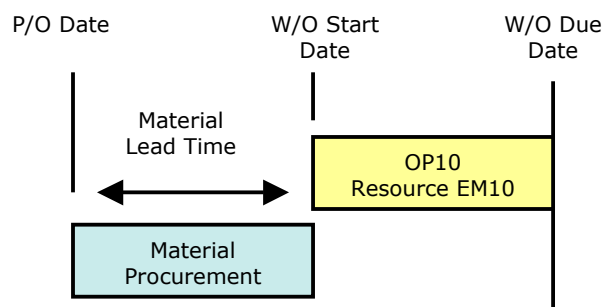
- View the Capacity Loading of Resource Groups and individual Resources
- Manually reschedule the planned Resource loading into other periods defined on the Manufacturing Periods Calendar
- Reschedule the loading across alternative Resources as defined in the BOM Routing

This facility was introduced primarily to meet the requirement of a high volume repetitive component manufacturing process, and is similar in many respects to a manual 'T' card loading system. An example BOM/Routing is shown below.

NOTE ! The current version is restricted to planning one resource per operation. Please contact your BlueStone consultant for requirements with multiple resources per operation



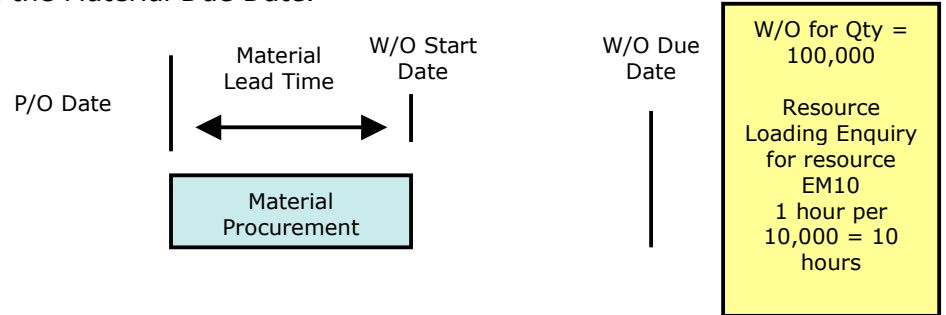
A conventional MRP2 loading system would schedule the Works Order for the above assembly as below



Data Sheet for Works Order Scheduling

Without a Capacity Planning module (such as Preactor) to provide infinite/finite loading, Sapphire can show a total Resource loading in hours by Works Order but not by date, calculated from the Times or Quantities already booked. (See the View Resource Loading enquiry)

The W/O Start Date will define the Material Due Date.



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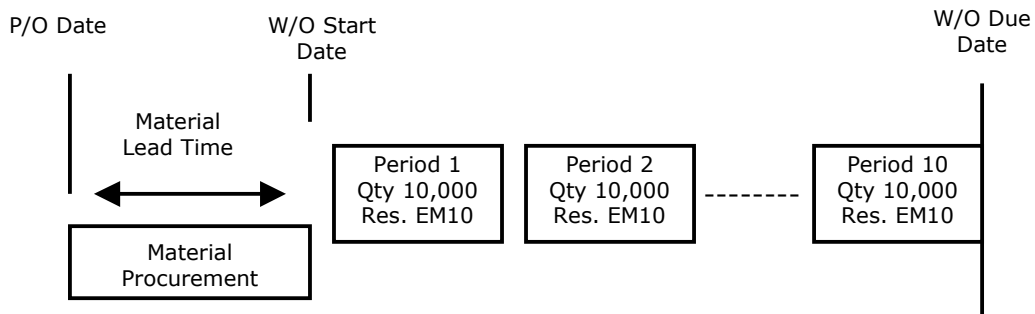
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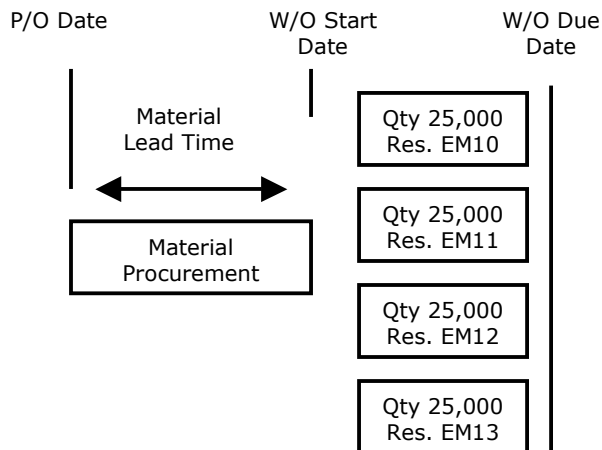
By using the Reschedule Works Order program, the assigned capacity loading can be split by quantity and assigned to specific weeks, as a manual resource loading process. In addition the specified alternative resources can be utilised. This enables

- Production to be scheduled for completion sequentially over a period of time (say total of 100,000 units to be completed at the rate of 10,000 per week)
- Parallel use of a number of identical or similar resources on a single operation
- True 'parallel operations' where two or more operations can be in progress at the same time
- Combinations of the above

Sequential Production



Parallel Production



CAUTION

Because this is the equivalent of a manual process, it would be quite possible with multi operation works orders, to unintentionally schedule operations to be completed out of sequence. For example, attempting to complete OP40 before OP10 has been started. Operations could also be scheduled before material was available.

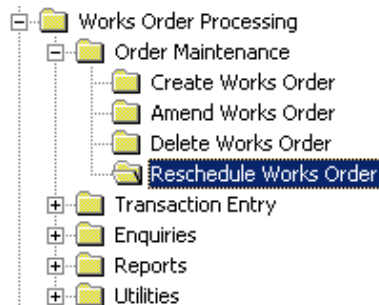
2. Installation

2.1 The amended/additional programs for this feature

- Update the standard BOM to allow alternative resources to be specified
- Provide an additional program to enable the resources to be rescheduled as described above
- Provide a View Capacity Enquiry
- Allow Works Order Progress by applying Tracking Slip entry against specific schedule lines

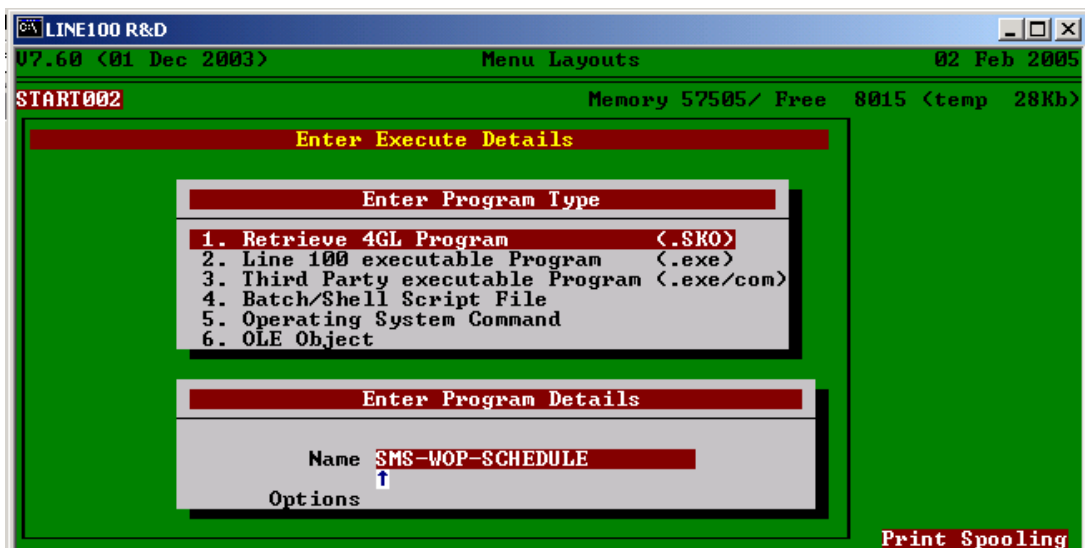
2.2 Install the programs by logging in as Manager, and then selecting 'External Update, Import a Database'. Accept the option to 'Rebuild the Catalogue' when requested.

2.3 An additional menu option must be added to Reschedule Works Orders. This can be added to the numbered menu or to an own menu as shown below



Set up the menu by logging on as Manager, selecting 'Name Table, Menus, <user name>, Amend the Menu'.

The Program Type and Details are shown below. The Schema name is SMS-WOP-SCHEDULE and the program name is SMSWOSC.



Please refer to the SMS Sapphire System Manager manual for further details.

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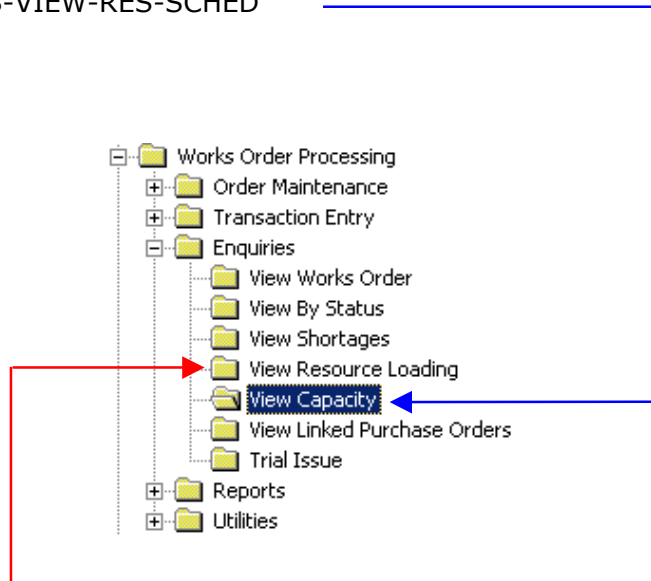
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2.4 An additional menu option MUST be added to View Capacity. This can be added to the numbered menu or to an own menu as shown below.

The program name is SMS-VIEW-RES-SCHED



The View Resource Loading enquiry MUST be deleted from the menu, as this is NOT compatible with the Works Order Scheduling option.

The program name is SMS-WO-RESOURCE-VIEW

3. Static Data – Manufacturing Periods

The Manufacturing Periods must be set up. If this has not already been done, select *Sapphire System Manager, Company Defaults, Manufacturing Period, Parameters*

Manufacturing Periods – Period Length

Daily

Weekly

Monthly

Duration

Prefix

1st Period

Year Number

Period End Date
(First)

Manufacturing Period Maintenance

A typical parameter set up is shown. When the parameters have been entered, select *Create Period Register* to generate the table.

NOTE ! the standard convention for week numbering to ISO8601 states that Week 01 contains the first Thursday of the calendar year

The table can be viewed and amended as required through the menu options.

Period	End Date
w501	09 Jan 2005
w502	16 Jan 2005
w503	23 Jan 2005
w504	30 Jan 2005
w505	06 Feb 2005
w506	13 Feb 2005
w507	20 Feb 2005
w508	27 Feb 2005
w509	06 Mar 2005
w510	13 Mar 2005
w511	20 Mar 2005

Manufacturing Period Maintenance

4. Static Data – Resource Available Capacity

The Available Capacity must be entered for each Resource, and the system will then show the balance of remaining hours, being the difference between Available Hours and the Expected (Planned) hours

4.1 Available Hours Per Period

The Available Hours for the Resource are specified by the Period as set in the Manufacturing Periods – see (3) above.

The maximum hours are

- Daily Period 24 hours
- Weekly Period 168 hours
- Monthly Period 744 hours

The Period Type and the associated hours are defaulted to the Capacity Information section of the Resource Register screen.

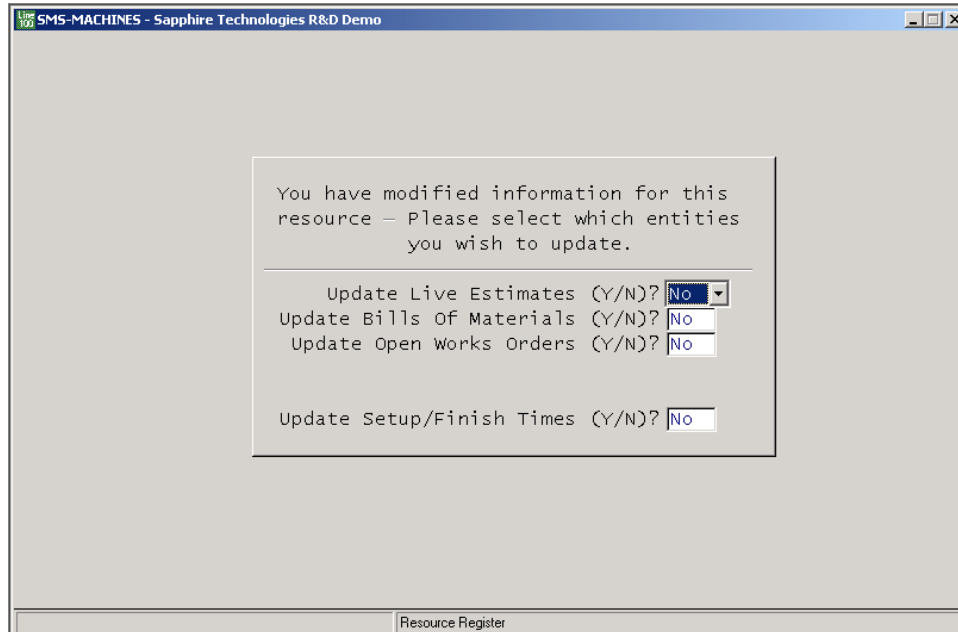
4.2 Bill of Materials, Utilities, Parameters, Resource Register

The screenshot shows a software window titled 'SMS-MACHINES - Sapphire Technologies R&D Demo'. The window is divided into two main sections: 'Resource Definition' and 'Capacity Information'.
 In the 'Resource Definition' section, the following fields are visible:
 - Reference: EM10
 - Description: Machining Centre 1
 - Type: Machine
 - Group: GP20
 - Charge Rate: 20.0000
 - Set Up Time: 0:30
 - Finish Time: 0:00
 - Available Hrs/Period: (field is present but empty)
 In the 'Capacity Information' section:
 - Period Type: Week (greyed out)
 - Maximum Hours Per Period: 168 (greyed out)
 - Available Hours Per Period: 35.00 (circled in red, indicating it is the field being edited)
 At the bottom of the window, the text 'Resource Register' is visible.

The 'Period Type' and 'Maximum Hours Per Period' are 'greyed' and cannot be amended here.

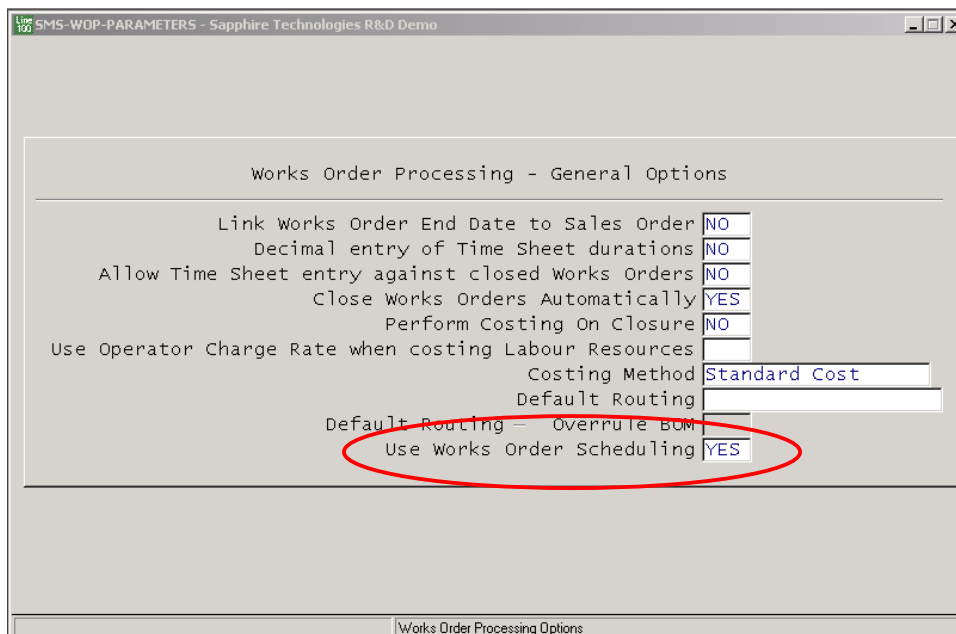
Selecting the 'New' or 'Amend' Resource option allows the 'Available Hours Per Period' to be entered for this Resource.

When Accepting and leaving the Amend screen, the option is given to update Estimates, BOM's and Works Orders with any information that has been changed in the top section (Resource Definition) part of the screen.



5. Parameter Setting

Works Order Processing, Utilities, Parameters, Options, General



The Use Works Order Scheduling parameter must be set to YES to enable the Scheduled Resources to be displayed during the transaction entry Progress Works Order

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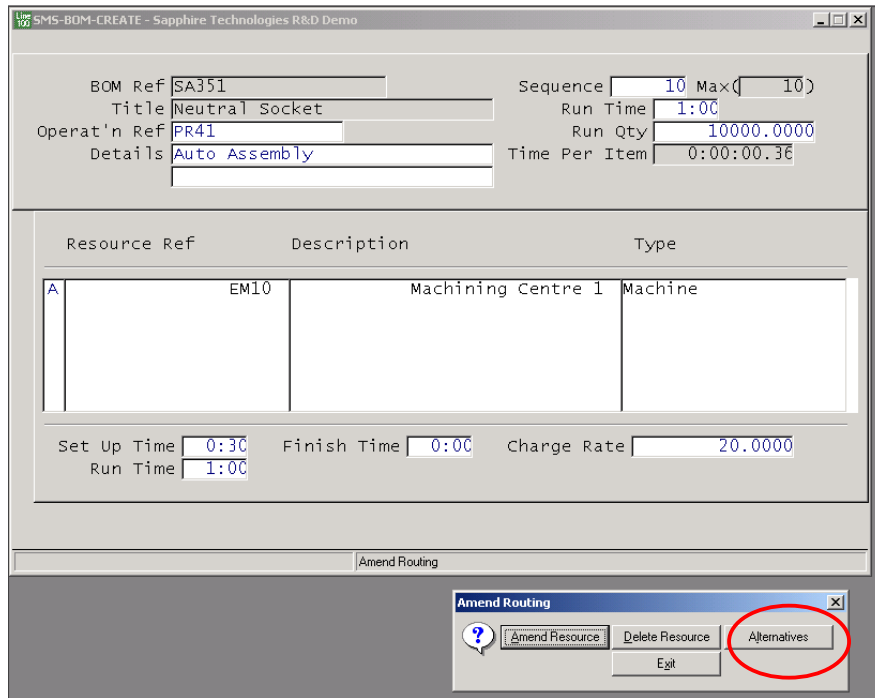
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6 Operation – Bills of Material – Alternative Resources

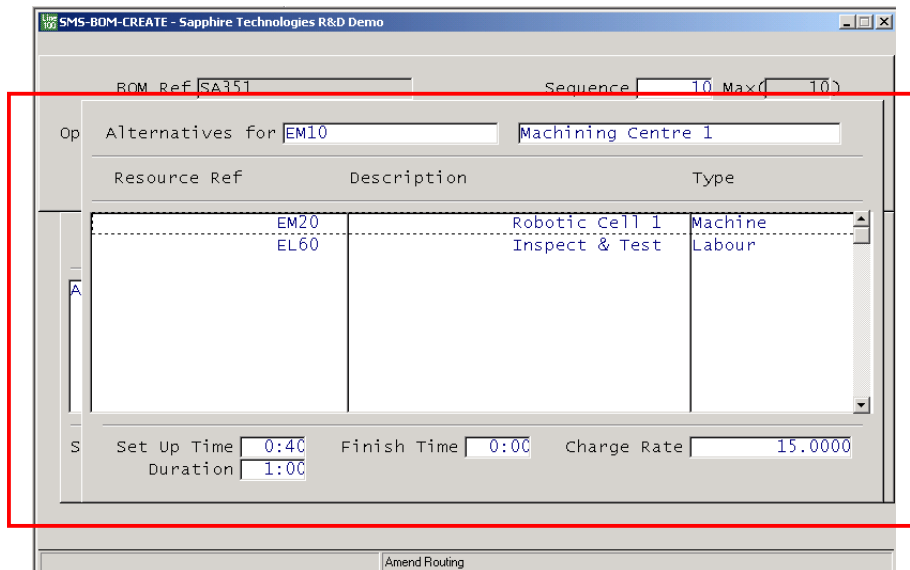
During the Create/Amend BOM routine, a new program is now available to specify Alternative Resources.

NOTE ! See the separate BOM Set Up data sheet. The BOM screen was amended from Ver 9 SP12 onwards. The latest screen is shown below.

Bills of Materials, BOM Maintenance, Create/Amend BOM, <Item No>, ESC, Accept, ESC, Routing, Amend Routing



By selecting Alternatives, any existing alternative Resources are displayed



Escaping from the above screen displays a base menu that will allow a New Alternative to be selected

The screenshot shows a software window titled "SMS-BOM-CREATE - Sapphire Technologies R&D Demo". The top section contains fields for BOM Ref (SA351), Title (Neutral Socket), Operat'n Ref (PR41), and Details (Auto Assembly). To the right, there are fields for Sequence (10), Run Time (1:00), Run Qty (10000.0000), and Time Per Item (0:00:00.36). Below this is a table with columns "Resource Ref", "Description", and "Type". The "Alternative Resource" section is highlighted with a red box and contains fields for Reference, Description, Set Up Time (0:00), Duration (0:00), Finish Time (0:00), and Charge Rate (0.0000). At the bottom right, there is a button labeled "Amend Routing".

A '/' search in the Reference box will show the available Resources for selection

This screenshot shows the same software window as above, but with the "Alternative Resource" section expanded to show a list of available resources. The list has three columns: "Resource Ref", "Description", and "Type". The resources listed are:

Resource Ref	Description	Type
EL50	Assembly	Labour
EL60	Inspect & Test	Labour
EM10	Machining Centre 1	Machine
EM20	Robotic Cell 1	Machine

The "Amend Routing" button is visible at the bottom right.

Use the cursor to select a Resource and then Return to confirm the selection.

Data Sheet for Works Order Scheduling

The Review Resources screen will now show that alternative resources are available for this process, indicated by the 'A' in the first column. Pressing 'Return' with the cursor on the Resource line will show the base menu and allow the alternatives to be seen.

Resource Ref	Description	Type
A	EM10	Machining Centre 1

Set Up Time: 0:30 Run Time: 1:00 Finish Time: 0:00 Charge Rate: 20.0000

Amend Routing

NOTE ! Alternatives can only be seen through the 'Amend' screen.

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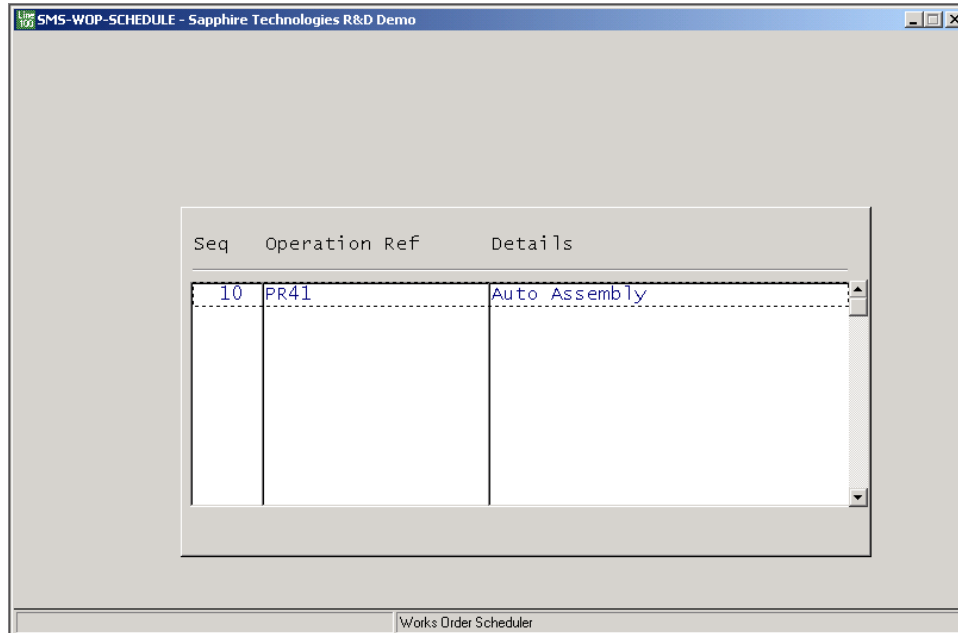
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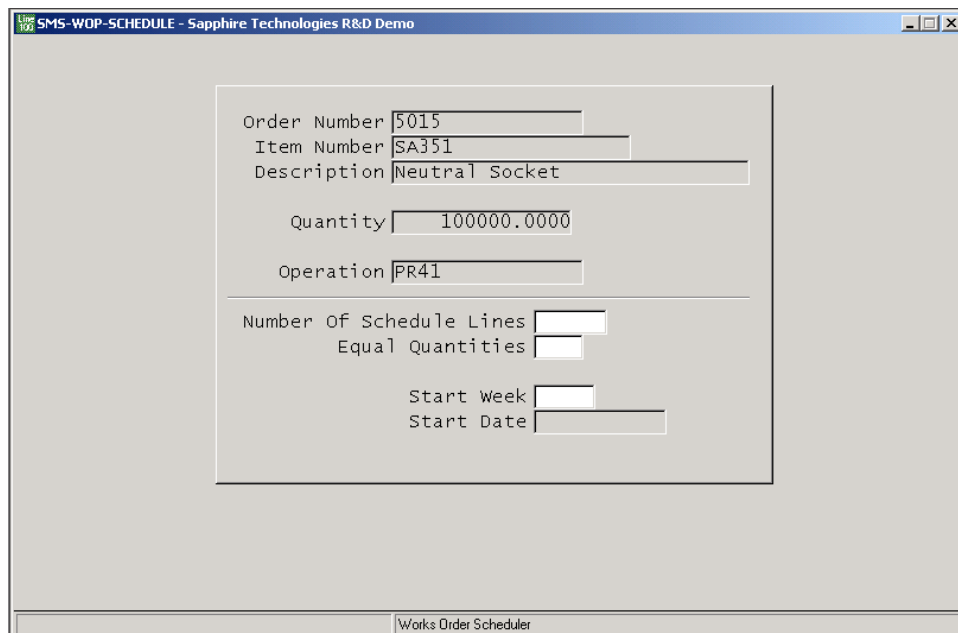
7 Operation – Works Order Scheduling (Resource Loading)

Select the Works Order Scheduling program, using the menu option set up in (2.3) above. For example *Works Order Processing, Order Maintenance, Reschedule Works Orders.*

7.1 Enter the Works Order number and Accept.



Select the operation to be scheduled from the list (there is only one operation on the works order shown as an example)



7.2 The options are now given to enter the number of schedule lines required, and whether the quantities on each line are to be equal. The Start Week for the schedule is selected from the drop down box, which displays the Manufacturing Period calendar set up in (3) above

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Data Sheet for Works Order Scheduling

In the following example screen, the Number of Schedule lines selected was = 4, and the option Equal Quantities = Y . The Start Week was W514.

The four schedule lines have been generated, and the Quantity column shows the total quantity equally split across the four periods. Note that if the option Equal Quantities = N had been selected, then the Quantity column would have been left blank for the user to enter the required (unequal) schedule quantities.

The screenshot shows a window titled "SMS-WOP-SCHEDULE - Sapphire Technologies R&D Demo". It contains a form with the following fields:

- Order Number: 5015
- Bill of Materials: SA351
- Operation Ref: PR41
- Time Per Item: 0:00:00.36 (HH:MM:SS.SS)

Below the form is a table with the following columns: Week, Start Date, Quantity, Resource, Available, Planned, Spare.

Week	Start Date	Quantity	Resource	Available	Planned	Spare
W514	04 Apr 2005	25000.0000	EM10	35.00	2.50	32.50
W515	11 Apr 2005	25000.0000	EM10	35.00	2.50	32.50
W516	18 Apr 2005	25000.0000	EM10	35.00	2.50	32.50
W517	25 Apr 2005	25000.0000	EM10	35.00	2.50	32.50

At the bottom of the window, there is a summary section:

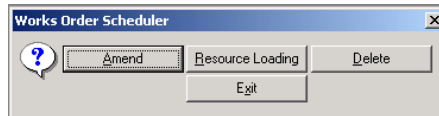
Total: 100000.0000
Required: 100000.0000

Below the main window, there is a smaller window titled "Works Order Scheduler" showing a resource loading summary:

Available	Planned	Spare
35.00	50.00	-17.50
35.00	50.00	-17.50

NOTE ! If the Resource has been overloaded, the Spare capacity column is shown in inverse video (dark blue) and the value is negative

Select a line by moving the cursor, and press Return to display the base menu.

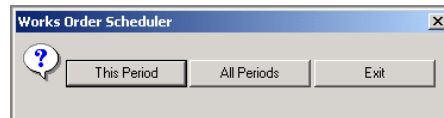


The 'ESC' key moves back to the operations list to enable another operation to be selected and scheduled.

Amend allows the line to be amended, including selecting an alternative resource for 'Parallel Production'

Delete deletes the selected line

Resource Loading produces another base menu that will allow the user to display the loading for the resource on the selected line for This Period (as selected on this line) or for All Periods



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Data Sheet for Works Order Scheduling

SMS-WOP-SCHEDULE - Sapphire Technologies R&D Demo

Resource

Available Hrs/Period Spare

Week Start Date	Works Order Number	Operation	Quantity	Hours
w514 04 Apr 2005	5015	PR41	25000.0000	2.5
w515 11 Apr 2005	5015	PR41	25000.0000	2.5
w516 18 Apr 2005	5015	PR41	25000.0000	2.5
w517 25 Apr 2005	5015	PR41	25000.0000	2.5

Bill of Materials Time Per Item

Works Order Scheduler

'All Periods' Resource Loading (note that there is only one order – 5015 – scheduled)

SMS-WOP-SCHEDULE - Sapphire Technologies R&D Demo

Resource

Available Hrs/Period Spare

Week Start Date	Works Order Number	Operation	Quantity	Hours
w532 08 Aug 2005	5015	PR41	25000.0000	2.5

Bill of Materials Time Per Item

Works Order Scheduler

'This Period' Resource Loading (note that there is only one order – 5015 – scheduled)

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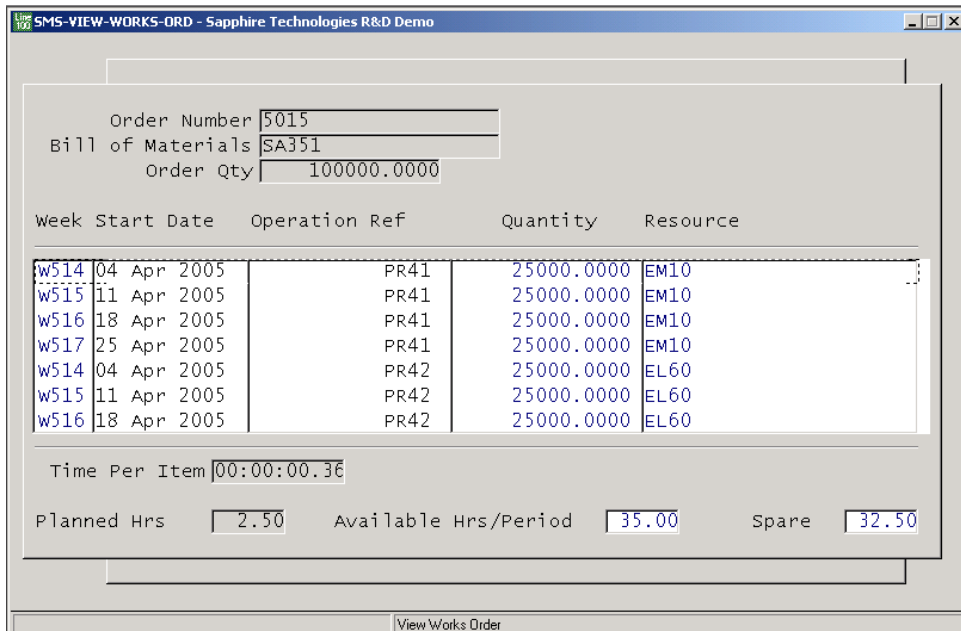
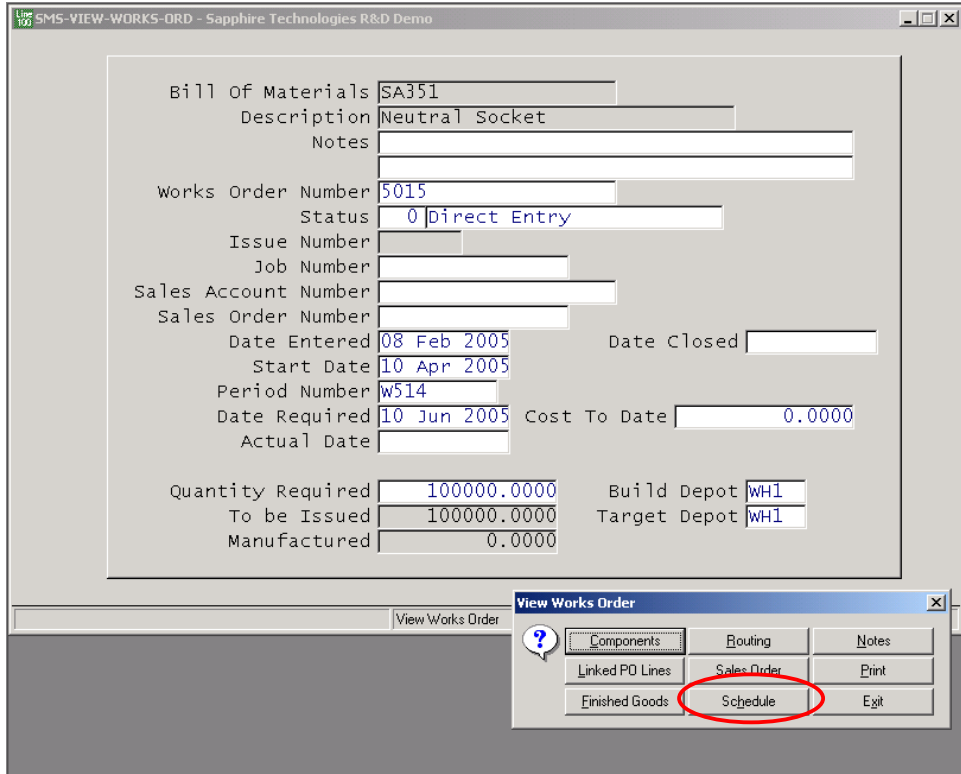
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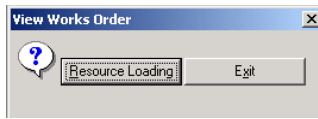
8. View Works Order - Schedule

The Schedule can be viewed through *Works Order Processing, Enquiries, View Works Order, <order number>, Schedule*

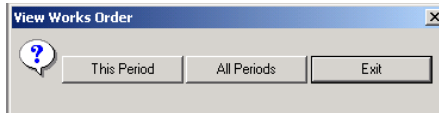


Data Sheet for Works Order Scheduling

Clicking on a line produces a base menu to enable the Resource Loading to be viewed



If Resource Loading is selected the further base menu is displayed for This Period or All Periods as described in (7) above



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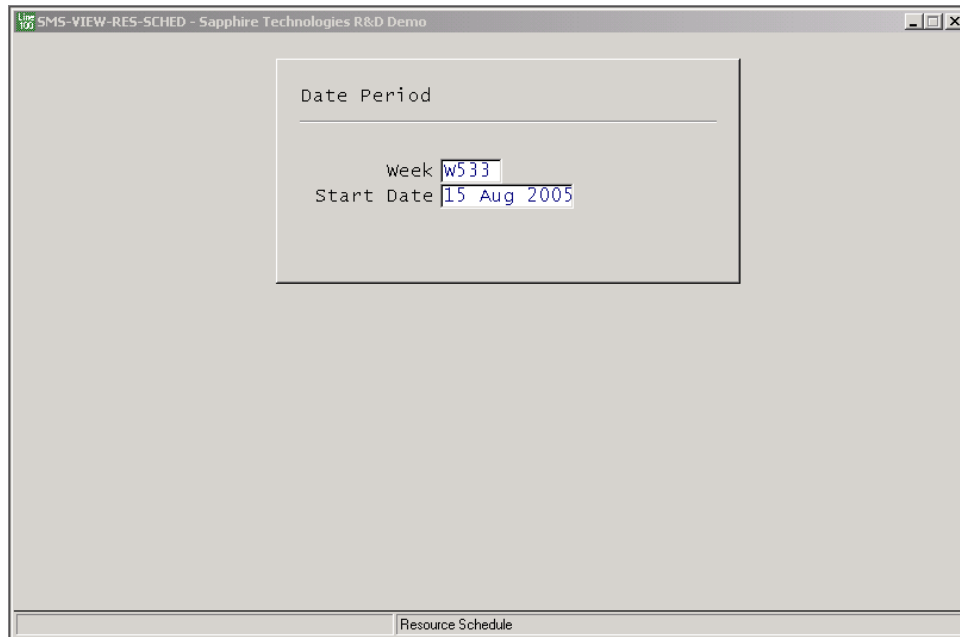
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9. View Capacity

Works Order Processing, Enquiries, View Capacity



The Start Week for the Capacity Loading is selected from the drop down box, which displays the Manufacturing Period calendar set up in (3) above.

Press 'Enter' to display the base menu with the options of Accept, Reenter or Return.

9.1 Selecting Accept then displays the Capacity Loading starting with the selected week, for all Resource Groups.

Resource Group	15 Aug 2005		22 Aug 2005		29 Aug 2005		05 Sep 2005	
	Avail	Used	Avail	Used	Avail	Used	Avail	Used
GP10	35.00	0.00	35.00	0.00	35.00	0.00	35.00	0.00
GP20	-17.50	52.50	-17.50	52.50	35.00	0.00	35.00	0.00
GP30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TL10	70.00	0.00	70.00	0.00	70.00	0.00	70.00	0.00

Resource Group Desc:

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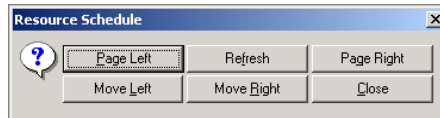
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Scrolling through the list with the Up/Dn arrow keys or selecting by using the mouse can select the Groups.

'ESC' displays the base menu that enables the weeks view to be selected



Page Left and **Page Right** move to the next 4 weeks view

Move Left and **Move Right** moves one week at a time

Refresh returns to the Capacity 'chart' to enable a group to be selected

Close exits to the menu

9.2 In the above example The Resource Group GP20 is overloaded. Double clicking on this line enables the individual Resources within the Group to be viewed. 'ESC' displays a base menu as above to enable the user to select the weeks view.

Resource	15 Aug 2005		22 Aug 2005		29 Aug 2005		05 Sep 2005	
	Avail	Used	Avail	Used	Avail	Used	Avail	Used
EM10	-17.50	52.50	-17.50	52.50	35.00	0.00	35.00	0.00
EM20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Resource Description: Machining Centre 1

In this case the machine EM10 is overloaded whilst EM20 is not loaded at all. Double clicking the Resource line produces the base menu with the option to View Resource Detail or Exit.

View Resource Detail drills down to the individual Works Orders loaded on the Resource

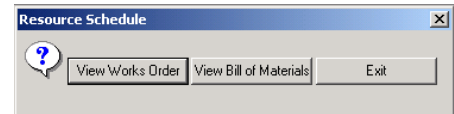
Resource: EM10

Week	Start Date	Works Order Number	Operation	Quantity	Hours
w533	15 Aug 2005	5015	PR41		2.50
w533	15 Aug 2005	5059	PR41		50.00
w534	22 Aug 2005	5015	PR41		2.50
w534	22 Aug 2005	5059	PR41		50.00

Bill of Materials: SA351

Resource Schedule

Double clicking the Works Order line displays the base menu options to View Works Order or View Bill of Materials. Both of these options have further drill down options



9.3 View Works Order

Bill of Materials: SA352
 Description: Live Socket
 Notes:
 Works Order Number: 5059
 Status: 0 Direct Entry
 Issue Number:
 Job Number:
 Sales Account Number:
 Sales Order Number:
 Date Entered: 24 Jun 2005 Date Closed:
 Start Date: 14 Aug 2005
 Period Number: w534
 Date Required: 28 Aug 2005 Cost To Date: 0.0000
 Actual Date:
 Quantity Required: 100000.0000 Build Depot: WH1
 To be Issued: 100000.0000 Target Depot: WH1
 Manufactured: 0.0000

View Works Order

View Works Order

Components Routing Notes
 Linked PO Lines Sales Order Print
 Finished Goods Schedule Exit

9.4 View Bill of Materials

SMS-VIEW-RES-SCHED - Sapphire Technologies R&D Demo

Bill Of Materials SA351 Level 1
 Description Neutral Socket UOM
 Build Path SA351 »
 Issue Number 0

Seq	Item Number	Description	Total Qty
1	01-512	Brass 54 x 1.00	0.164
2	w131	Silver wire 1mm dia	0.093

Qty 0.1648 of Size 1.0000 Total Qty 0.1648000

Raw Material In stock 100.0000
 UOM m Component Ref
 Minimum Issue 0 Bulk Item Unit Cost 0.0000

View BOM

View BOM

Routing Notes Change Notices

Regisplay Exit

10. Progress Works Order entry

As an example, the works order shown below has been set for 'Parallel Production' with the operation allocated over 4 resources in the same week.

SMS-WOP-SCHEDULE - Sapphire Technologies R&D Demo

Order Number: 5065
 Bill of Materials: SA352
 Operation Ref: PR41

Time Per Item: 0:00:03.60
 (HH:MM:SS.SS)

Week	Start Date	Quantity	Resource	Available	Planned	Spare
W535	29 Aug 2005	25000.0000	EM10	35.00	25.00	10.00
W535	29 Aug 2005	25000.0000	EM11	35.00	25.00	10.00
W535	29 Aug 2005	25000.0000	EM12	35.00	25.00	10.00
W535	29 Aug 2005	25000.0000	EM13	35.00	25.00	10.00

Total: 100000.0000
 Required: 100000.0000

Works Order Scheduler

Works Order Processing, Transaction Entry, Progress Works Order

Enter or search for the Works Order number and press Return.

SMS-PROG-WORKS-ORD - Sapphire Technologies R&D Demo

Works Order: 5065
 BOM Ref: SA352
 Description: Live Socket

Job Number: []
 Qty Required: 100000.0000

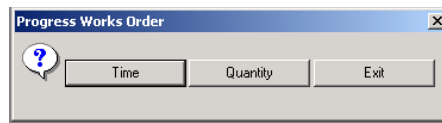
Seq	Operation	Quantity Req'd	Run Quantity	Start	Finish
10	PR41	100000.0000	0.0000		

Progress Works Order

Select Start Operation Enter Tracking Slip
 Review Tracking Slip End Operation Exit

Scroll to the required operation line (there is only one operation in the above example) and Return to display the base menu.

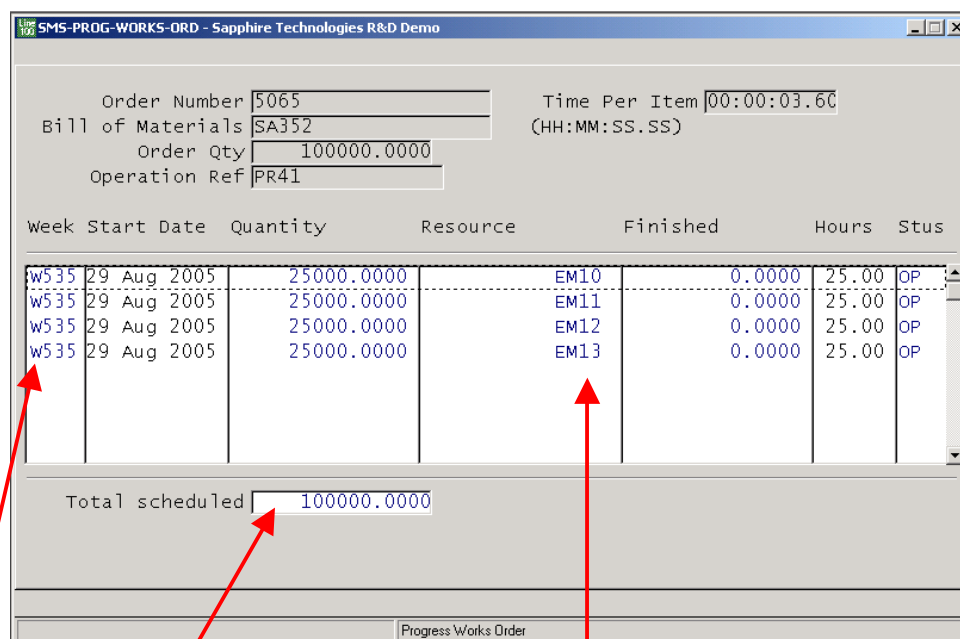
Select Enter Tracking Slip, and a further base menu allows entry by Time or Quantity



The 'Time' option is not applicable within the Progress Works Orders program when the Works Order Scheduling is switched on and should **NOT** be used.

10.1 Progress Works Order by Quantity booking

From the base menu select Quantity. The screen now shows the scheduled operation, in this case using four machines in the same week.



In week W535 the Total quantity is scheduled across four Resources (machines) in the same week (Parallel Production)

Scroll down to the resource line against which the booking is to be made, and press Return.

Data Sheet for Works Order Scheduling

In this example the booking is to be made against schedule line 2, with the resource EM11. (Note that a quantity of 25000 has already been completed on schedule line 1, and the line status has been changed from **OP**en to **CL**osed)

Order Number: 5065 Time Per Item: 00:00:03.60
 Bill of Materials: SA352 (HH:MM:SS.SS)
 Order Qty: 100000.0000
 Operation Ref: PR41

Week	Start Date	Quantity	Resource	Finished	Hours	Stat
w535	29 Aug 2005	25000.0000	EM10	25000.0000	25.00	CL
w535	29 Aug 2005	25000.0000	EM11	0.0000	25.00	OP
w535	29 Aug 2005	25000.0000	EM12	0.0000	25.00	OP
w535	29 Aug 2005	25000.0000	EM13	0.0000	25.00	OP

Resource: EM11 Date: 14072005 Time: 10:57

Total
 Processed: 0.0000 Reference:
 Rejected: 0.0000 Batch UOM: Each
 Accepted: 0.0000

Progress Works Order

The booking panel is now displayed

Note that the Resource is defaulted from the selected line and cannot be amended. The current date and time is automatically added.

Resource: EM11 Date: 14 Jul 2005 Time: 10:57

Processed: 10000.0000 Reference: Inspection 1
 Rejected: 500.0000 Batch UOM: Each
 Accepted: 9500.0000

Enter the quantity processed (manufactured) and any reject quantity. The Reference field allows for a free text entry. In the above example a partial quantity booking has been made

The base menu is then available

Progress Works Order

? Accept Reenter Discard

Select Accept, and then a further base menu is available to allow for Notes to be added against the booking.

Progress Works Order

? Notes Exit

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Data Sheet for Works Order Scheduling

Select Exit and the booking is completed

Order Number:
Time Per Item:
(HH:MM:SS.SS)

Bill of Materials:

Order Qty:

Operation Ref:

Week	Start Date	Quantity	Resource	Finished	Hours	Stat
w535	29 Aug 2005	25000.0000	EM10	25000.0000	25.00	CL
w535	29 Aug 2005	25000.0000	EM11	9500.0000	25.00	
w535	29 Aug 2005	25000.0000	EM12	0.0000	25.00	OP
w535	29 Aug 2005	25000.0000	EM13	0.0000	25.00	OP

Total scheduled:

Progress Works Order

If a further booking is then made, that would meet or exceed the scheduled line quantity, the option is given to close the schedule line and move the status to closed.

Resource:
Date:
Time:

Processed:
Reference:

Rejected:
Batch UOM:

Accepted:

In the above example the booked quantity of 15,500 would complete the required quantity of 25,000 required on the schedule line.

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Data Sheet for Works Order Scheduling

SMS-PROG-WORKS-ORD - Sapphire Technologies R&D Demo

Order Number <input type="text" value="5065"/>	Time Per Item <input type="text" value="00:00:03.60"/>
Bill of Materials <input type="text" value="SA352"/>	(HH:MM:SS.SS)
Order Qty <input type="text" value="100000.0000"/>	
Operation Ref <input type="text" value="PR41"/>	

Week	Start Date	Quantity	Resource	Finished	Hours	Stat
W535	29 Aug 2005	25000.0000	EM10	25000.0000	25.00	CL
W535	29 Aug 20	Do you want to close this works order schedule line ?			25.00	OP
W535	29 Aug 20				25.00	OP
W535	29 Aug 20				25.00	OP
W535	29 Aug 20				25.00	OP
Total scheduled		<input type="text" value="100000.0000"/>				

Progress Works Order

Progress Works Order

?

Close WO Sched.
 Close WO Schedule Li

If the 'Close WO Schedule Line' option is chosen, the line status will be moved to '**C**losed' and no further bookings can be made.

If the schedule line is not closed, additional bookings can be made in excess of the required quantity.

10.2 Review/Amend Tracking Slip Bookings

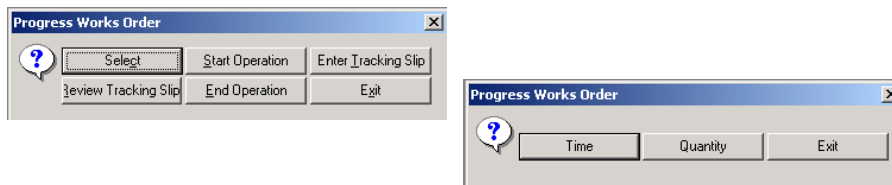
Works Order Processing, Transaction Entry, Progress Works Order

Enter the Works Order number by using the drop down list,

Seq Operation	Quantity Reqd	Run Quantity	Start	Finish
10	PR41	100000.0000	43000.0000	28 Jul 2005

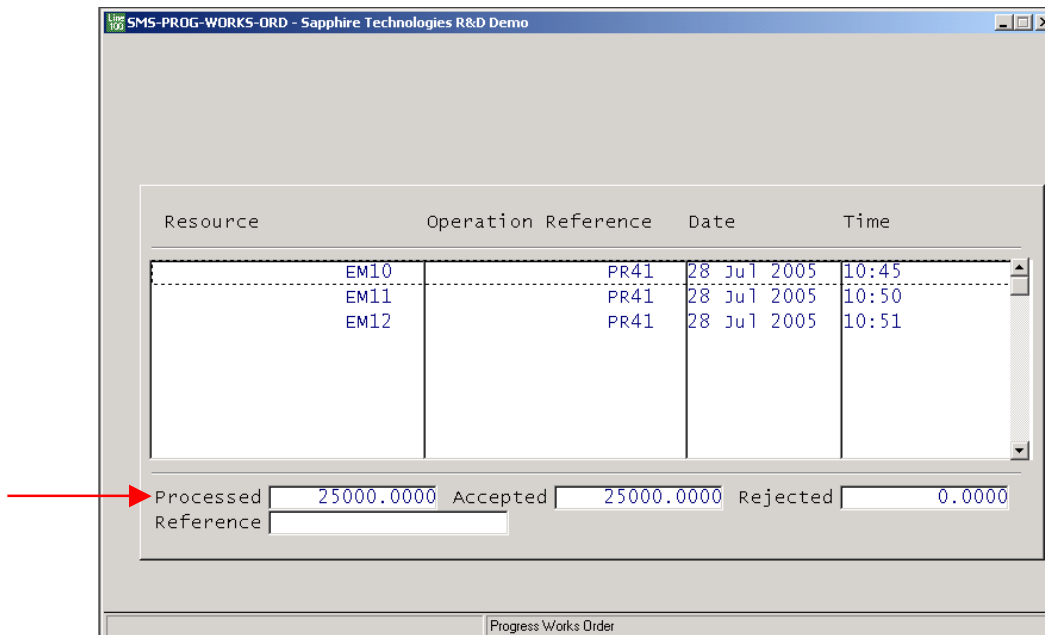
The opening screen shows the quantity booked at the Operation level, in the above example a quantity of 43,000 have been completed on OP10 against a requirement of 100,000.

Press 'Return' on, or double click, the required operation line to show the base menu.



From the base menu select Review Tracking Slip, and then Quantity at the next base menu.

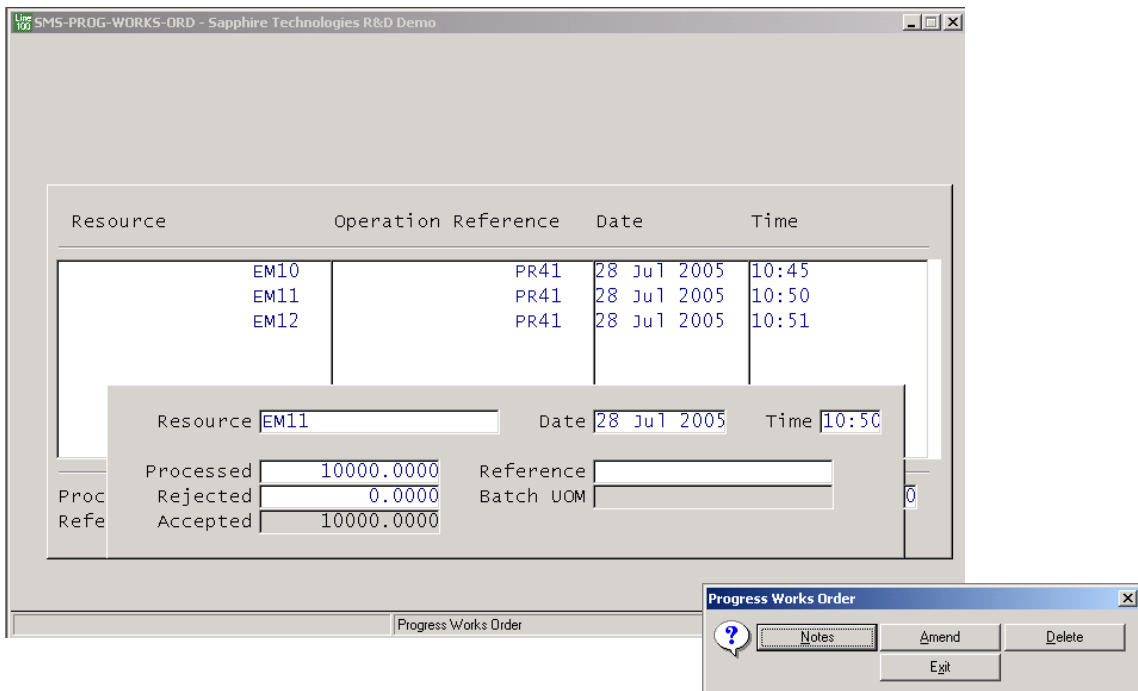
Data Sheet for Works Order Scheduling



The screen now shows the breakdown of the Operation booking quantity by Resource. Scrolling through the Resources will show the quantity booked by resource at the lower part of the screen. In the above example 25,000 have been booked on Resource EM10. (There are also bookings of 10,000 on EM11 and 8000 on EM12 giving the total of 43,000 on the previous screen)

Note that the fourth resource, EM13, is not shown on this screen as there have not been any bookings made against it and hence there is nothing to amend.

Press 'Return' on a Resource line to see more details of the booking and also produce the base menu



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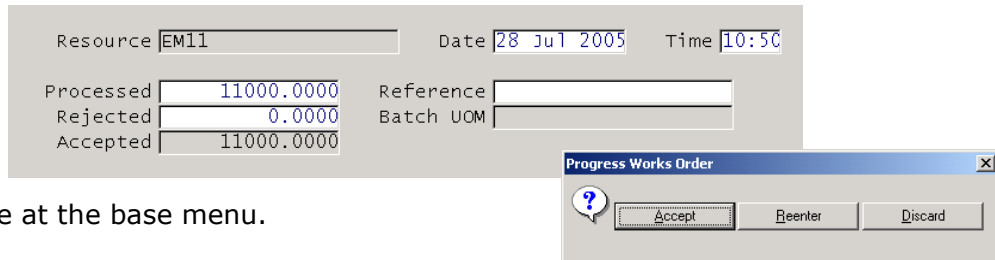
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Notes will show any notes that have been added

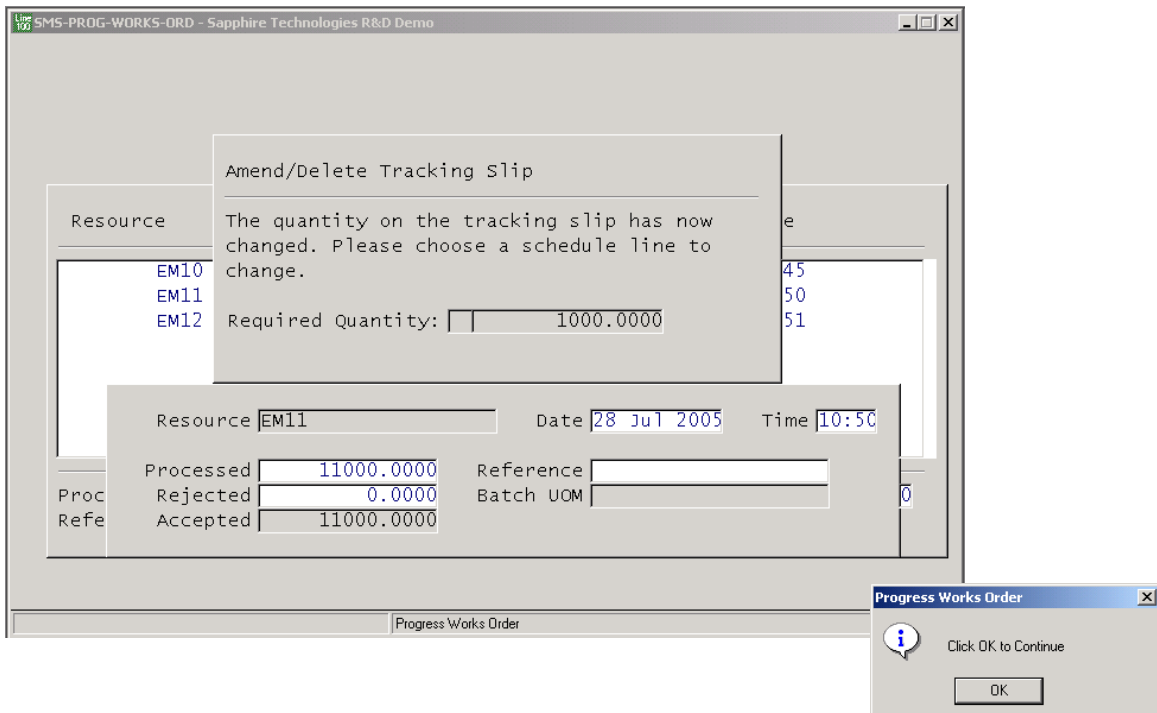
Delete allows the booking to be deleted. There is a further confirmation to allow the deletion or return to the menu without making the change

Exit returns to the menu

Amend allows any of the available (non greyed) fields to be changed. In this example the Processed quantity has been changed to 11,000



Accept the change at the base menu.



The system recognises that the change has been made, and that in this case an additional 1000 items need to be added to an existing Tracking Slip.

Click OK at the base prompt to continue.

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Data Sheet for Works Order Scheduling

Select a schedule line to amend. If an incorrect line is selected that does not match the Resource to be amended, an error message is displayed.

Order Number: 5069 Time Per Item: 00:00:03.60
 Bill of Materials: SA352 (HH:MM:SS.SS)
 Order Qty: Operation Ref: Please choose another schedule line

The line chosen does not match the tracking slip resource amended.
 Choose a line with the following resource:
 EM11

Week Start Date	Quantity	Resource	Finished	Hours	Stat
w533 15 Aug 2005	0			25.00	CL
w534 22 Aug 2005	0			25.00	OP
w535 29 Aug 2005	0			25.00	OP
w536 05 Sep 2005	0			25.00	OP

Total scheduled: 100000.0000

Progress Works Order dialog: Click OK to Continue

Order Number: 5069 Time Per Item: 00:00:03.60
 Bill of Materials: SA352 (HH:MM:SS.SS)
 Order Qty: 100000.0000 Operation Ref: PR41

Week Start Date	Quantity	Resource	Finished	Hours	Stat
w533 15 Aug 2005	25000.0000	EM10	25000.0000	25.00	CL
w534 22 Aug 2005	25000.0000	EM11	10000.0000	25.00	OP
w535 29 Aug 2005	25000.0000	EM12	8000.0000	25.00	OP
w536 05 Sep 2005	25000.0000	EM13	0.0000	25.00	OP

Resource: EM11 Date: 28 Jul 2005 Time: 10:50

Total: Processed: 11000.0000 Reference: Rejected: 0.0000 Batch UOM: Accepted: 11000.0000

Progress Works Order

The correct line is selected and the Processed quantity amended to match the header and amendment quantities.

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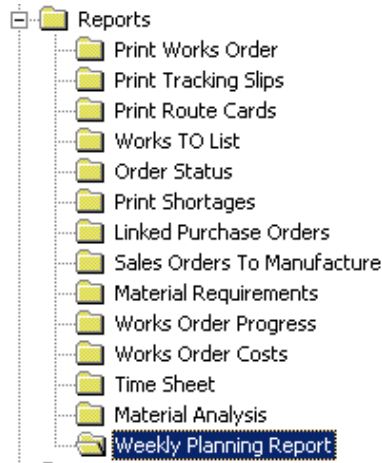
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11. Weekly Planning Report

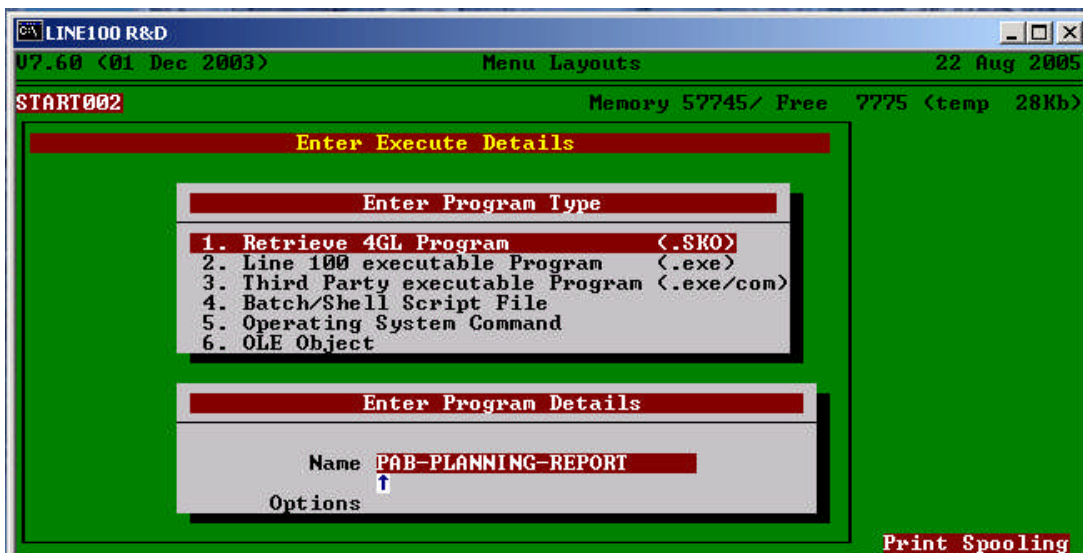
An option is available to print a copy of the Hours Loaded, by Resource and Works Order.

11.1 To run the report, an additional menu option must be added. This can be on the numbered menu or an own menu as shown below, typically under *Works Order Processing, Reports*



Set up the menu by logging on as Manager, selecting 'Name Table, Menus, <user name>, Amend the Menu'.

The Program Type and Details are shown below. The Schema name is PAB-PLANNING-REPORT and the program name is PABPLRE.



Please refer to the SMS Sapphire System Manager manual for further details.

11.2 Example of Weekly Planning Report

Sapphire Technologies R&D Demo				Printed By		B O B L	
Weekly Planning Report				Date Printed		22 Aug 2005	
Week Number: W535						Page Number	
Start Date: 29 Aug 2005							
Resource	Hours Loaded	Hours Avail	Qty Loaded				
EL50	0.0000	35.0000	0.0000				
Order Number		BOM Ref	Operation	Hours	Quantity		
5064		CA1700	PR42		0.0000	0.0000	
EL60	2.5000	70.0000	25000.0000				
Order Number		BOM Ref	Operation	Hours	Quantity		
5064		CA1700	PR43		0.0000	0.0000	
5015		SA351	PR42		2.5000	25000.0000	
EM10	25.0000	35.0000	25000.0000				
Order Number		BOM Ref	Operation	Hours	Quantity		
5065		SA352	PR41		25.0000	25000.0000	
EM11	25.0000	35.0000	25000.0000				
Order Number		BOM Ref	Operation	Hours	Quantity		
5065		SA352	PR41		25.0000	25000.0000	

APPENDIX

The following files are related to the above changes

To provide the New BOM Screen (In Bills of Materials)

SMS-BOM-PROC2-CREATE
SMS-BOM-PROC2-REVIEW
SMS-BOM-PROC2-VIEW

The equivalent of the above in Works Orders

SMS-WORKS-ORD-REVIEW

Parameters Table (includes the Use Works Order Scheduling parameter)

SMS-WOP-PARAMETERS

Works Order Scheduling

To add the alternatives column to the BOM screen

SMS-BOM-PROC2-CREATE
SMS-BOM-PROC2-REVIEW
SMS-BOM-PROC2-VIEW

Alternatives Data Table

SMS-BOM-ALT-RESOURCE

Also SMS-WOP-SCHEDULE (Program)
SMS-WOP-SCHEDULE (Table)
SMS-WOP-SCHED-UNIQ (Table)

Update to Progress Works Order transaction entry

SMS-PROG-WORKS-ORD

View Works Order

SMSVIWO.SKO

Resource Register

SMSMACH.SKO

Capacity Loading Report

PAB-PLANNING-REPORT

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