

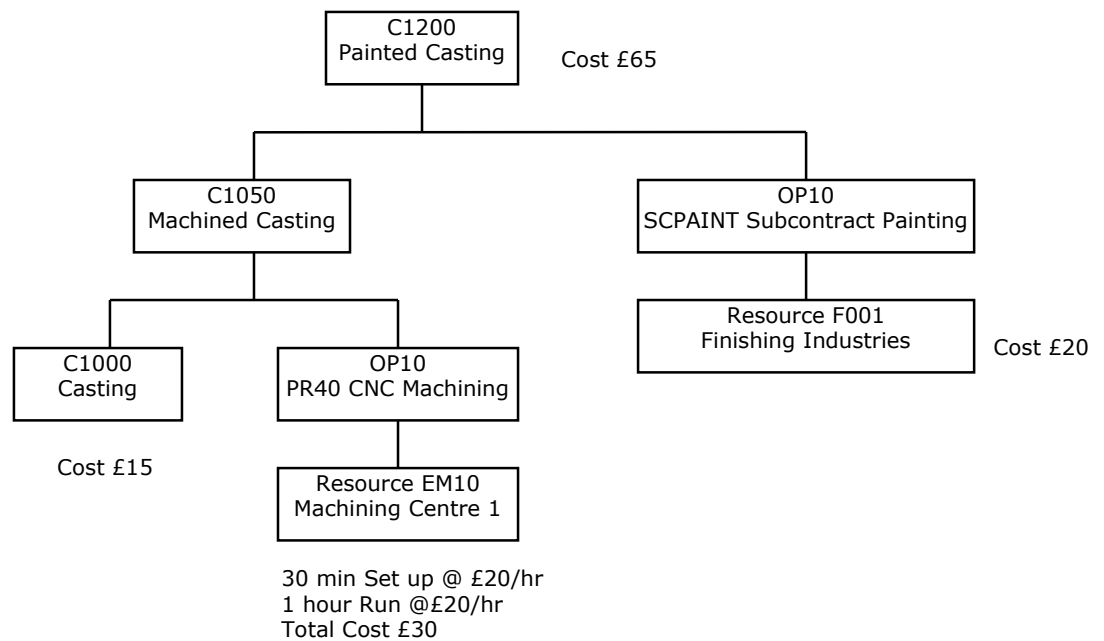
CAUTION !! All new procedures and processes should be checked in the 'Test' environment before being applied to the 'Live' business system.

SUBCONTRACT OPERATIONS – Ver 2

This document describes the process for handling Subcontract Operations within Sapphire. There are two possible instances where this may be required

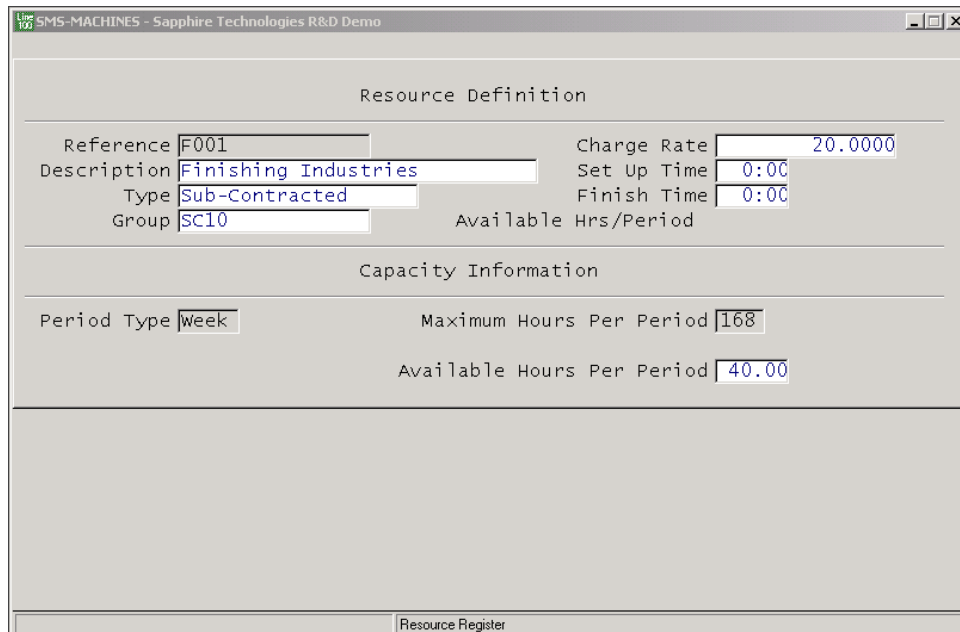
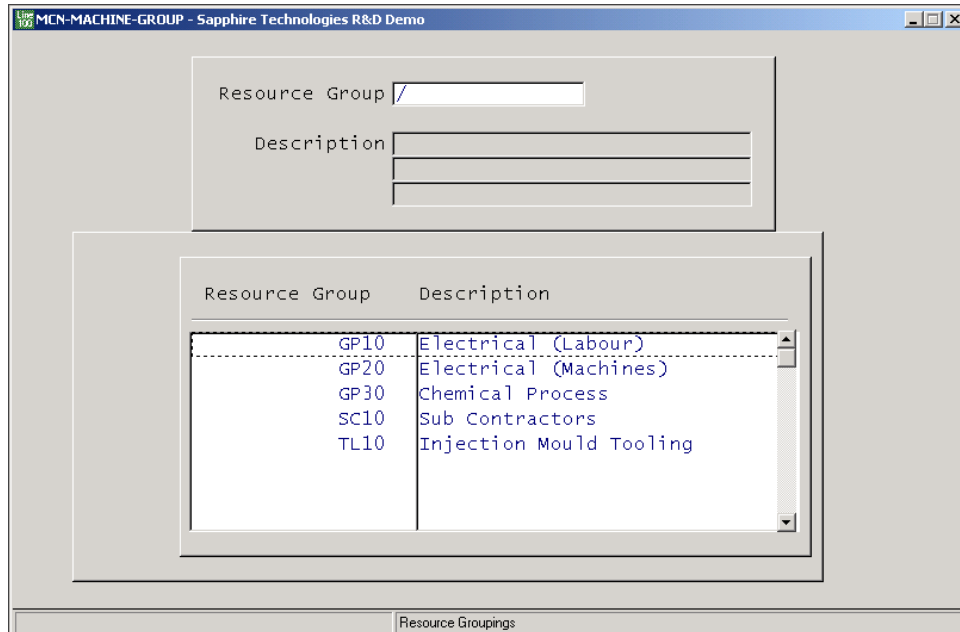
- Purchase of labour only, where there is insufficient 'in house' capacity and the decision is taken to use a subcontractor to perform the operation based on an hourly rate (sometimes called 'shop offload')
- The purchase of a process that is not available internally, such as painting or plating, where the subcontractor supplies both the labour and materials to complete the operation or process for a fixed price

The following assembly is used as an example in this document



1. Resource Groups and Resources

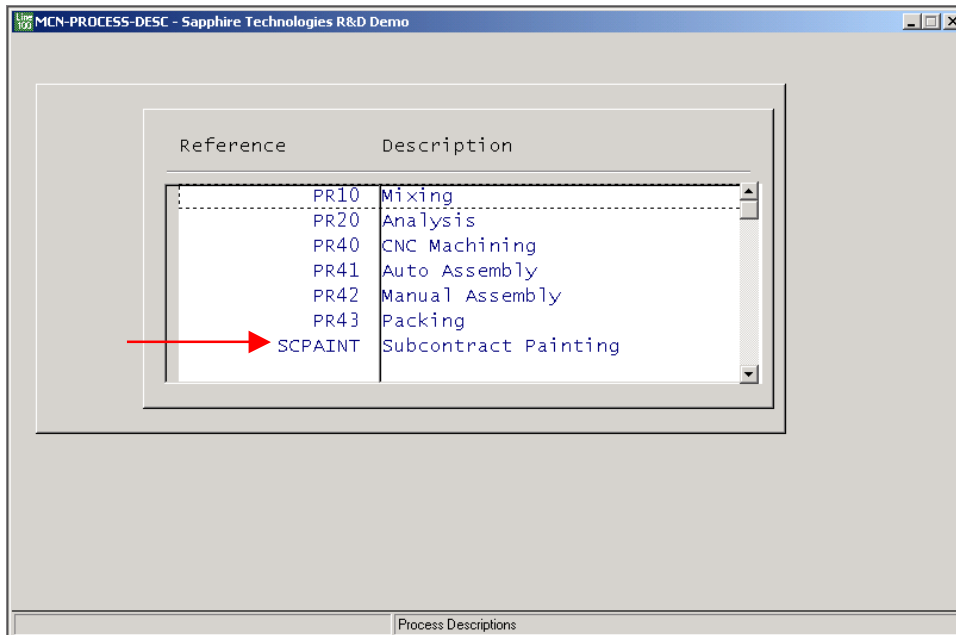
It is useful to set up a separate Resource Group for subcontract resources and an example is shown below. The group would contain all subcontractors such as painting, plating, machining etc



An example of an individual subcontract resource is shown above. In this case, for simplicity, the Resource reference has been set to be the same as the suppliers account number.

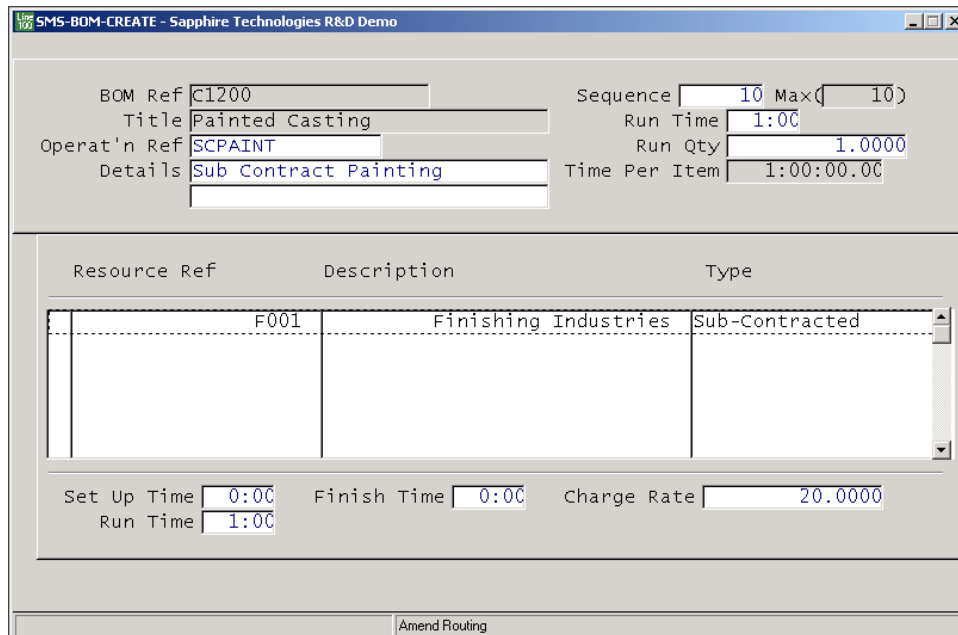
The Charge Rate is shown as £20/hour. The Capacity Information (shown as 40 hours/week) is optional and does not need to be entered for a subcontract resource, although if it is added the capacity loaded on the subcontractor could then be monitored.

2. Process Descriptions



A subcontract process has been added

3. Bill of Materials - Routing



3.1 In this example the cost of the external painting process is £20, and is therefore entered as a 1 hour run time.

In the current version of Sapphire, cost can only be entered as a time based on the Charge Rate for the resource, and not as an absolute cost in pounds/pence. The choice of the rate is therefore important depending on the anticipated unit cost. An hourly rate of £0.60 would allow cost resolution to 1p.

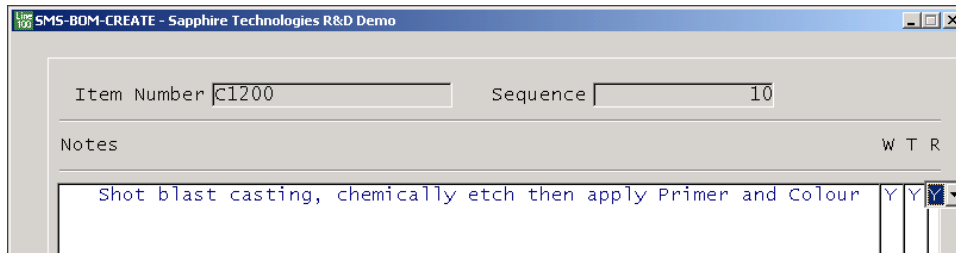
BlueStone Solutions for Business

Unit A, Tayside Software Centre, Technology Park, Dundee, DD2 1TY

Email: sales@bluestone-solutions.co.uk www.bluestone-solutions.co.uk

Offices in Leicester & Bristol. For all locations contact (0800) 027 3775

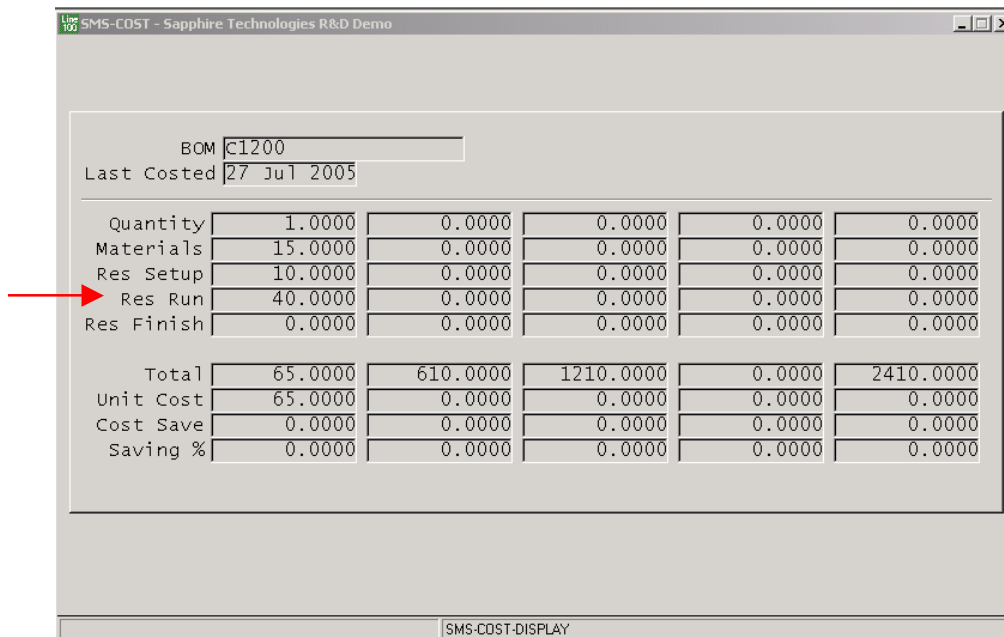
3.2 Notes can be added against the operation



The notes can be targeted to appear on the

- W Works Order
- T Tracking Slip
- R Route Card

4. BOM Costing



The cost of the subcontract operation is included in the total resource Run Time cost

5. Operation & Procedure

5.1 A Works Order is created for a quantity of 2 off for the C1200 Painted Casting. There are sufficient C1050 Machined Castings in stock to meet the requirement.

The operation is flagged as subcontract.

The screenshot shows the 'SMS-VIEW-WORKS-ORD' window with the following details:

- Works Order: 5068
- BOM Ref: C1200
- Description: Painted Casting
- Job Number: [Empty]
- Qty Required: 2.0000

Seq	Operation	Finished	Qty To Do	WIP	Start	Finish
10	SCPAINT	0.0000	2.0000	0.0000		

Op Details: Sub Contract Painting

5.2 A Purchase Order is raised on the Paint subcontractor. In this case the Account number was set to be the same as the Resource

The screenshot shows the 'MASTER-PURCH-FILE' window with the following details:

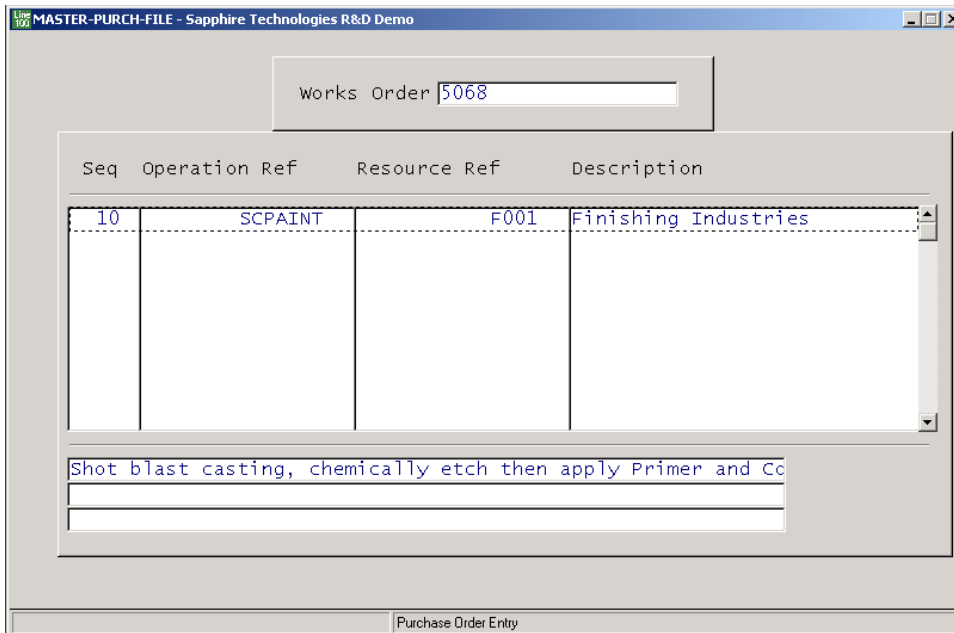
- Order No: 0000000036
- Date: 27 Jul 2005
- Country: GB
- Currency: Pounds
- Fixed Rate: NO
- Rate Ref: 0
- Exchange Rate: 1.000000000
- Account: F001 (circled in red)
- Short Name: Finish
- Company: Finishing Industries
- Freight %: 0.00
- Duty %: 0.00
- Address: Unit 27, Parkside Ind Est, Leeds
- Due Date: 06 Aug 2005
- Depot: [Empty]
- Post Code: [Empty]
- Their Ref: [Empty]
- Contact: [Empty]
- Settlement: YES
- Telephone: 0113 722 5226
- Payment Term: 0 Days
- Fax: [Empty]
- Value: 0.00

The 'Purchase Order Entry' dialog box is open, showing the following options:

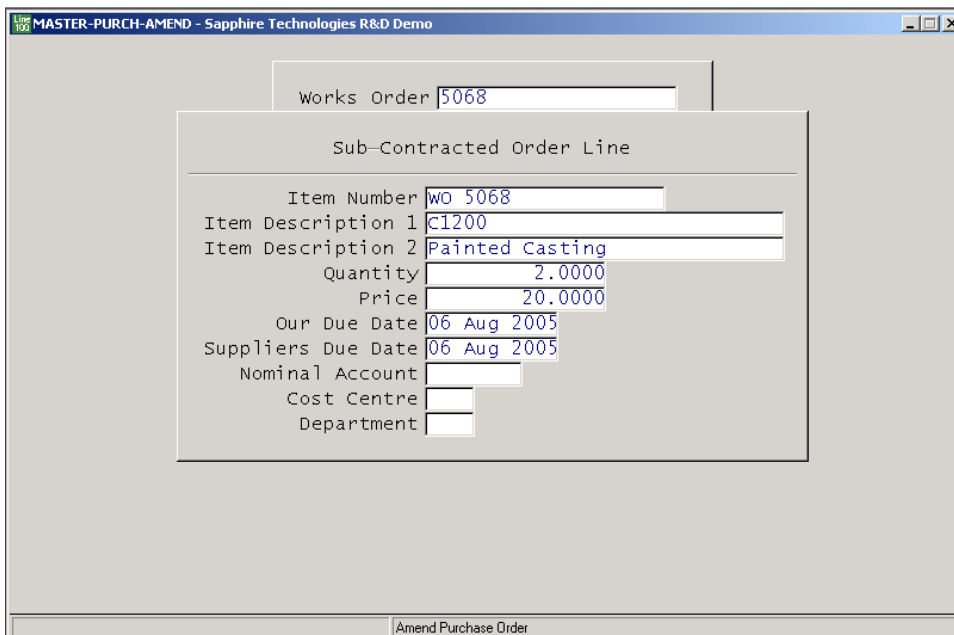
- New Line
- Quick Line Entry
- Sub-Contracted Line (circled in red)
- Review Line
- Delete Line
- Exit

5.3 On leaving the header screen, select the option for a Sub-Contracted Line

5.4 Select the Works Order from the drop down list

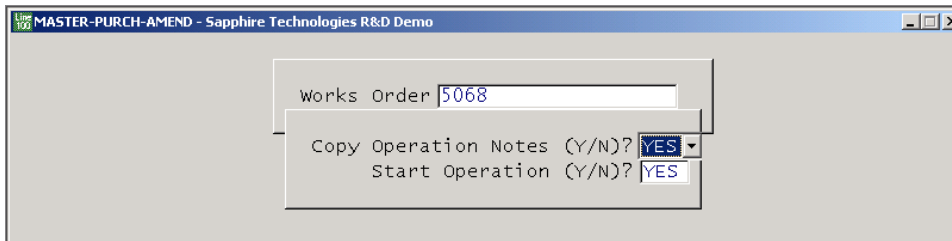


The available subcontract operations on the selected works order are listed (only one in this case) and the operation text is shown at the base of the screen.

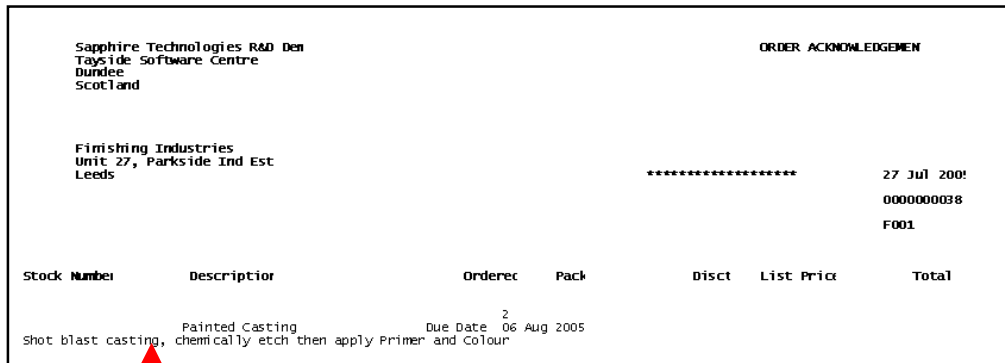


Scroll to and accept the required subcontract line, and the above screen is displayed. The Quantity of the items required is defaulted from the operation and the Price from the Resource.

5.5 The option is given to Copy Operation Notes and Start the Operation. The default is 'YES' for both



5.6 Print the Order



The Operation Notes are copied to the order if selected as above

The Works Order is moved to Status 5 Issued if the 'Start Operation' was selected as above. (This is effectively the same as the Delay Issue option within Works Orders where the status is moved on to Status 5 but the goods are not physically issued)

The items must now be issued using *Works Order Processing, Transaction Entry, Works Order Issue*.

5.7 Goods Receipt

Purchase Order Processing, Transaction Entry, Book Goods In, By Order

Select the Order Number and enter the suppliers Delivery Reference number if applicable

Order No 0000000038 Date 27 Jul 2005 Exchange Rate 1.00000000
 Supplier F001 Finishing Industries Exchange Rate Fixed NO
 Purch By BOBL Freight % 0.00
 Their Ref _____ Duty % 0.00

Item Number	Factored Qty	Ordered	Delivered	Invoiced
WO 5068	2.0000	2.0000	0.0000	0.0000

Description c1200 Painted Casting
 Notes Shot blast casting, chemically etch then apply Primer and Colour
 Our Date 06 Aug 2005 Supp Item _____
 Supp Date 06 Aug 2005 Linked To WO: 5068

Purchase Order Goods In

Note that the Works Order is shown as the Item Number and also in the 'Linked To' reference. The notes are also shown as copied to the Purchase Order from the Works Order operation

Select Book Goods In and a reminder is shown that the items are Non Stock

This is a non-stock item.

Quantity Received 2.0000
 Date 27 Jul 2005

Accept the message/confirm the booking in and the following message is displayed

This purchase order line is for a subcontracted works order operation.

The quantity booked in is now greater than or equal to the quantity required.

Do you wish to complete the operation?

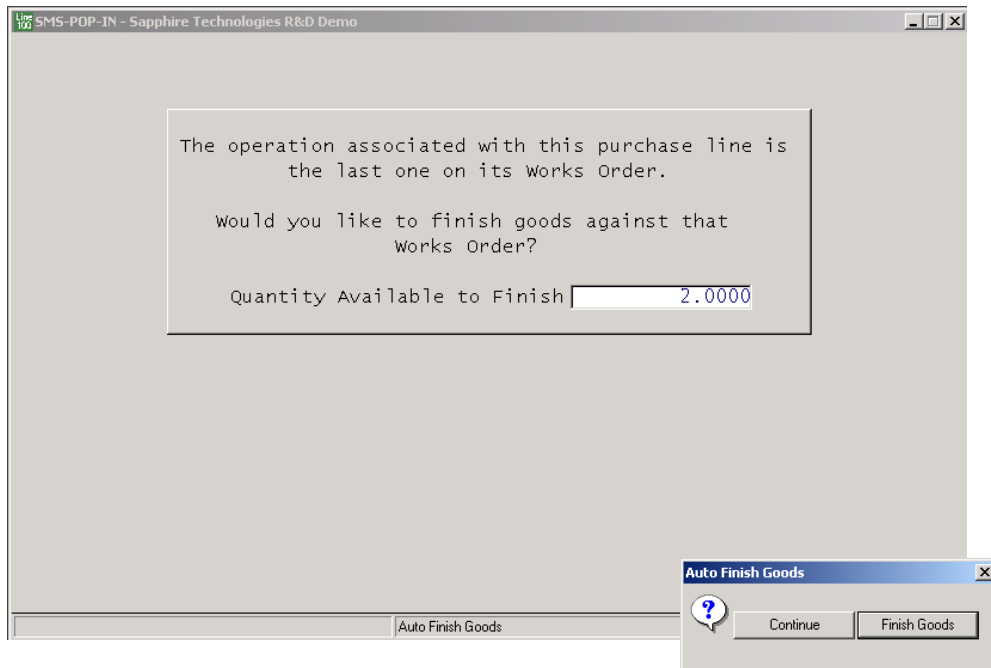
Purchase Order Goods In

? Yes No

Select YES to complete the Works Order operation

Data Sheet for Subcontract Operations

A further option is now available if the operation is the last on the Works Order, which enables the user to book the completed goods into stock



Select Finish Goods to complete the booking.

Item Number Last Days Transactions

Description Stock Balance

Depot Measured In

Date	Reference	In	Balance	Out
27 Jul 2005	16:34 6079	2.0000	4.0000	
22 Jul 2005	16:23 6078	2.0000	2.0000	
Total		4.0000		0.0000

Account Ref

Unit Cost Currency Invoiced?

GRN Summary

The completed goods are now in stock

6. Works Order Costing

Works Order Processing, Reports, Works Order Costs, Detailed

Sapphire Technologies R&D Dem						Date Printed	27 Jul 2005
Works Order Cost Report						Printed By	BOBL
						Page Number	1
Works Order Number	5068	Start Date	01 Aug 2005	Quantity Required		2.0000	
Job Number		End Date	01 Aug 2005	To Be Issued		2.0000	
Bill of Materials	C1200			Manufactured		2.0000	
Description	Painted Casting	Customer Account					
Operations							
Seq	Operation Ref	Details	Start Date	End Date	Expected Hours	Total Hrs To Date	
S&Q	898	Painton Ref	27 Jul 2005	27 Jul 2005	02:00	00:00	
		Sub Contract Painting					
					TOTAL	02:00	00:00
Materials Issued							
Date	Item Number	Description	GRN	Quantity	Price	Value	
27 Jul 2005	C1050	Machined Casting	6077	2.0000	45.0000	90.0000	
					Total Material Cost	90.0000	
Linked Purchase Non Stock Items							
Item Number	Description	Purchase Order	Qty Received	Price	Value		
WO 5068	C1200	0000000038	2.0000	20.0000	40.0000		
					Total Purchase Order Cost	40.0000	
					Work In Progress Value	0.0000	
					Total Works Order Cost	130.0000	
					Grand Resource Costs	0.0000	
					Grand Material Costs	90.0000	
					Grand Purchase Order Costs	40.0000	
					TOTAL COSTS	130.0000	
					Grand Work In Progress Value	0.0000	
					Grand Sales Revenue To Date	0.0000	
					Profit	-130.0000	
					Margin	0.00 %	
					Grand Expected Sales Revenue	0.0000	
						-130.0000	
						0.00 %	

The report shows the cost of the materials and the linked Purchase Order for the sub contract process.