

## About this Book

The **Qube Job Costing User Guide** provides information about the Job Costing module. This book includes such topics as Basic Job Costing, FIFO/LIFO Job Costing, Advanced Job Costing, and Job Cost Buckets.

Use this book as a general reference book.

The **Qube Job Costing User Guide** is part of a 14-volume set. The other books in the set are:

- General Information User Guide
- System Administration User Guide
- Inventory Management User Guide
- Production Scheduling and Bills of Material User Guide
- Sales Order Management User Guide
- Purchasing Management User Guide
- Accounting with Qube User Guide
- Accounting with Dynamics User Guide
- Order Configuration User Guide
- Global Commerce User Guide
- Implementation Workbook
- Qube Sample Reports Book
- Index

## Overview

This user guide contains the following topics:

- Basic Job Costing
- Manually Applied Charges
- FIFO/LIFO Job Costing
- Job Cost Reports
- Advanced Job Costing
- Job Cost Buckets
- Estimated vs. Actual Job Cost
- Job Cost Transaction Detail

## Basic Job Costing

Qube ERP™ has highly automated job costing capabilities. This functionality allows you to track all of the expenses accrued on a specific job and determine whether or not it was profitable using the job cost reporting functions.

The production planning function completely automates this process when you run production scheduling based on sales order and forecast records. All proposed transactions, such as POs, manufacturing orders, planned labor and inventory consumption are planned by the system and are tied to the job prior to their actual occurrence. Therefore, when you log the completion of these items (a PO receipt or planned assembly, for example) the job cost data is automatically captured.

## Standard Rates

In addition, Qube ERP™ provides the ability to set up standard inventory costs and labor rates, automate the maintenance of those rates, and analyze all of your jobs using an actual vs. standard reporting function. These rates are established in labor rates, work center records, bills of material, etc. The system then monitors the actual amounts of inventory and labor actually consumed to the job, and compares these amounts in the reports. The **Labor Standards** window can be used to constantly monitor your labor standard rates, and update them when desired.

## Manually Entered Transactions

In addition to the planned operations, Qube ERP™ provides the ability to apply manually entered inventory, labor and purchasing transactions to any job. These transactions will be included in the job cost reports, giving you a total picture of all transactions, planned and otherwise, which were applied to each job.

## The Sales Order Line Number

The number used to track jobs in the Qube ERP™ system is the **Sales Order Line Number**. This number is calculated as the **Sales Order Number** combined by a dash with the **line number** of an item on the sales order.

In the following example, Item 725 would have an order line number of 1855-1, Item 7111 would have 1855-2, and so on. Thereafter, these jobs would be tracked through the system using these job numbers.

Sales Order Items									
10004 AAA Company		1855-1 of 3							
Item Code	Date	Status	Ordered	Shipping	Invoiced	B/O	Price	Unit	Extension
725	04/09/97	0	4	0	0	4	525.000	ER	2,100.00
725	04/09/97	0	4			4	525.000	ER	2,100.00
7111	04/09/97	0	16			16	330.000	ER	5,280.00
DAC3	04/09/97	0	16			16	400.000	ER	6,400.00

## Which Costs are Tracked?

Any time inventory is used up, labor is applied or purchases are made, they can be tracked to a job.

## Inventory Transactions

Inventory transactions are tracked to a job by inserting the **Sales Order Line Number** in the appropriate field.

Inventory Transaction Quantities									
Transaction Number	Transaction Type		Date	Posted On J/E #	To Period				
85152	Job Cost or Adjustment		05/22/97						
Item Codes	Ty	Loca-tion	PO/Invoice Item #	Order Line # If Made to Order	Stock on Hand	Quantity	Unit	Lot/Batch #	Reason
0001	OUT	1		1873-1	299.000	25.000	ER		U
0001	OUT	1		1873-1	299.000	25.000	ER		U
0002	OUT	1		1873-1	50.000	10.000	ER		D

## Purchase Orders

You may apply job numbers directly to purchase orders by inserting the **Sales Order Line Number** in the appropriate field.

Purchase Order Items									
<b>SPRUNL Space Unlimited</b> <span style="float: right;">60011-1 of 1</span>									
Item Code	Date	Status	Ordered	Received	B/O	Cost	Unit	Extension	
P1004	05/22/97	0	1	0	1	2.25000	ER	2.25	
P1004	05/22/97	0	1	1	1	2.25000	ER	2.25	
Canton							2.25		
G/L Account 0-000-1310-000 <span style="float: right;">Comments</span> Inventory - Raw Materials Job Allocation ABC CONTRIV Capsules, Canton of 100 Bottles									
<input type="checkbox"/> Print Notes 1 Unit Conversion Factor 1 <span style="float: right;">Lead Time 2 Days Reference #</span> <input type="checkbox"/> Print Notes 2 Unit Wt Lbs <input type="checkbox"/> Rework <input checked="" type="checkbox"/> Taxable Code 2 <span style="float: right;">Revision Code</span>									
Scheduled Receipt Date	Requested Receipt Date	Ordered	Received	B/O	Line Status	Allocated to Prod'n	Job Allocation	Shipped to Purchasing Vendor Shipment Code	
05/24/97	10/07/05	1	0	1	2 0	1873-1			
05/24/97	10/07/05	1	1	1	2 0	1873-1		60011-1-1	

And the **PO receipt transaction** will automatically be applied to the job:

Inventory Transaction Quantities									
Transaction Number	Transaction Type		Date	Posted On J/E #	To Period				
85153	P O Receipt		05/22/97						
Item Codes	Ty	Loca-tion	PO/Invoice Item #	Order Line # If Made to Order	Stock on Hand	Quantity	Unit	Lot/Batch #	Reason
P1004	IN	1	60011-1-1	1873-1	1.000	1.000	ER		
P1004	IN	1	60011-1-1	1873-1	1.000	1.000	ER		

## Job Costing Information on a Vendor Invoice

It is possible to charge costs reflected on a vendor invoice (voucher) to a job by entering the **Sales Order Line Number** on the voucher item.

**Vendor Invoice Items**

**IAMWAR Lamp Warehouse** 987654

Item	G/L Account	Quantity	Unit Cost	Unit	Extension
First Item	5000-000/10	50.000	10.00000	EA	500.00
Second Item	5000-100/00	100.000	12.00000	EA	1,200.00
OAK LEG BLANK	1400-000/00	10.000	11.00000	EA	110.00
Another Item	5000-000/20	1.000	600.00000	EA	600.00

Cost of Sales - Materials, Second Dept 2,410.00

VAT Tax Code  ☐ This item is taxable

Not Reportable; Tax Rate is 0 % Currency of Issue USA US Dollars

Sales-Order Line # 100002-2 Home Currency Unit Cost 10.00000

PO Item Code 0.00

Job Cost Bucket 0 Job Cost Phase

Notes

Header Items Payments

## Labor Transactions

**Employee Time Charges and Labor Applied to Planned Operations** may be applied to the job:

**Employee Time Charges, by Date and Person**

Employee Code 1 Samuel Database User Posted to JE #

Signature:  Date 06/02/2000 Period /

Order-Line #	Item Code	Item Description	Start Time	Stop Time	Time Spent	Activity	Job Cost	Job
1055-1	725	725 TablChair-Oak Dining/Arm	08:15	09:45	1:30	20	0	0

## Assembly Transactions

Both Scheduled and Non-Scheduled Transactions may be applied to jobs:

**Non-Scheduled Assemblies**

Transaction Number	Date	Posted To J/E#	Order Line# If Made to Order	Lot/Batch Number	Actual # Hrs
05357	04/06/1995		10009-1		15

Assembled Item Code	Quantity	Sent to Location	Unit	Fifo Unit Cost	Extension
9111	3.000	200	EA	267.81000	803.43000

Component Item Code	Quantity	Pulled From Location	Unit	Fifo Unit Cost	Extension	Lot/Batch #
9111-FAB/SEH	3.00000	200	EA	15.15000	45.45000	
9111-F0/CUT	3.000	200	EA	21.82400	63.97200	
9111 FR/FIN	6.000	200	EA	230.80000	1,384.80000	
LAM-1	9.000	1	EA	2.00000	18.00000	
FINAL	3.408		HR	10.00000	34.08000	
LAM-2	9.000	1	EA	1.50000	13.50000	

Laminate in Aubergine 1,559.80200

Quantities Costs Non-Scheduled Scheduled Reverse

## Job Cost Reports

After all of these transactions have been applied to a job, you can print out any of the **Job Cost Reports** to determine the precise cost and profitability of each job.

### Job Cost Detail For Order Items 1873-1 thru 1873-1

Period Covering 01/01/97 - 12/31/97

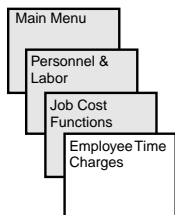
Report Printed on 05/22/97 at 16:23, Page #1

Fiscal Week: 236 - 288

Date	Description	Quantity	Unit Cost	Revenue	Material Cost	Labor Cost	Overhead	Cost Extension
05/22/97	Chair - Series 9.1 Ready to Ship							
05/22/97	Pull 0001 bolts - table 1, #85152	25.000	EA	10.00	250.00			250.00
05/22/97	Pull 0002 nuts - table 1e, #85152	10.000	EA	0.15	1.50			1.50
05/22/97	Return 9111-POKUT foam - cut for, #85154	-1.000	EA	35.00	-35.00			-35.00
05/22/97	Pull FOAM foam used in ma, #85154	6.000	BF	1.50	9.00			9.00
05/22/97	Pull COVER moisture barrier, #85154	3.000	SP	3.89	11.66			11.66
05/22/97	Pull GLUE glue used to at, #85154	0.112	GL	3.00	0.34			0.34
05/22/97	Assemble CUT cutting, #85154	0.500	HR	28.00		14.00		14.00
05/22/97	Labor by D Joe job 1873-1	2.367	Hrs	28.00				14.00
05/22/97	Labor by Joe job 1873-1	0.500	Hrs			14.00		14.00
05/22/97	Purchase Celebration party for job 1873-1	1.000	EA	100.00	100.00			100.00
	Sub Totals for 1873-1	47.479			337.50	28.00		365.50
	Totals	47.479			337.50	28.00		365.50

## Manually Applied Charges

### Employee Time Charges, by Date and Person



**Employee Time Charges, by Date and Person**

Employee Code: 1    Screen: 1    Post to Person: Home    Posted to Job #

Start Date: 11/02/1995    Period: /

Order-Line #	Item Code	Item Description	Start Time	Stop Time	Time Spent	Activity	Job Cost	Job	Charge
			Time	Time	Hours	Minutes	Type	Bracket	
1855-1	725	725 Job Chair-Oak Dining/Arm	4	56	SAND	S			0
1855-2	7111	Series 7 Chair	2			S			
1050	9111	Returned Series 9 Chair	3	33		O			
1932-1	1MILK	Whole milk in quarts	1	20	LAM	S			

AAA Company    11    51

By Person    By Job

This is a comment field which enables the user to enter detailed descriptions of the type of work done on the selected job by the selected person on the selected date.

This window is used to record employee time charges, which are used to apply direct labor to each job. Employee time charges are connected to each job by using the **Sales Order Line Item** record number. Employee time charges are posted to the payroll payable account, and can be used in conjunction with the payroll module in Great Plains Accounting and Great Plains Dynamics.

All types of time charges may be entered, including those to be charged directly against specific contracts, those charged against routine production for stock and also time allocated to overhead, such as vacation and sick leave.

### Window Attributes

#### Employee Code

*[Five character, alphanumeric, validated]* Enter the code of the employee who has performed the time and activities which are being recorded. When you enter the employee code, the name of the employee will appear following the code. If you enter a code which the system does not recognize, it will display a message informing you of that and ask you to try again. The system will not allow you to proceed until you have entered a valid employee code or cancelled the transaction.



## Signature

*{Validated}* The system will ask the employee doing the data entry to provide a valid **Employee Signature** for the employee code entered. This is provided as a security measure, helping to ensure that only authorized people enter data for each employee. This may be the employees themselves, or supervisors, etc., who are authorized to enter these records. If you enter the correct code, the system will immediately change the code to \*\*\* CODE IS O.K. \*\*\* and allow you to proceed with your entries. If the code does not match the code entered in the employee record, the system will immediately terminate the transaction.

## Date

*{Date field, required}* Enter the date the work was performed in this field. Each employee time charge record can serve as an employee time card record for each employee for each day. By capturing accurate data about the work each employee performs on each day, you will be able to keep track of hours worked for payroll purposes, and charge those payroll expenses off to the appropriate jobs through the job cost functionality of the system.

After you enter a date and tab out of that field, the system will look to see if there have already been entries made for you on the specified date. If entries already exist for that day, the system will display them for you and add up the total number of hours recorded for you for the given day.

## Posted to JE #

*{Display field only}* This field will remain empty until the transaction is posted. Once it is, this field will display the journal entry number to which the transaction was posted.

## Order Line #

*{Alphanumeric, validated}* Enter the **Sales Order Line #** to which the time is being charged. Once you enter the order-line number, the system will first verify that the code represents a valid job and then display the product code and description and the customer's name associated with that order-line number. This information is displayed to help you verify that you are charging your time to the correct project. Enter a different number for each different operation or job being logged in the list.



Item Code

{Display only} This field displays the item code of the item being worked on. This is drawn from the sales order line #.

Item Description

{Display only} This field displays the item description of the item being worked on. This is drawn from the sales order line #.

Start/Stop Time

(Version 7.36 only) You may choose to enter start and stop times and let Qube ERP™ compute the hours and minutes spent on the job, instead of entering time directly in the **Time Spent** fields. Also, if you change the **Time Spent** fields directly, Qube will automatically adjust the stop time.

You must enter time in hours and minutes. When you first tab into these fields, you will see “##:##” in the fields. If you want to indicate that the job started at 8:15 a.m., enter 0815. Qube ERP™ automatically places the 15 into the second portion of the input field, resulting in a display of 08:15.

Start Time	Stop Time	Time Spent	
		Hours	Minutes
08:15	10:20	2	5

Time Spent

{Two fields, numeric} If you chose to enter start and stop times in the previous fields, Qube ERP™ automatically computes the hours and minutes spent on the job. If you chose not to enter start and stop times, you may enter time spent directly in these fields. You must enter the hours and minutes separately. Do not enter fractions of an hour, such as “2.5” hours, as the system will not accept this.

Activity Codes

{All Caps, Validated} Entering a code into this field enables the user to record what type of activity was performed on the project. This type of information enables the system to report to management summary information on the length of time different types of activities are consuming on various projects. Before Activity Codes are entered into this window, they must first be set up using the **Activity Codes** window (see [“Activity Codes” on page LAB-25](#)).

Type

{All Caps, Validated} Use this field to enter the type of time spent on the job. These type codes must be set up using the Time Charge

Codes window. They help determine the pay rate of each block of time (see [“Time Charge Codes” on page LAB-28](#)).

## Job Cost Bucket

Enter the job cost bucket code in this field. For more information on job cost bucket codes, see [“Job Cost Buckets” on page JC-46](#).

## Job Phase

Enter the job cost phase code in this field.

## By Person

(Version 7.36 only) Click on this tab to enter and view time charges for a specific employee on a specific date.

## By Job

(Version 7.36 only) Click on this tab to enter and view all time charges entered by any person on any date for a specific job.

## Employee Time Charges, By Job

Date	Employee Code	Item Code	Billing Rate/Hr	Start Time	Stop Time	Time Spent Hours Minutes	Activity Code	Type
08/15/1992	1	725				4 56	SAND	S
08/15/1992	1	725				4 56	SAND	S
11/02/1995	1	725				4 56	SAND	S

Samuel Database User      725 TubChair-Oak Dining/Arms & Headrest      9      52

By Person      By Job

## Window Attributes

The window attributes are the same as card 1 (Employee Time Charges, by Date and Person), except for Billing Rate.

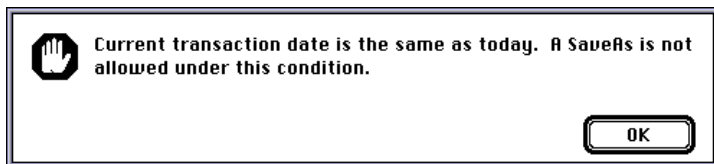
## Billing Rate/Hr

Enter the hourly rate to be billed for this job.

## Using the Windows

### Save As

The **Save As** command will be ignored if the transaction you are trying to duplicate has “today's” date on it. This would cause a duplicate set of transactions for the selected employee on today's date. In this case, the following message will be displayed:



### Finding Time Charge Records

Press **<CTRL/COMMAND-F>** on your keyboard, or select **FIND TRANSACTION** from the Action menu. The system will place your cursor in the employee code field. Enter the employee code, and then **<TAB>** to the date field. *It is important that you enter a date or the system will not know which records to display for you.* After entering a date, press the **<ENTER>** key. The system will proceed to display the records of time charged by the specific employee on the specific date you entered.

### Editing Time Charge Records

Time charge records may be changed only by an employee who is in possession of the authorized employee **Signature**, and only if a transaction is unposted. After you select **<EDIT>** from the **Action menu** or **Commands Bar**, the system will place the cursor in the **Employee Code** field. **<TAB>** into the **Signature** field. Enter the authorized employee signature and press **<ENTER>**. If the authorization code you entered matches the secret code recorded in the employee's file, the system will first change the code to read **\*\*\*CODE IS O.K.\*\*\*** and then allow you to proceed and change any information displayed on the screen.

### When to Enter Transactions

Normally, items being sold by a manufacturing company will have bills of material which contain some reference to a work center or routing. The number of hours specified in the work center or routing record determines the standard number of hours required to build the

item. You should therefore not enter employee time charges for all hours spent building items. If you do, you will be double-counting; the value of the employee time charges will be added to the value of the standard labor added to inventory reflected in the inventory assembly transaction when the item is assembled. You should enter only labor spent in excess of standard. This will result in job cost reports that report labor spent at standard as part of the inventory assembly transactions plus labor spent in excess of standard from the employee time charges.

## Using Employee Time Charges to Increment Billable Labor Hours

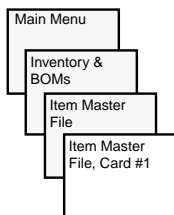
It is possible to use the system to not only record labor costs against a job, but also to cause the billable value of labor on that sales order to increase as the labor expense increases. This is a very handy feature for companies who bill on a time and materials basis.

### • To increment billable hours through employee time charges

1. First, you must set up a record in the Item Master File with an Item Code that begins with LABOR.

In addition, you must enter the price you will charge for the labor applied to the jobs. When time is applied in this way, it is incremented to the job in minutes. For example, this is a record which has been established for labor at rates of \$25 per hour.

The item code must begin with LABOR



**Item Master File, Card #1**

Item Code  Misc labor at \$25 per hour

Group  Sub-Group  ☒ Purchased ☐ Fabricated

Option Class  Sub-Class  G/L Sales Sub-Account

Item Type  Grade  ☐ 1st Article Produced

Revision Code  Revision Date  ☐ 1st Article Approved

Cost Updated  ☐ Inspect on Receipt ☒ Master Scheduled Item

☒ Active item

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Material Cost  # Sales Units per Shipping Unit

Freight In  Weight per sales unit (lbs).....

Material O/H  Cubic Feet per Sales Unit.....

Outwork  Stockkeeping Unit.....

Labor  Purchasing Unit.....  =  SKUs

Labor O/H  Sales Unit.....  =  SKUs

Total Cost

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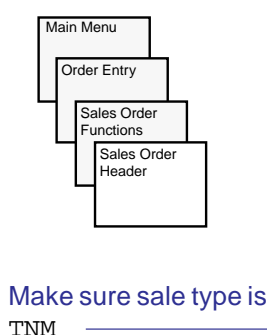
**Default Selling Prices**

Quantity	Price	Quantity	Price	Quantity	Price
0	0.420	0	0.420	0	0.420
0	0.000	0	0.000	0	0.000
0	0.000	0	0.000	0	0.000
0	0.000	0	0.000	0	0.000
0	0.000	0	0.000	0	0.000

Card #1 Card #2 Quantities Batch Quantities Usage

Cost is converted to rate per minute

- The Sale Type (found in the Sales Order Header) must be **TNM (Time & Materials)**, as shown.



**Sales Order Header**

<b>Bill To</b> 10014      Date 02/13/97 Rockwell Marketing Dept. 4311 Jambourée Road Building A-2 Newport Beach CA 92658 U.S.A. Sam Johnson	<b>Ship To</b> 10014      Order 2030 Rockwell Marketing Dept. 4311 Jambourée Road Newport Beach CA 92658 U.S.A. User Sam Johnson Call      Hours Before Delivery
<b>Credit Card</b> # <b>Sales Rep</b> Acct Mgr 1 <b>Pay Terms</b> 2.0% 10 DAYS Net 30 <b>P.O. #</b> <b>Contract #</b> <b>Sale Type</b> TNM1      Status R      Ready	<b>Shipping Location</b> 1      ✓ <b>Requested Ship Date</b> 02/23/97      UPS Zone <b>Last Shipped On</b> 02/13/97 <b>Shipment Terms</b> Via FedEx <b>Change #</b> Change Date <b>Sub</b> 000 <b>Dept</b> 00 <b>Deposit</b> = \$

- Also, the sales order item referenced when recording the time must have an Item Code beginning with **LABOR**.

**Sales Order Items**

Item Code	Date	Status	Ordered	Shipping	Invoiced	B/O	Price	Unit	Extension
9111	02/14/97	H	1	0	0	1	777.231	EA	777.23
LABOR/25	02/14/97	H	1			1	777.231	EA	777.23

- Once both of these conditions are met, you can enter employee time charges against the line item of the **LABOR** item such as this:

**Employee Time Charges**

Employee Code 1      Samuel Database User      Posted to JE #  
 Signature:      Date 01/12/97      Period /

Order-Line #	Item Code	Item Description	Time Spent	Activity	Type
02/24/97	LABOR/25	Misc labor at \$25 per hour	1 15	PRINT	S
2033-2	LABOR/25	Misc labor at \$25 per hour	1 15	PRINT	S

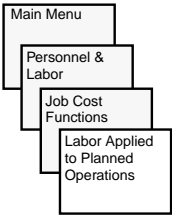
- After entering the employee time charges, the sales order will be incremented, in minutes, by

the amount of time entered into the Employee Time Charges window.

Sales Order Items										
10005	CCC Company	2033 - 2 of 2								
Item Code	Date	Status	Ordered	Shipping	Invoiced	B/O	Price	Unit	Extension	
LABOR/25	02/14/97	H	75	75	0	75	0.420	HIN	31.50	
9111	02/14/97	H	1			1	777.231	EA	777.23	
LABOR/25	02/14/97	H	75	75		75	0.420	HIN	31.50	



## Labor Applied to Planned Operations



This window is used to apply labor to and close out **planned operations**, and the **planned assemblies** associated to the final stages of routings. For information on the differences between planned operations and planned assemblies, see [“Planned Purchase, Planned Assembly, Planned Operation” on page PLAN-121](#).

Qube ERP™ provides the **Labor Applied to Planned Operations** window to use when entering time charges against planned operations. The entry of time on the **Employee Time Charges** window is the recording of unplanned (unscheduled) events.

### Window Attributes

#### Transaction Date

*{Date field, required}* Enter the date of the transaction in this field. Each time you enter records for a date, the system will check to see if other transactions were entered in the same date. If there were, all transactions for the date will be displayed after you click <SAVE>.

#### Posted to JE #/ Period

*{Display only}* These fields will remain empty until the transaction has been posted to the general ledger. After a transaction has been posted, it cannot be edited.

#### Mfg Order-Task #

*{Validated}* When using this window to enter transactions reflecting labor applied to a *planned operation*, you must first load the planned operation into the list prior to applying labor to it. The number in this field is the *Manufacturing Order Task #*; that is, the concatenation of the *manufacturing order number* and the *task number*. No dashes,

slashes, spaces or other delimiters are used; just the manufacturing order number followed by the task number.

You may also elect to ignore this field and simply apply labor to various jobs in the system, similar to the **Employee Time Charges** window. In these cases, just <TAB> out of this field and begin entering data into the additional fields provided in the window. This type of transaction might look like this:

Labor Applied to Planned Operations											
Transaction Date		02/14/97		Posted to JE				Period		/	
Prod Order-Task #	Order-Line #	Item Code	Work Center Code	Employee Code	Scheduled Hours	Actual Hours	Units Activity Done Code	Activity Type	Do Assem	Sent to	Location
	1855-2	7111	RSSV	1	2.000	3.000	5.000	RSSV	S	YES	200

You may also enter “REWORK” in this field, as shown:

Prod Order-Task #	Order-Line #	Item Code	Work Center Code	Employee Code	Scheduled Hours	Actual Hours	Units Activity Done Code	Activity Type	Do Assem	Sent to	Location
REWORK	1921-5	453 KIT	99	1	0.500	1.000	100		0	YES	200

Qube ERP™ responds to this entry by allowing you to enter fields which are otherwise preset by reference to a selected manufacturing order task. These fields include the order-line #, item code, work center code, employee code and scheduled hours. You will not be required to enter valid codes in some of these fields, but if you leave a field blank Qube ERP™ will verify with a prompt. For example, if you leave the item code field blank, this message displays:

**OK to proceed with a blank work center code. Are you sure?**

**NO**

**YES**

## Order-Line #

*{Validated}* This is the order line number (job number) to which this labor transaction will be applied. When entering a valid **Manufacturing Order Task #**, this field is display only, and is provided so the user can validate the accuracy of the data being entered.

<b>Item Code</b>	<i>{Display only}</i> This is the item code to which this labor transaction is being applied. This field is provided so the user can validate the accuracy of the data being entered.
<b>Work Center Code</b>	<i>{Display only}</i> This is the work center where the operation has been planned and is being performed. This field is provided so the user can validate the accuracy of the data being entered.
<b>Employee Code</b>	<i>{Validated}</i> Enter the code of the employee whose rate should be charged to this task. If no employee code is applied, the standard labor rate of the work center will be applied to the cost component of this transaction.
<b>Scheduled Hours</b>	<i>{Display only}</i> This field displays the number of scheduled hours for the scheduled number of units. This field is provided so the user can validate the accuracy of the data being entered.
<b>Units Done</b>	<i>{Required, numeric}</i> Enter the number of units actually completed in this field. The quantity scheduled will be defaulted to make data entry easier.
<b>Activity Code</b>	<i>{All Caps, Validated}</i> Entering a code into this field enables the user to record what type of activity was performed on the project. This type of information enables the system to report to management summary information on the length of time different types of activities are taking various projects. Before Activity Codes are entered into this window, they must first be set up using the <b>Activity Codes</b> window (see <a href="#">“Activity Codes” on page LAB-25</a> ).
<b>Type</b>	<i>{All Caps, Validated}</i> Use this field to enter the type of time spent on the job. These type codes must be set up using the Time Charge Codes window. They help determine the pay rate of each block of time (see <a href="#">“Time Charge Codes” on page LAB-28</a> ).
<b>Do Assembly?/ Sent to Location</b>	When production scheduling is run on a BOM which contains a routing list, the resulting schedule will include a planned operation for each step in the routing, plus a planned assembly to add the parent

item to stock and relieve its components. The planned assembly will occur at the work center referenced in the last operation step and on the last date on which the last operation step is scheduled.

Therefore the last operation step in a routing will contain at least two tasks. The first task will be the last operation, the second task will be the assembly of the fabricated item. The assembly will be scheduled requiring no time to perform.

In these cases, you will need to close out both the routing and the assembly. This field is provided as a convenience to the user. It allows you to record the completion of the assembly transaction in the final step of the routing, without having to leave the window.

All that is required is that the user enter **YES** into the second to last column plus a **Sent to Location**. Both of these values are required to create the assembly and both will be defaulted by Qube ERP™ to make this easier for the user. This means that you will not have to leave the labor module to enter a separate assembly transaction. It will all be set up automatically.

The resulting assembly transaction will have all of the same impact of an assembly originating from either of the **Assembly Transaction** windows.

## • To enter labor applied to planned operations

1. Click **<NEW>**.
2. Enter the date of the transactions.
3. Enter the Manufacturing Order Task #.

This will be a concatenation of the manufacturing order number and the task number, without any delimiters between them.

4. If you wish to use a specific employee's labor rate for the transaction, enter the code for that employee in the Employee Code field.

If you do not enter a value in this field, the standard labor rate of the work center will be used.

5. Enter the Actual Hours the operation took.
6. Enter the actual number of Units Done.
7. If you wish, you may enter an Activity Code.
8. Enter the Type of labor completed.

This will affect the labor rate applied to the transaction.

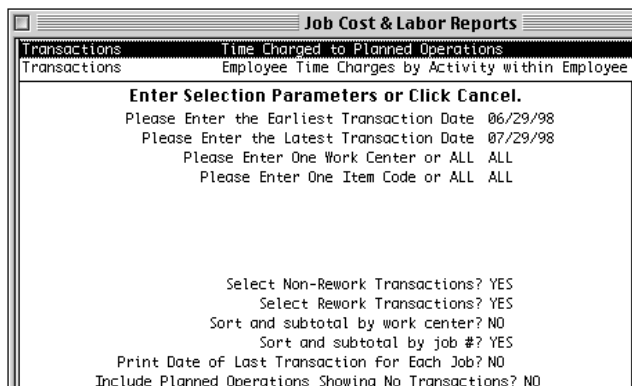
9. If this operation was the last operation in a routing, you may enter YES in the Do Assembly? field and a Location Number in the Sent to Location field.

10. Add as many line items as required.

11. Click <SAVE>.

## Printing Labor Applied to Planned Operations

You can print a report of time charges pegged to planned operations either by viewing the transaction on the window and pressing <CTRL/CMD-P> or by making the following selection from the Job Cost Reports list:



The screenshot shows a window titled "Job Cost & Labor Reports". Inside, there are two tabs: "Transactions" and "Time Charged to Planned Operations". The "Time Charged to Planned Operations" tab is selected, and it displays the text "Employee Time Charges by Activity within Employee". Below the tabs, there is a section titled "Enter Selection Parameters or Click Cancel." followed by several prompts for input: "Please Enter the Earliest Transaction Date 06/29/98", "Please Enter the Latest Transaction Date 07/29/98", "Please Enter One Work Center or ALL ALL", and "Please Enter One Item Code or ALL ALL". At the bottom, there are four more prompts: "Select Non-Rework Transactions? YES", "Select Rework Transactions? YES", "Sort and subtotal by work center? NO", "Sort and subtotal by job #? YES", "Print Date of Last Transaction For Each Job? NO", and "Include Planned Operations Showing No Transactions? NO".



The resulting report will look similar to this:

## World Class Industries

### Time Charged to Planned Operations

Period Covering 01/01/97 - 07/29/98

Report Printed on 07/29/98 at 09:13, Page #1

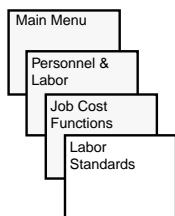
Fiscal Week: 1 - 83

Trans Date	Quantity	Item Code	Order Line #	Task #	Work Center	Standard Hours	Actual Hours	Actual vs Standard	Unit Standard Cost	Actual Cost	Cost Variance	Posted On JE #	Date of Last Transaction
05/16/97	100.000	453 KIT	1921-5	REWORK	99	0.500	1.000	0.500	0.00	0.00	0.00		356/99
Subtotal for 1921-5						0.500	1.000	0.500	0.00	0.00	0.00		356/99
07/30/97	1.000	453 KIT	2064-1	156-4291	15	1.400	1.400		8.00000	11.20	11.20		
07/30/97	1.000	453 KIT	2064-1	216-4291	21	0.850	0.850		8.00000	6.80	6.80		
07/30/97	1.000	453 KIT	2064-1	446-4291	44	0.115	0.117	0.002	8.00000	0.92	0.93	0.01	
07/30/97	1.000	453 KIT	2064-1	986-4291	98	1.424	1.417	-0.007	8.00000	11.39	11.33	-0.06	
07/30/97	1.000	453 KIT	2064-1	996-4291	99	0.005		-0.005	8.00000	0.04		-0.04	
07/30/97	1.000	453	2064-1	SHOP6-4291	SHOP	2.233	2.233	0.000	8.00000	17.86	17.87	0.00	
Subtotal for 2064-1						6.027	6.017	-0.010	48.21	48.13	-0.09		356/99
Total for Labor from 01/01/97 - 07/29/98						6.527	7.017	0.490	48.21	48.13	-0.09		

The option to print the date of the last transaction for each job is available only if you select to sort and subtotal by job # (instead of by work center). This value is printed in the job subtotal; if you are not subtotalling on the job #, it would make no sense. The value is printed as the last date or “No Transactions” if no transactions were found for any given job #.

Selecting to include planned operations showing no transactions will cause Qube ERP™ to read from the planning records (tasks), rather than from the transaction records. Therefore, the report will read more records and take more time to print.

## Labor Standards



Date	Run Time		# of Units Completed	Average Hrs per Unit	Posted?
	Hours	Minutes			
01/01/97	3	25	3.000	1.139	NO
01/01/97	3	25	3.000	1.139	NO
01/02/97	2	25	3.000	0.806	NO
01/03/97	5	27	6.000	0.908	NO
01/04/97	8	15	7.000	1.179	NO
19		32	19	1.028	

Buttons: Purge Selected Lines, View the BOM, Update the BOM

This window provides a function whereby data can be entered regarding the time required to perform given functions. Then the average time required to produce one of the specified items may be automatically entered into that item's inventory master record and its bill of material, with all other inventory items and bills of material also updated with the new information.

The window appears as shown above when viewing an item which has no routing. If the selected item has a BOM which includes a routing list, the routing list will be displayed to the right of the labor standard data, like this:

Date	Run Time		# of Units Completed	Average Hrs per Unit	Posted?
	Hours	Minutes			
02/14/97		42	5.000	0.140	NO
02/14/97		42	5.000	0.140	NO
02/14/97		36	5.000	0.120	NO
1		18	10	0.130	

**Routing List**

- CUT Cutting
- METLATH Metal Lathe
- DRILL Drill Press
- WELD Welding
- DRY Paint Drying

Buttons: Purge Selected Lines, View the BOM, Update the BOM

Qube ERP™ enables you to maintain labor standard data for each work center referenced on the routing list. In the above example, the

third work center in the routing list is selected and the labor standard data for that work center is displayed. When not in *enter data mode*, you may click on any of the other steps in the routing list to display & edit the labor standard data relevant to each work center. Selecting the first work center in the routing list, in this example, displays different labor standard data:

**Labor Standards**

Item Code: R00 Rod - Steel, finished for chairs Posted to JE #92136

Work Center: CUT Cutting

Date	Run Time		# of Units Completed	Average Hrs per Unit	Posted?
	Hours	Minutes			
02/14/97		1	5.000	0.003	NO
02/14/97		1	5.000	0.003	NO
		1	5	0.003	

**Routing List**

CUT	Cutting
METLATH	Metal Lathe
DRILL	Drill Press
WELD	Welding
DRY	Paint Drying

Purge Selected Lines View the BOM Update the BOM

The window works very much like the **Employee Time Charges** window. Reference is made on this window to a work center, however, and not an individual employee. The work center and work center rate have no real impact on the data calculations in this window. Transaction records are entered for the purpose of calculating the total average hours per unit shown at the bottom of the window, not the cost of the labor involved.

Data in this window is collected in two ways. First, it may be entered manually directly into this window. This provides a way of manually collecting data regarding the manufacture of each item and deriving a standard labor rate for the items. This is a good way to initially establish your labor standards for each item.

Second, data may also be captured in this window from other transactions. Any time you enter a scheduled or unscheduled assembly transaction in the data file, the data will be collected and displayed in this window.



Then, this window can be used to evaluate the ongoing collection of labor data and you can use the Purge Selected Lines function to eliminate outliers. After careful review, you can use the window's functions to update the labor standards in the bills of material.

## Window Attributes

### Commands Bar

#### Find and Scroll Buttons

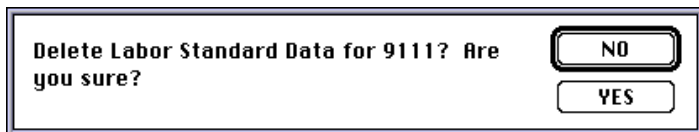
*{Commands Bar buttons}* Use the find and scroll buttons to find on the **Item Code** on which you wish to work. You must find the item prior to performing any other operations.

#### Edit

*{Commands Bar button}* Once you have found the item whose labor standard you wish to edit, click **<EDIT>** to enter, change or delete labor standard transactions.

#### Trash

*{Commands Bar button}* Click **<TRASH>** to delete all of the labor standard transactions for an item. After clicking this button, the following message will be returned:



Click **<YES>** to proceed, **<NO>** to abort.

### Deleting Lines from the List

Records are deleted automatically if you click **<EDIT>** and then delete the dates in the date field. The system will delete a whole line if it finds a blank in the date field.

### Purge Selected Lines

*{Button}* Use this button to selectively purge items from the list without having to edit the date out of each one individually. Select the items you wish to purge using the established methods of delet-

ing items in a list. Then click the button, *<PURGE SELECTED ITEMS>*. The function will return the following message:

Purge the 3 selected lines from the file, now?

NO

YES

Click *<YES>* to proceed, *<NO>* to abort.

## View the BOM

*{Button}* Clicking this button will display the bill of material for the item displayed in the *<ITEM CODE FIELD>* above.

## Update the BOM

*{Button}* Clicking this button will cause the total **Average Hrs per Unit** at the bottom of the list to be written to the work center or routing records of the item’s bill of material. After doing this, the following message will be displayed:

Item Cost changed. Update all other Bills of Materials, NOW?

NO

YES

Click *<YES>* to proceed, *<NO>* to abort. Any cost changes will be rolled up into other bills of material if you click *<YES>*. Only current costs will be impacted. Standard costs are only impacted when you edit them on the **Inventory Standard Costs** window.

If the item whose labor standard you are updating is used as a subassembly in several other items each of which may have fairly large bills of material of their own, this updating process may take awhile.

If the bill of materials for the item whose labor standards you are updating references a routing list, the labor standard will be updated one work center at a time.

## Item Code

*{Validated, required}* After clicking *<FIND>*, enter the code of the item whose labor standard you wish to view or calculate.

<b>Work Center</b>	<i>{Display only}</i> This field displays the work center where the item is produced, or where the operation is performed, in the case of a routing record.
<b>Date</b>	<i>{Date field}</i> This is the date of the operation being logged. You may delete items from the list by deleting the date field.
<b>Run Time/Hours &amp; Minutes</b>	<i>{Two fields, numeric}</i> Enter the hours and minutes separately for the total number of units completed. Do not enter fractions of an hour, such as “2.5” hours, as the system will not accept this.
<b># of Units Completed</b>	<i>{Required, numeric}</i> Enter the total number of units actually completed in this field.
<b>Average Hours per Unit</b>	<i>{Calculated, display only}</i> This is the average hours for the units completed on each line. The total at the bottom of the window is that average for all units completed on the window, and is the new labor standard if you elect to click the button, <UPDATE THE BOM>.
<b>Posted</b>	<i>{Yes/No, display only}</i> This field will display NO until the transaction is posted.

## Posting Charges to Planned Operations and Labor Standard Transactions to the GL

These two types of transaction post differently than all other employee time charge transactions. All other time charge transactions post the full value of the time multiplied times each employee's rate. Both charges to planned operations and labor standard transactions post only the difference between the standard and the actual labor value. *The value of labor at standard in these transactions is already included in the value of the assembled inventory item.* The difference between actual and standard will be posted to **Payroll Payable** and **Labor Variance**. Qube ERP™ will select the appropriate GL accounts to post for these functions by reading your GL Key Accounts entries.

The amount posted will depend on the information contained in each transaction.

The variance for **Labor Standard** transactions will be calculated as:

(Actual hours - Standard Hours) \* Work Center's Hourly Rate

**Charges to Planned Operations** may also contain one personnel record. If the transaction does not contain reference to a personnel record, the variance will be the same calculation as shown above. If it does contain reference to a personnel record, the work center rate will be replaced by the rate of the personnel record. The variance will then be:

(Actual hours - Standard Hours) \* Personnel Record's Hourly Rate

## Fifo/Lifo Job Costing

### Current vs. Fifo / Lifo

**Fifo/Lifo Job Costing** is an individually sold Qube ERP™ module. In order for this function to work, you must have purchased Fifo/Lifo Job Costing.

When not using fifo/lifo job costing, the current unit cost for each inventory transaction will equal the **current unit cost** found in the **Item Master File** at the time the transaction was produced. If current unit costs change frequently, it is important to associate unit costs which more accurately represent the cost of the item at the time of purchase to each inventory transaction.

For example, lumber costs can swing widely over short periods of time. You may purchase one quantity of lumber at \$.30/board foot and another quantity at \$.45/board foot. Both purchases may be made while the item master file shows \$.30 board foot as the **Current Unit Cost**. A job may be accepted based on your ability to purchase lumber at the relatively low price. Job costing which reports all inventory transactions at the current cost and not at the cost of the specific purchase may incorrectly report a profit or loss on a job.

### Current Costs Under Fifo/Lifo

Qube ERP™ carries job cost data in two places; standard and current costs. Since all inventory calculations are carried at standard, the Fifo/Lifo costs will be carried in the Current Cost data of inventory transactions. Then, when you print the Job Cost reports at Current, you will really be deriving these from the Fifo/Lifo layers in the system.

The function carries all Fifo/Lifo Costs in a Fifo/Lifo Layers window. All inventory transactions will carry current costs from the inventory file until an “Update Fifo/Lifo Layers” routine is run. Then,

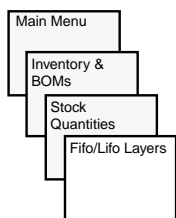
all current costs will be updated with Fifo/Lifo data. This routine is run when inventory transactions are posted to the general ledger.

Fifo/Lifo Stock Layers						
Data file is set up for Fifo evaluation						
Item Code	Q1111		Series 0 chain		Fifo Unit Cost 0.00000	
Date	Reference Number	Bought/Trade for Job #	Unit Cost	Original Quantity	Current Quantity	Extension
08/03/1998	Assembly 10336	2025-1	0.00000	1.000	1.000	0.00000
08/03/1998	Assembly 10374	2025-1	1.000	1.000	1.000	
08/05/1998	Assembly 10392	2025-1	1.000	1.000	1.000	
Totals					3.000	0.00000
Fifo Cost Lifo Cost Load All Layers						



**Note:** This is a separate module, available for sale. In order to use Fifo/Lifo Job Costing, you must have purchased it from Qube Connections, and it must be enabled in the Features Set window.

## Fifo/Lifo Stock Layers



When using Fifo/Lifo job costing, the system records the quantity of stock which entered inventory at each different unit cost. These different stock layers may be viewed from this window. This window is accessed by double-clicking the <*FIFO/LIFO LAYERS*> selection under the Stock Quantities section of the **Inventory Functions** window.

Under this method of inventory cost management, the system assigns units costs to inventory transactions by pulling quantities from the different stock layers on a first-in/first-out or last-in/first-out basis, based on the quantity available in each stock layer.

All transactions into inventory are recorded in this window. Fifo/Lifo layers are updated as inventory transactions are posted to the general ledger (although, currently, this function does not post to the GL under Fifo/Lifo; all inventory postings are done at standard).

## Fifo Calculations

For example, the window above displays the item ABC123. It indicates that 25 units were added to stock in one PO receipt at \$1, an additional 15 were added at \$2, and 40 were added in two receipts at \$3. It also shows that the first two transactions were used up. (The line flagged `Posting Adjustmt` will be dealt with later.)

Assume the first two layers were used up in a single transaction of 40 units which were pulled from inventory (used up in an assembly or shipped out on a sales invoice). Under Fifo, the system would pull 25 units from the layer valued at \$1 (worth \$25) plus 15 units from the layer valued at \$2 (worth \$30). The total value would be \$55, which, if divided by the 40 units, would produce an actual unit cost of \$1.375 each. The inventory transaction pulling the 40 units from

stock would show a unit cost of \$1.375 regardless of what the **Item Master File** showed as the **Current Unit Cost**.

Inventory Transaction Costs							
Transaction Number	Transaction Type		Date	Posted On J/E #	To Period		
85159	Job Cost or Adjustment		06/06/97	92081	1		
Item Codes	Ty	Loca-	PO/Invoice Item #	Order Line # If Made to Order	Current Unit Cost	Standard Unit Cost	Quantity Unit
ABC123	OUT	1	5025-1	1878-1	1.37500	2.00000	40.000 EA
ABC123	OUT	1	5025-1	1878-1	1.37500	2.00000	40.000 EA
Sprocket							
Sprocket							
<div>Quantities</div> <div>Costs</div> <div>Non-Scheduled</div> <div>Scheduled</div>							

## Lifo Calculations

Under **Lifo** (last in/first out), the system would pull all 40 units from the layers valued at \$3. The total value would be \$120, which, if divided by the 40 units, would produce an actual unit cost of \$3 each.

## Updating the Fifo/Lifo Stock Layers

Updating the fifo/lifo stock layer quantities and transaction costs can be a very complex and time-consuming procedure. If the layers were updated when each inventory transaction is created, it would slow the system down too much, more than doubling the amount of time required to produce, edit or delete every inventory transaction. To avoid this, the system updates the fifo/lifo layers in batch mode, whenever inventory transactions are posted. This means that fifo/lifo layers will show a different stock quantity than the **Item Master File** if there are unposted inventory transactions for a selected item.

## Posting Adjustmt

The window also displays an “**unposted**” incoming transaction for 15 of an item. The system highlights this fact by displaying a line labeled **Posting Adjustmt** as the last line in the list. This “Posting Adjustmt” line will carry a running total of all unposted layers. When the **Update Fifo/Lifo Layers** routine is run during the next inventory posting, these will be distributed among the proper layers.



## Inventory Transaction Costs

All inventory transactions will show a transaction unit cost equal to the current cost of the item at the time the transaction was created until the transaction is posted. At that time, the unit cost and fifo/lifo layer quantities are updated and the unit cost may be changed. This implies that job cost reports will be more accurate if the inventory transactions have first been posted.

## Exceptions to the Normal Updating Logic

There are some transactions which are handled in a different manner. For example, an outgoing transaction resulting from an invoicing shipment will pull from stock layers in the normal fifo or lifo manner. If the user deletes the invoice, the system creates an incoming transaction. The incoming transaction will carry a unit cost *identical to that of the outgoing transaction produced when the invoice was created*. This is also true when inventory transactions are created as part of a sales credit memo and as a result of reversing any existing inventory transaction (by clicking the <REVERSE> button).

## Impact on the General Ledger

Fifo/lifo job costing has no impact on the method used to track the value of inventory in the general ledger. This is done using standard costs and purchase price variance.

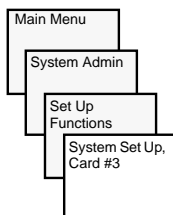
## Initial Set Up

If you are just implementing Fifo/Lifo job costing as a new function and wish to set it up in your data file, do the following:

1. **Use Omnis7 Utilities to check the data file and make sure the Master and inventory transactions (FXFER) files do not need reorganization.**
2. **Make sure the feature is enabled in the Feature Set window.**

This is an individual, for sale, module, and there is an additional charge for this feature.

3. **View the System Set Up Card #3 and make the proper selection between Fifo and Lifo.**



**System Set Up Card #3**

**Inventory Price Defaults (% Times Cost)**

Price Column	1	2	3
% Discount applied to	Quantity #2 150.0	Quantity #3 125.0	Quantity #4 100.0
	10.0	15.0	20.0

☐ Relieve Inventory Upon Invoicing    ☐ Assembly transactions relieve inventory through all indented BOM levels  
 Default location to pull inventory when Invoicing Non-Scheduled orders: 1  
 Default location to pull inventory when Invoicing Scheduled orders: 30  
 Inventory General Stock Includes Stock Location 1 up to Location #: 100  
☒ Define WIP by shop floor location    ☐ Define WIP by item type (SUB)  
 W.I.P. Inventory Begins at Stock Location Number: 000  
 Default "Pull From" location for Assemblies: 1    Default "Pull From" location for Raw Materials: 1  
 Default "Send to" location for Assemblies: 51    Default location for PO Receipts: 1  
 Default location for Receipts Requiring Inspections: 1

Stock Batch Label used in Batch Tracking shall be: Batch  
☒ Associate Lots and Batches with specific Stock Locations  
☒ Preselect Lot/Batch number of components when assembly transactions are created  
☒ Allow automatic lot/batch splits for All Items  
☐ Allow automatic lot/batch splits only on Selected items    ☐ Do NOT automatic lot/batch splits on any items

Default Item Type for new items: RAW    ☒ Allow adding new items to Item Master File during BOM entry  
☒ Use FIFO for job cost evaluation    ☐ Use LIFO for job cost evaluation  
 Name & path of application used to store Inventory Drawings: KDGMac: Applications: Adobe Acrobat 3.0:    Document Suffix: pdf  
 Acrobat Reader 3.0  
 Code to Request Next Sequential Number: \*  
 Default Work Center Code: FINAL123    Final Assembly  
 Normal Warranty Period on Shipped Merchandise is: 12 Months  
☒ Require Unique Work Center Shop Floor Locations?    ☐ Allow Work Centers to share Shop Floor Locations  
☐ Post Sales Using Item Master Sub Accounts

Card 1    Card 2    Card 3    Card 4    N/A

**4. View the System Admin Functions window and double-click the <INVENTORY UTILITIES> selection.**

Select from the **INV Utilities** menu <SET UP FIFO/LIFO LAYERS>. This procedure can take a long time if there are many records in the inventory transactions and/or item master file.

**5. Replace the reports file with the most current version.**

This will place a Fifo/Lifo Layers report at the bottom of the BOM reports list.

Bills of Materials Reports	
Where Used	Flat Where-Used report
Where Used	Indented Where-Used report
Options	Option Item Groups
Options	Option Sets
Options	Valid Options & Prices by Item Code
Options	Where Used Options
Fifo/Lifo	Fifo/Lifo Layers

## Job Cost Reports

Job Cost reports are found in the **Job Cost & Labor Reports** window. These reports are listed in several groups:

Job Cost & Labor Reports	
Job Cost	Sorted by Job (Sales Order-Line) Number
Job Cost	By Sales Order # (Select by Date)
Job Cost	By Sales Order # (Select by Date, No Labor Detail)
Job Cost	By Sales Order # (Select by Period)
Job Cost	By Sales Order # (Select by Period, No Labor Detail)
Job Cost	Sorted by Invoice Number
Job Cost	Sorted by Item Code
Job Cost	Sorted by Customer Name
Job Cost	Sorted by Sales Rep
Job Cost	Inventory Transactions by Job
Job Cost	Payables Transactions by Job within GL Dept
Job Cost	Transactions by Transaction Date

Job Cost & Labor Reports	
Transactions	Routing: Estimated vs Actual Time Charges
Transactions	Routing: Expected Late Jobs
Transactions	Problems, Situations and Conditions Log
Transactions	Actual vs Standard labor by Date
Transactions	Actual vs Standard labor by Item Code
Transactions	Actual vs Standard labor by Job #
Transactions	Actual vs Standard labor by Work Center
Transactions	Time Charged to Planned Operations
Transactions	Employee Time Charges by Activity within Employee
Transactions	Employee Time Charges by Job Within Employee Dept
Transactions	Employee Time Charges by Activity within Job #
Transactions	Employee Time Charges by Employee
Transactions	Employee Time Charges by Sales Type
Transactions	Employee Time Charges by Order Number
Work Centers	Work Center List by Shop Floor Location
Work Centers	Work Center List by Work Center Code

The Job Cost section provides several reports that provided detailed information about jobs. These reports may be printed at current cost

or standard cost, and include many important choices in the parameters section.

## Please Double Click to Enter Parameters

Please Enter Beginning Transaction Date 07/28/97

Please Enter Ending Transaction Date 07/28/98

Please Select Beginning Order-Line or ALL ALL

Please Select Ending Order-Line or ALL ALL

Enter Overhead Factor, if you wish {as a %}

Apply Overhead to Labor, Material or Both? BOTH

Value Transaction at Current Cost? YES

Value Transaction at Standard Cost? NO

Print Order Items With No Cost Transactions? NO

Print "Not Ready to Ship" Only? NO

Print Totals for each Job Only? NO

Exclude Stock Item Purchases to Inventory Accounts? YES

Select One Item Code or ALL ALL

## Date Ranges

*{Date format, all job cost reports}* Enter the beginning and ending transaction dates in these fields. No transactions which occur before the beginning date or after the ending date will be reported on, so make sure you take in all of the possible dates for complete reporting on any job. Also, these reports pay no attention to invoicing or posting dates: you may continue to accrue charges even after invoicing a sales order item and posting the invoice.

## Transaction Number Ranges

*{Validated, selected reports}* Enter the range of transactions on which you wish to report. In the **Job Cost Sorted by Job** report this field will require **ALL** or a range of **Sales Order Line Numbers**:

Please Select Beginning Order-Line or ALL ALL

Please Select Ending Order-Line or ALL ALL

and the report will limit reporting to each individual job (Sales Order Line Number (see [“The Sales Order Line Number” on page JC-3](#)).

You may also select an individual item code or all item codes. This report covers many types of transactions (invoices, employee time charges, vendor invoices and inventory transactions). The selection of one item code will apply only to inventory transactions, vendor in-

voice items and labor applied to planned operations. All other types of transactions reference the item being sold, since there is no other opportunity in these types of transactions to reference anything but the item being sold.

The **Job Cost by Sales Order Number** reports, however, will print out job cost data on entire sales orders. In these reports, the entry in these fields must be **ALL** or a range of **Sales Order Numbers**:

Please Select Beginning Order or All ALL  
Please Select Ending Order or All ALL

The **Job Cost by Invoice Number** report provides the ability to print only those costs associated with a specific **invoice** or all **invoices** within a date range. When printing this report, enter **ALL** or one desired **Invoice Number**.

Please Enter One Invoice # or All ALL

The **Job Cost by Item Code** report provides the ability to print only those costs associated with a specific **item number** or all **item numbers** within a date range. When printing this report, enter **ALL** or one desired **Item Code**.

Please Enter One Item or All ALL

The **Job Cost by Customer Name** report provides the ability to print only those costs associated with a specific **customer code** or all **customer codes** within a date range. When printing this report, enter **ALL** or one desired **Customer Code**.

Please Enter One Customer Code or All ALL

The **Job Cost by Sales Rep** report provides the ability to print only those costs associated with a specific **rep code** or all **rep codes** within a date range. When printing this report, enter **ALL** or one desired **Rep Code**.

Please Enter One Sales Rep Code or All ALL

The **Inventory Transactions by Job** report provides the ability to print only those costs associated with a range of **sales order line numbers** or all **sales order line numbers** within a date range. When

printing this report, enter ALL or a range of **Sales Order Line Numbers**.

Please Enter a Beginning Job Code or ALL ALL  
Please Enter an Ending Job Code or ALL ALL

The **Payables Transactions by Job within GL Dept** report provides the ability to print only those costs associated with a range of **sales order line numbers within GL departments** or all **sales order line numbers within GL departments** within a date range. When printing this report, enter ALL or a range of **Sales Order Line Numbers** and **Department Codes**.

Enter Beginning Job Code or ALL ALL  
Enter Ending Job Code or ALL ALL  
Enter Beginning GL Dept (Cost Center) Code or ALL ALL  
Enter Ending GL Dept (Cost Center) Code or ALL ALL

## Overhead Factors

*[Selected reports]* The job cost reports provide a column showing **Overhead**, as seen here:

<u>Date</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Revenue</u>	<u>Material Cost</u>	<u>Labor Cost</u>	<u>Overhead</u>
Series 9 chair, 1 Ready to Ship 05/23/97	Pull 9111 series 9 chair, #85851	1.000 EA	553.74		553.74		553.74
	Sub Totals for JC-1	1.000			553.74		553.74
	<u>Totals</u>	1.000			553.74		553.74

Using the **Overhead Factors** choices allows you to calculate an a single overhead rate for the report and apply it to LABOR, MATERIAL, or BOTH.



**Caution:** Any overhead rates applied to these reports will be *in addition to* any overhead that is applied through the system overhead factors. Therefore, if you apply overhead as a percentage of inventory or labor in your current or standard costs, and then print this report showing overhead again, you will be applying overhead twice.

## Warranty Selections

*{Selected reports}* This selection provides the ability to analyze job cost data on work performed on return orders which were in warranty. This must be used in conjunction with proper date ranges and transaction codes (**invoice number**, **item code**, **customer name** and **sales rep**) to provide accurate job cost reporting data.

## Current or Standard Cost Selections

Enter YES in the cost evaluation choice you prefer. The default will be Current Cost for all reports, but you may elect to print them all at Standard Cost instead.



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**Note: In most cases, selecting Current Cost will provide a more accurate representation of actual cost on a job.**

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## Print “Not Ready to Ship” Only

*{Selected reports}* This selection allows you to print job cost status for all jobs which are still in process only (unshipped and not yet ready to ship), based on the **Status** field found in the **Sales Order Items** window. This selection is valuable for determining if you are within budget on current jobs.

## Print Totals for each Job Only

*{Selected reports}* Allows you to exclude the job cost detail from the reports, printing only the total cost and revenue on each job.

## Beginning and Ending Period Posted

*{Selected reports}* Pertains to the transactions, not the job itself. Allows you to isolate only posted transactions (those which actually impact the general ledger), and determine which posting periods are printed (see [“General Ledger Calendar” on page GL-2](#)).

## Include Customer Returns/Non-Customer Returns

*{Selected reports}* Provides the ability to include customer and non-customer returns in the job cost calculations.

## Exclude Item Purchases to Inventory Accounts

*{Selected reports}* If the job cost reports include *both* purchased items scheduled to a job *and* items applied to a job through inventory transactions, it is possible that the reports could apply the same items to a job *twice* (once when purchased and once when pulled). Select-



ing this option provides the ability to omit the purchase of any items to the inventory GL accounts and include only the inventory transactions, limiting the inclusion of the items to only once per job. The defaulted selection is **YES**, and should normally be accepted.

## Actual vs. Standard Labor Reports

These reports provide very useful information when using standard labor rates. Standard labor rates are those which appear in an item's bill of material or routing record. Most jobs should approximate standard rates if they are accurate, but you will often want to know which jobs deviated from the standard and by how much. These reports will provide that information. The Actual vs. Standard Labor by Date report is shown here:

Screen report												
World Class Industries												
Actual vs Standard labor by Date												
Period Covering 01/01/97 - 12/31/97												
Report Printed on 05/23/97 at 12:56, Page #1												
Fiscal Week: 236 - 288												
Transaction Date	Quantity	Item Code	Order Line #	Task #	Work Center	Standard Hours	Actual Hours	Actual vs Standard	Unit Cost	Standard Cost	Actual Cost	Cost Variance
05/8/97	10.000	RCD		CUT64421	CUT	0.020	0.300	0.280	28.00000	0.56	8.40	7.84 92075
05/8/97	4.000	RCD		CUT64151	CUT	0.008	0.150	0.142	28.00000	0.22	4.20	3.98 92075
05/8/97	10.000	RCD		DRILL64431	DRILL	1.250	1.500	0.250	8.00000	10.00	12.00	2.00 92075
05/8/97	4.000	RCD		DRILL64151	DRILL	0.500	1.000	0.500	8.00000	4.00	8.00	4.00 92075
05/8/97	1.000	9111-FOCUT		CUT		0.500	1.000	0.500	28.00000	14.00	28.00	14.00
07/8/97	4.000	RCD		METLATH64151	METLATH	0.600	0.600	0.000	10.00000	6.00	6.00	0.00
08/10/97	10.000	RCD		METLATH64991	METLATH	1.350	1.350	0.000	10.00000	13.50	13.50	0.00
08/12/97	10.000	RCD		WELD64431	WELD	2.500	3.000	0.500	10.00000	25.00	30.00	5.00 92057
07/8/97	4.000	RCD		WELD64151	WELD	1.000	2.000	1.000	10.00000	10.00	20.00	10.00 92053
05/8/97	1	FIN 1		FINAL		1.000	2.000	1.000	8.00000	8.00	16.00	8.00
05/8/97	1	FIN 1		FINAL		1.000	1.000	0.000	8.00000	8.00	8.00	0.00
05/8/97	1.000	FIN 1		FINAL		1.000	1.000	0.000	8.00000	8.00	8.00	0.00
05/10/97	1.000	9111		FINAL		1.000	2.000	1.000	8.00000	8.00	16.00	8.00
05/8/97	1.000	9111		FINAL		1.000	2.000	1.000	8.00000	8.00	16.00	8.00
05/8/97	2.500	C1002		PACK		0.063	0.067	0.004	10.00000	0.63	0.67	0.04
05/8/97	25.000	C1003		PACK		0.450	0.050	0.500	10.00000	-4.50	0.50	5.00
05/8/97	1.000	C1004		PACK		0.030	0.333	0.303	10.00000	0.30	3.33	3.03
Subtotal for						12.371	19.550	7.179		119.71	200.60	80.89
Total for Labor from 01/01/97 - 12/31/97						12.371	19.550	7.179		119.71	200.60	80.89

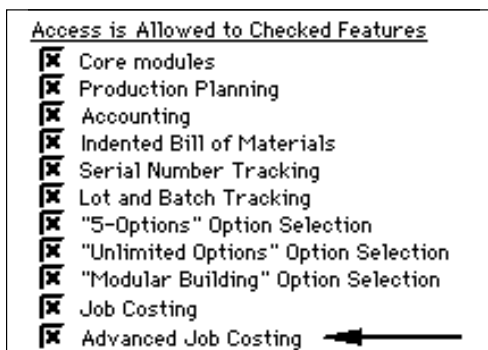


## Advanced Job Costing

In addition to using the Qube ERP™ highly automated job costing capabilities, you may also select to use Advanced Job Costing. Advanced Job Costing allows you to go beyond tracking whether a specific job was profitable, by permitting you to set up job buckets to track individual costs within a job. Advanced Job Costing is an optional module that may be purchased separately.

### Advanced Job Costing Setup

To enable this feature, go to the Application Features Set Window and check the Advanced Job Costing box, as shown below.



For more information about adding or removing features from the features set, see ["Adding and Removing Features" on page SYS-138](#).

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**If you were using Advanced Job Costing prior to 8/18/97, you must run a utility in order to continue using the Advanced Job Costing functions so that your existing data will continue to associate estimated job cost data properly.**

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## Starting Advanced Job Costing

### • To access and run the utility,

1. Open System Administration functions.
2. Under the Utility Functions section, double-click on Personnel Utilities to load the PER Utilities menu.
3. From the PER Utilities menu, double-click on the line:

#### Calc Job Estimate Type

You will see the following prompt:

Begin utility to convert 6 records of job estimates data to allow inclusion of

NO

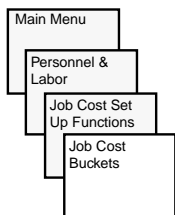
YES

#### 4. Select YES.

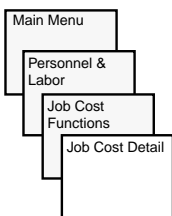
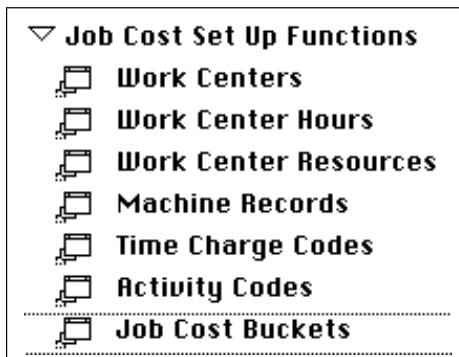
If this feature is enabled for your company, be sure to set up the User Access Privileges for the two selections that relate to this enhancement. They are found in the Personnel & Labor section, as shown:

Function	Access Privileges			
Job Phases	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Add	<input checked="" type="checkbox"/> Edit or Delete	<input checked="" type="checkbox"/> Print
Job Cost Buckets	YES	YES	YES	YES
Job Phases	YES	YES	YES	YES

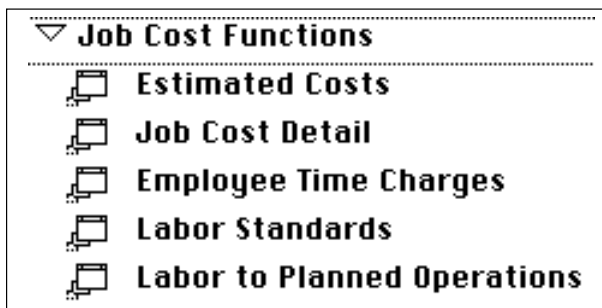
## Accessing the Windows



To access these new windows, open the Personnel & Labor module. To open the **Job Cost Buckets window**, select **Job Cost Set Up Functions**, then select **Job Cost Buckets**, as shown below:



To view job cost transactions, open the **Job Cost Detail window**. Select **Job Cost Functions** from the Personnel & Labor module, then select **Job Cost Detail**, as shown below:



## Job Cost Buckets

This function allows you to set up a master file of job cost categories which may be referenced elsewhere. The window allows the entry of buckets three levels deep (top level, second level, and third level). That is, any entry in the second level must be related to an entry in the top level and any entry in the third level must be related to an entry in the second level.

### The Job Cost Buckets Window

Code	Description	% Markup
1	Material	
1A	Foundations	30
1B	Windows	30
1C	Lumber	25
1D	Doors	20
1E	Tackboard	10
1F	Sheet Rock	20
1G	Signage	40
2	Labor	
2A	Plant	
2A1	Wall framing	20
2A2	Set & connect	20
2A3	Tackboard	20
2A4	Sheet-Rocking	25
2A5	Install Windows	20
2A6	Install Doors	20
2A7	Set	20
2B	Field	
2B1	Set Modules	30
2B2	Module closures	30
2B3	Module line bolting	30
2B4	Gutters & downspouts	30
2B5	Punchlist	30
3	Sub-Contractor	
3A	Roofing	15
3B	Insulation	15
3C	Electrical	15
3D	Painting	15
3E	Ceiling	15
3F	Plumbing	15
3G	Floor Covering	15
4	Other Direct	
4A	Bonding	10
4B	Mobilization	20
4C	Cleanup	30
4D	Subsistence	20

The window contains a data entry section and a display of the entire job cost bucket structure. After entering new data, or editing or deleting existing data entries, Qube ERP™ rebuilds the “All Levels” display to show the new structure.

### Windows Attributes

#### Level 1, Level 2, Level 3

{Radio Button} Select the job cost bucket level number for this code. You must select one of the three buttons; level 1 is the top level.

#### Description

{20-character field, alphanumeric, required} Enter a description of the job bucket.

<b>Default Markup</b>	<i>{Numeric}</i> Enter the percentage of the default markup (may be zero). This field allows you to default the percent markup value found in each job cost phase record.
<b>Code</b>	<i>{5-character field, alphanumeric, required}</i> Enter the job bucket code. Each code must be unique. This is the short description that will be referenced on the Item Master File Card #1 and on manufacturing orders. For more information on how it is used, see <a href="#">“Item Master File, Card #1” on page JC-58.</a>
<b>Parent’s Code</b>	<i>{5-character field, alphanumeric}</i> If you are entering a level 2 or level 3 job bucket, enter the parent’s job bucket code.
<b>Grandparent’s Code</b>	<i>{5-character field, alphanumeric}</i> If you are entering a level 3 job bucket, enter the grandparent’s job bucket code.
<b>Employee time charges may use this bucket</b>	<i>{Checkbox}</i> One of four different types of transactions; you may check more than one. If you check this box, employee time charges are permitted to use this bucket.
<b>Inventory Transactions may use this bucket</b>	<i>{Checkbox}</i> One of four different types of transactions; you may check more than one. If you check this box, inventory transactions are permitted to use this bucket.
<b>PO Shipments may use this bucket</b>	<i>{Checkbox}</i> One of four different types of transactions; you may check more than one. If you check this box, PO shipments are permitted to use this bucket.
<b>Vendor Invoices may use this bucket</b>	<i>{Checkbox}</i> One of four different types of transactions; you may check more than one. If you check this box, vendor invoices are permitted to use this bucket.

## Entering Job Cost Data

The data entry portion of the window looks like this:

Job Cost Buckets						
Level 1	Level 2	Description	Default Markup	Code	Parent's Code	Grand-Parent's Code
<input type="radio"/>	Level 1					
<input checked="" type="radio"/>	Level 2	Painting	15 %	3D	3	
<input type="radio"/>	Level 3					

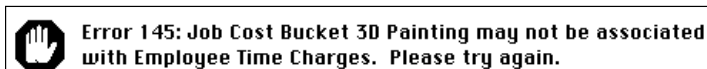
☐ Employee time charges may use this bucket  
☐ Inventory Transactions may use this bucket  
☒ PO Shipments may use this bucket  
☒ Vendor Invoices may use this bucket

Each code may be up to five characters in length. Each description may be up to 20 characters long. Qube ERP™ requires each code to be unique. If you attempt to enter a duplicate code, Qube ERP™ displays an error message.

This approach has the benefit of ensuring that the entry of any single code relating it to job cost transactions will designate a unique job cost bucket and any parent and/or grandparent bucket that may be associated with it.

## Transaction Types

Each job cost bucket code may be associated with any of four different types of transactions. By excluding certain types from each record, you can control how the codes are used and ensure that they are used appropriately. For example, the code shown above may not be used with employee time charges or inventory transactions. If it is, Qube ERP™ displays a message like this:



The Default Markup field serves to default the percent markup value found in each job cost phase record.

## Viewing and Sorting Levels

A display is also provided at the far right of the window which shows all levels and their relative position in the structure. The list may be



sorted in three different ways: by all levels (indented), by code, and by description. To select the desired sort, simply click on the appropriate label.

All Levels		All Levels		All Levels	
Code	Description	Code	Description	Code	Description
L	Labor	B	Bonding	.B	Bonding
.FLD	Field	CL	Ceiling	.CL	Ceiling
.GD	Gutters & downspouts	CLEAN	Cleanup	.CLEAN	Cleanup
.MC	Module closures	DOOR	Doors	.DOOR	Doors
.MLB	Module line bolting	EL	Electrical	.EL	Electrical
.PNCH	Punchlist	F	Foundations	.FLD	Field
.SM	Set Modules	FC	Floor Covering	.FC	Floor Covering
.P	Plant	FLD	Field	.F	Foundations
.ID	Install Doors	GD	Gutters & downspouts	.GD	Gutters & downspouts
.IW	Install Windows	ID	Install Doors	.ID	Install Doors
.SC	Set & connect	INS	Insulation	.IW	Install Windows
.SET	Set	IW	Install Windows	.INS	Insulation
.SR	Sheetrocking	L	Labor	L	Labor
.T	Tackboard	LUM	Lumber	LUM	Lumber
.WF	Wall framing	M	Material	M	Material
M	Material	MC	Module closures	.MOB	Mobilization
.DOOR	Doors	MLB	Module line bolting	.MC	Module closures
.F	Foundations	MOB	Mobilization	.MLB	Module line bolting
.LUM	Lumber	O	Other Direct	O	Other Direct
.PSR	Sheetrock	P	Plant	.PRINT	Painting
.SG	Signage	PAINT	Painting	.P	Plant
.TB	Tackboard	PLB	Plumbing	.PLB	Plumbing
.W	Windows	PNCH	Punchlist	.PNCH	Punchlist
O	Other Direct	PSR	Sheetrock	.RF	Roofing
.B	Bonding	RF	Roofing	.SET	Set
.CLEAN	Cleanup	SC	Set & connect	.SC	Set & connect
.MOB	Mobilization	SET	Set	.SM	Set Modules
.SS	Subsistence	SG	Signage	.PSR	Sheetrock
SUB	Sub-Contractor	SH	Set Modules	.SR	Sheetrocking
.CL	Ceiling	SR	Sheetrocking	.SG	Signage
.EL	Electrical	SS	Subsistence	SUB	Sub-Contractor
.FC	Floor Covering	SUB	Sub-Contractor	.SS	Subsistence
.INS	Insulation	T	Tackboard	.T	Tackboard
.PAINT	Painting	TB	Tackboard	.TB	Tackboard
.PLB	Plumbing	W	Windows	.WF	Wall framing
.RF	Roofing	WF	Wall framing	.W	Windows

To some extent, the coding structure determines how the indented display appears. Qube ERP™ maintains indented levels appropriately, regardless of what codes are used.

However, you may want the major category of Material to appear at the top of your list, instead of Labor. Labor appears before Material in this example, because L comes before M. If you simply edit the

code for Material from M to 1, all related codes will be automatically updated and the list redrawn, as shown:

Code	Description
1	Material
.DOOR	Doors
.F	Foundations
.LUM	Lumber
.PSR	Sheetrock
.SG	Signage
.TB	Tackboard
.W	Windows
L	Labor
.FLD	Field
..GD	Gutters & downspouts
..MC	Module closures
..MLB	Module line bolting
..PNCH	Punchlist
..SM	Set Modules

The same principle applies to the codes used in subordinate bucket codes, as shown in the following example.

Code	Description
1	Material
.1F	Foundations
.2W	Windows
.3LUM	Lumber
.4DOOR	Doors
.5TB	Tackboard
.6PSR	Sheetrock
.7SG	Signage

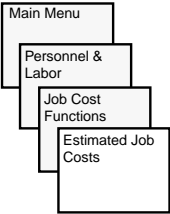
## Ordering the List by Code

Although these code modifications allow you to change the indented display, it also makes the codes more difficult to remember. An alternative is to use codes which are strictly designed for providing order in the list, like this:

Code	Description
1	Material
.1A	Foundations
.1B	Windows
.1C	Lumber
.1D	Doors
.1E	Tackboard
.1F	Sheetrock
.1G	Signage
2	Labor
.2A	Plant
.2A1	Wall framing
.2A2	Set & connect
.2A3	Tackboard
.2A4	Sheetrocking
.2A5	Install Windows
.2A6	Install Doors
.2A7	Set
.2B	Field
.2B1	Set Modules
.2B2	Module closures
.2B3	Module line bolting
.2B4	Gutters & downspouts
.2B5	Punchlist
3	Sub-Contractor
.3A	Roofing
.3B	Insulation
.3C	Electrical
.3D	Painting
.3E	Ceiling
.3F	Plumbing
.3G	Floor Covering
4	Other Direct
.4A	Bonding
.4B	Mobilization
.4C	Cleanup
.4D	Subsistence



## Estimated vs. Actual Job Cost



Each job (sales order-line number) may be assigned a percent mark-up, a current percentage complete, and an estimated cost. Each transaction associated with a selected job and a selected bucket determines the actual cost and therefore the projected cost and variance. To view estimated job costs, select **Job Cost Functions** from the Personnel & Labor module, then select **Estimated Job Costs**, as shown below.

Job Cost Functions		
	Employee Time Charges	⌘T
	Estimated Job Costs	
	Job Cost Detail	
	Labor Standards	⌘J
	Labor to Planned Operations	

Two components (Dollar values and Hours) are displayed on separate cards. You may drill down by double-clicking on any line in the list. Qube ERP™ will respond by opening the **Job Cost Detail** window and displaying those transactions which support the subtotal for the selected job cost bucket.

### Windows Attributes

#### Sales Order

*{Radio Button}* Select this button if you wish to find a particular sales order. You may click on this button only when performing a *FIND* function.

#### Forecast

*{Radio Button}* Select this button if you wish to find a particular forecast. You may click on this button only when performing a *FIND* function.

#### Quote

*{Radio Button}* Select this button if you wish to find a particular quote. You may click on this button only when performing a *FIND* function.

## Estimated Job Costs Window, Dollar Values

Estimated Job Costs						
<input checked="" type="radio"/> Sales Order <input type="radio"/> Forecast <input type="radio"/> Quote						
96360		1 EA		96360		07/31/96
96360-1    Multi Cultural - Knox Pres. W. S. Local Action Co.						
Expected Revenue: \$ 312,000.00						
Estimated Profit: 3,109.00    1.00 %						
Job Cost Bucket	% Markup	Estimated Cost	% Complete	Actual Cost	Projected Cost	Variance
LABOR						
.. Plant						
.. Wall framing	20	1,000	80	689	861	-139
.. Set & connect		3,500	100	3,654	3,654	154
.. Tackboard		8,000	100	7,937	7,937	-63
.. Sheet-Rocking		1,500	90	1,198	1,331	-169
.. Install Windows		5,000	90	3,729	4,143	-857
.. Install Doors				1,408	1,408	1,408
.. Set				30	30	30
.. Field						
.. Set Modules		15,000	100	14,413	14,413	-587
.. Module closures		10,000	85	6,656	7,831	-2,169
.. Module line bolting	30					
.. Gutters & downspouts	30					
Totals		310,713		288,590	308,891	-1,822
				<input type="button" value="Load the List"/>		<input type="button" value="Update Actual Cost"/>
						Actual Cost Updated on 07/18/97
						<input type="button" value="\$ Values"/> <input type="button" value="Hours"/>

## Columns

### Job Cost Bucket

This column displays the name of the job cost bucket.

### % Markup

This column displays the markup percentage assigned to the job.

### Estimated Cost

This column displays the estimated cost of the job.

### % Complete

This column displays the percentage of the job that is complete.

### Actual Cost

This column displays the actual cost of the job. To update the numbers shown in this column, click on the button labeled *UPDATE ACTUAL COST*.

### Projected Cost

This column displays the projected cost of the job. To update the numbers shown in this column, click on the button labeled *UPDATE ACTUAL COST*. The projected cost is calculated using the percent-

age complete applied to the actual cost. For example, if the actual cost is found to be \$1,000 and the percentage complete is 50%, the projected cost is therefore \$2,000.

## Variance

This column displays the variance between the estimated cost of the job and the projected cost of the job. To update the numbers shown in this column, click on the *UPDATE ACTUAL COST* button.

## Buttons

### Load the List

This button loads all job bucket costs for a job into the list.

### Update Actual Cost

This button prompts Qube ERP™ to read all transactions related to each bucket and update the numbers in the **Actual Cost**, **Projected Cost**, and **Variance** columns.

### Estimated Job Costs - Hours Window

☐ Sales Order
 ☐ Forecast
 ☐ Quote

96360      1 EA      96360  
 96360-1      Multi Cultural - Knox Pres.  
    W. S. Local Action Co.

Job Cost Bucket	% Markup	Estimated Hours	% Complete	Actual Hours	Projected Hours	Variance
LABOR						
.. Plant						
.. Wall framing	20	150.00	80	122.00	152.50	2.50
.. Set & connect		250.00	100	225.50	225.50	-24.50
.. Tackboard		60.00	100	40.00	40.00	-20.00
.. Sheet-Rocking		10.00	90	6.00	6.67	-3.33
.. Install Windows		10.00	90	6.00	6.67	-3.33
.. Install Doors		2.00		1.00	1.00	-1.00
.. Set		15.00		10.00	10.00	-5.00
.. Field						
.. Set Modules		90.00	100	76.50	76.50	-13.50
<b>Totals</b>		<b>692.00</b>		<b>570.50</b>	<b>602.57</b>	<b>-89.43</b>

\$ Values
Hours

## Columns

<b>Job Cost Bucket</b>	This column displays the name of the job cost bucket.
<b>% Markup</b>	This column displays the markup percentage assigned to the job.
<b>Estimated Hours</b>	This column displays the estimated hours planned for the job.
<b>% Complete</b>	This column displays the percentage of the job that has been completed.
<b>Actual Hours</b>	This column displays the actual hours allocated to the job via labor transactions.
<b>Projected Hours</b>	This column displays the projected hours to complete the job.
<b>Variance</b>	This column displays the variance between the estimated hours and the projected hours.

## Estimated Costs and Quotations

Note the radio buttons at the top of the window, which distinguish between estimated costs associated with sales orders and those associated with forecasts. You may click on these radio buttons only when performing a *FIND* function. This instructs Qube ERP™ to look for the selected type of record.

Qube ERP™ also allows estimated costs to be associated with quotations. In this case, however, the columns referring to percentage complete, actual costs, projected costs, and variance are not relevant. Therefore, they are not displayed.

### Estimated Job Costs

☐ Sales Order    ☐ Forecast    ☒ Quote

QUOTE1    1 ER    96360    09/

QUOTE1-1    Multi Cultural - Knox Pres.  
 Bennett Valley School District

Expected Revenue: \$ 312,000.00

Estimated Profit: 312,000.00 | 100.00 %

Job Cost Bucket	% Markup	Estimated Cost
MATERIAL		
. Foundations	30	
. Windows	20	
. Lumber	25	
. Doors	20	
. Tackboard	10	
. Sheet Rock	20	
. Signage	40	
Totals		0

### Estimated Job Costs - Hours

☐ Sales Order    ☐ Forecast    ☒ Quote

QUOTE1    1 ER    96360

QUOTE1-1    Multi Cultural - Knox Pres.  
 Bennett Valley School District

Job Cost Bucket	% Markup	Estimated Hours
MATERIAL		
. Foundations	30	
. Windows	20	
. Lumber	25	
. Doors	20	
. Tackboard	10	
. Sheet Rock	20	
. Signage	40	
Totals		

\$ Values    Hours

\$ Values    Hours



## Reference Lists

Job Cost Bucket codes can be looked up using the reference lists. In Qube ERP™ 7.35, the reference list looks like this.

Job Cost Buckets:			
2	Labor		
2A	• Plant		
2A1	• • Wall Framing		
2A2	• • Set & connect		
2A3	• • Tackboard		
2A4	• • Sheet-Rocking		
2A5	• • Install Windows		
2A6	• • Install Doors		
2A7	• • Set		

Load <input type="text" value="50"/> , beginning at <input type="text"/>	Base on <input checked="" type="radio"/> Code <input type="radio"/> Description	
<input type="radio"/> Customers Type <input type="text"/>		<input type="radio"/> Work Centers <input type="radio"/> Employees <input type="radio"/> Outside Reps
<input type="radio"/> Open Sales Orders		<input type="radio"/> Problem Codes <input type="radio"/> Action & Activity Codes
<input type="radio"/> Open Jobs		<input type="radio"/> Cause Codes <input checked="" type="radio"/> Job Cost Buckets
<input type="radio"/> Vendors Type <input type="text"/>		<input type="radio"/> GL Accounts <input type="radio"/> Group <input type="text"/> <input type="radio"/> Currency Codes
<input type="radio"/> Open POs		<input type="radio"/> Ship Terms <input type="radio"/> Ship Via <input type="radio"/> Tax Codes
<input type="radio"/> Customer & Vendor Types		<input type="radio"/> Pay Terms <input type="radio"/> Checking Accounts
<input type="radio"/> Item Master File Group <input type="text"/>		<input type="radio"/> Reason Codes <input type="radio"/> Positive Qty Batches
<input type="radio"/> Inventory Group Codes <input type="radio"/> Inventory Sub-Group Codes		<input type="radio"/> Items with BOMs <input type="radio"/> Positive Qty Lots
<input type="radio"/> Option Class Codes <input type="radio"/> Option Set Choices		

Sort by Code	Sort by Description	Reload List	Print	Cancel	OK
--------------	---------------------	-------------	-------	--------	----

## References to Job Cost Buckets and Phases

These codes may be referenced in other files. Entries may be made on the following windows.

### Item Master File, Card #1

**Item Master File, Card #1** provides a field for the job cost bucket code of any item.

Item Master File, Card #1			
Item Code	BOX	Packing box	
Group		Sub-Group	GENERIC
Option Class	BOX	Sub-Class	
Item Type	RAW	Grade	
Revision Code		Revision Date	
Cost Updated	05/21/97	Inspect on Receipt	
		<input checked="" type="radio"/> Purchased <input type="radio"/> Fabricated	
		G/L Sales Sub-Account	000
		<input type="checkbox"/> 1st Article Produced	Job Cost Bucket
		<input type="checkbox"/> 1st Article Approved	1A
		<input type="checkbox"/> Master Scheduled Item	
		<input checked="" type="checkbox"/> Active item	Foundations

For more information about the Item Master File, see [“Item Master File, Card #1” on page INV-13.](#)

### Work Center Rate & Capacity

**Work Center Rate & Capacity** provides a field for the Job Cost Bucket code.

Work Center Rate & Capacity	
Work Center Code	LAYOUT
Description	MILL - LAYOUT LUMBER
Job Cost Bucket	2A1 Wall framing

For more information about work center rate and capacity, see [“Work Centers & Processes Window” on page BOM-25.](#)

### Employee Time Charges

**Employee Time Charges** provides fields for both the job cost bucket and the job phase.

Employee Time Charges									
Employee Code	415	Kenneth J. Zimmerman				Posted to JE #			
Signature:						Date	03/31/97	Period	/
Order-Line #	Item Code	Item Description	Time Spent Hours	Minutes	Activity Code	Type	Job Cost Bucket	Job Phase	
96366-2	FLD LBR	Field Labor Hours	4		423	S	2A1	1	
96366-2	FLD LBR	Field Labor Hours	4		423	S	2A1	1	
96366-2	FLD LBR	Field Labor Hours	4		413	S	2A2	1	

For more information about employee time charges, see [“Labor Transactions” on page JC-6.](#)

## PO Items Window

The **PO Items window** displays job cost bucket and job cost phase information in the same section as Purchase Order Shipments, since this is also the place where the sales order-line number is entered.

Scheduled Receipt Date	Requested Receipt Date	Ordered	Received	B/O	Line Status	Allocated to Prod'n	Job Allocation	Shipped to Purchasing Vendor	Shipment Code
04/02/97	04/02/97	20	0	20	1 0	20	95336-10	20590-1-1	
05/02/97	05/02/97	30		30	2 0	30	95336-14	20590-1-2	
06/02/97	06/02/97	40		40	3 0	40	95336-17	20590-1-3	
Job Cost Bucket 1C Lumber Job Cost Phase 1									

**Note:** the Draft Vendor Invoice from PO window will copy the job, job cost bucket, and job cost phase from the PO item into the corresponding vendor invoice item.

For more information about the PO Items window, see [“Purchase Order Items” on page PUR-57](#).

## Vendor Invoice Items

**Vendor Invoice Items** clusters all job cost reference information together in the center section of the **Vendor Invoice Items** window, including the job cost bucket and the job cost phase.

Sales-Order Line #	97397-1	
Cutten Elementary		
Building "D" - Sonoma County Term		
Job Cost Bucket	1A	Job Cost Phase 1
Foundations		

For more information about Vendor Invoice Items, see [“Vendor Invoice Items Window” on page AP-7](#).

## Inventory Transactions Quantities

**Inventory Transactions Quantities** shows job cost bucket and job cost phase codes in the lower section of the **Inventory Transaction Quantities** window.

**Inventory Transaction Quantities**

Transaction Number: 85111      Transaction Type: P.O. Receipt      Date: 08/28/1992      Posted On J/E #:      To Period:     

Item Code	Qty	Location	PO/Invoice Item #	Order Line # If Made to Order	Stock on Hand	Quantity	Unit	Lot/Batch #	Reason
FIN-2	IN	1	60010-1		4.000	50.000	EA	123-A	
FIN-1	IN	1	60010-2		2.000	75.000	EA	123-B	
JAZZ	IN	1	60010-3		5.000	30.000	SF	123-C	
KALFID	IN	1	60010-4		4.000	40.000	EA	123-D	

Finish in Black Oak      Job Cost Bucket:      Job Cost Phase:     

Quantities      Costs      Non-Scheduled      Scheduled

Reverse      24 08/28/1992 15:55:55

For more information about Inventory Transactions Quantities, see [“Transaction Quantities Window” on page INV-61.](#)

## Cash Disbursements Comments

**Cash Disbursements Comments** displays all job cost data. Job cost data (job code, job cost bucket, and job cost phase) may be entered in transactions that do not reference an existing vendor invoice. If a valid vendor invoice is referenced, the job codes will be found in that record.

**Cash Disbursement Comments**

Pay to the Order of: TABLAK      The Tablaken      Check No.: 5075      Date: 12/20/1992     

The Sum of:      \$759.50     

Payment to: Vendor      Employee or Outside Rep      Customer      Posted on J/E:     

Transaction #: 5100+      Type: Payment      Bank Code: 1000-000/00      Bank of America      To Per Unit: 1     

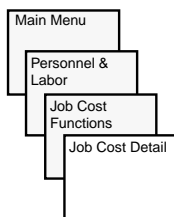
Comment:      Payment Amount: 750.50      Job Allocated:      Job Cost:      Job Phase:     

Transaction description:      750.50     

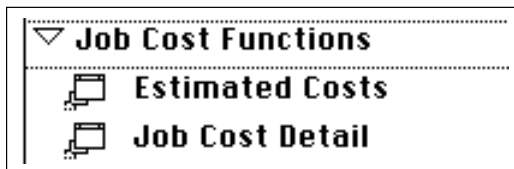
Main Card      Comments


For more information about cash disbursements, see [“Cash Disbursements” on page AP-22.](#)

## Job Cost Transaction Detail



To view job cost transactions, open the **Job Cost Detail** window. Select **Job Cost Functions** from the Personnel & Labor module, then select **Job Cost Detail**, as shown below.



Job Cost Transaction Detail									
96360	96360	 Load the List		Start Date	07/17/96	End Date	07/17/97		
96360-1	Multi Cultural - Knox Pres. W. S. Local Action Co.			Select 1 Job Cost Bucket or ALL		ALL			
Transaction Type	Job Cost Bucket	Phase	Date	Transaction #	Quantity	Unit Cost	Extension	Subtotal	
Employee Time Charge	2R1	1	01/01/97	963606210	23.000	29.95000	688.85		
Inventory Transaction	IF	1	03/17/97	80645-1	-5.000	5.25000	-26.25		
Inventory Transaction	IF	1	03/19/97	80670-1	-1.000	526.75000	-526.75		
Inventory Transaction	IF	1	03/19/97	80670-2	-1.000	1354.50000	-1,354.50		
Inventory Transaction	IF	1	03/19/97	80670-3	-1.000	827.75000	-827.75		
Inventory Transaction	IF	1	03/20/97	80667-39	1.000	275.00000	275.00		
Inventory Transaction	IF	1	03/27/97	80734-1	3.000	3.31000	9.93	31,773.50	
P O Shipment	3R	1	01/10/97	20047-2-1	1.000	245.25000	245.25		
P O Shipment	3C	1	01/10/97	20046-10-1	1.000	1291.00000	1,291.00	1,536.25	
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	5199.12000	5,199.12		
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	351.04000	351.04		
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	2754.00000	2,754.00		
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	4202.40000	4,202.40		
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	11211.75000	11,211.75		
Vendor Invoice	3R	1	01/31/97	96-360JRH	1.000	2322.00000	2,322.00		
Vendor Invoice	3B	1	01/31/97	JRH	1.000	863.00000	863.00		
Vendor Invoice	3B	1	01/31/97	JRH	1.000	2947.50000	2,947.50		
Grand Total								288,587.55	

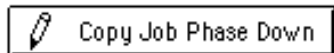
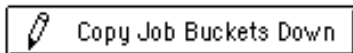
The window can be used to review and change the job cost bucket and the phase code entered into specific transactions. Using this window can be much easier than finding and editing each transaction individually. This is especially true if you wish to enter these codes into historical data.

There are also two buttons on this window which allow the same job cost bucket or job phase code to be copied into several records without having to enter it on each line.

### • To use the buttons:

1. Click the Edit button.
2. Select multiple lines.

3. Click the appropriate button, depending on whether you wish to copy job bucket codes or copy job phase codes.



You may also double-click on any selected line to drill down and view the selected transaction. Drill-down is available by double-clicking on any line in the list; the selected transaction displays.

## Reports

Two reports are provided for Advanced Job Costing. Both are found in the Job Cost Reports list.

Job Cost & Labor Reports	
Job Cost	Bucketed Summary Job Costs (Estimated vs Actual)
Job Cost	Bucketed Detail Job Costs

### Bucketed Summary Job Costs Report

The Bucketed Summary Costs report provides these user-entered parameters. It can also be printed when viewing data on the **Estimated Job Costs window** by pressing *CMD P*.

```
Please Enter Beginning Job (Order-Item) Date 07/29/96
Please Enter Ending Job (Order-Item) Date 07/29/97
Please Enter One Job Code or ALL ALL
Please Enter One Job Cost Bucket Code or ALL ALL
Please Enter One Customer Code or ALL ALL
```

```
Select Open Jobs? YES
Select Invoiced Jobs? NO
Print Totals for each Job Only? NO
```

### Bucketed Detail Costs Report

The Bucketed Detail Costs report provides these user-entered parameters and can also be printed by pressing *CMD P* from the **Job Cost Detail window**.

```
Please Enter Beginning Job (Order-Item) Date 07/29/96
Please Enter Ending Job (Order-Item) Date 07/29/97
Please Enter One Job Code or ALL ALL
Please Enter One Job Cost Bucket Code or ALL ALL
Please Enter One Customer Code or ALL ALL
Please Enter One Phase Code or ALL ALL
```

```
Select Open Jobs? YES
Select Invoiced Jobs? NO
Print Totals for each Job Only? NO
```

## Bucketed Detail Costs Report

Transaction Type	Job Cost			Transaction #	Quantity	Cost	Cost	Cost	Cost
	Bucket	Phase	Date						
<u>2039-2</u>	<u>Table Leg Nuts</u>								
Inventory Transaction			02/02/98	85970-2	1.000	0.15			0002, Table Leg Nuts
Inventory Transaction			02/02/98	85971-2	-1.000	-0.15			0002, Table Leg Nuts
Inventory Transaction			02/02/98	85972-2	1.000	0.15			0002, Table Leg Nuts
Inventory Transaction			02/02/98	85973-2	-1.000	-0.15			0002, Table Leg Nuts
Inventory Transaction			02/02/98	85974-2	1.000	0.15			0002, Table Leg Nuts
Inventory Transaction			02/09/98	85986-2	1.000	0.15			0002, Table Leg Nuts
Totals for job 2039-2						0.30			
<u>2039-3</u>	<u>Table Casters</u>								
Inventory Transaction			02/02/98	85970-3	1.000	1.00			0003, Table Casters
Inventory Transaction			02/02/98	85971-3	-1.000	-1.00			0003, Table Casters
Inventory Transaction			02/02/98	85972-3	1.000	1.00			0003, Table Casters
Inventory Transaction			02/02/98	85973-3	-1.000	-1.00			0003, Table Casters
Inventory Transaction			02/02/98	85974-3	1.000	1.00			0003, Table Casters
Inventory Transaction			02/09/98	85986-3	1.000	1.00			0003, Table Casters
Totals for job 2039-3						2.00			
Grand Totals						2.30			