



**OpenPro ERP Software**

# **OpenPro Application Manufacturing Standards**

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## Introduction

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Thank you for your interest in OpenPro. This Demonstration Guide is designed to orient you to the OpenPro product. The guide contains *getting started* information as well as a more detailed overview of the basic business flow. We hope you'll find the scenarios in the overview to be useful. We've loaded the same set of data used to populate the overview screen shots into the database you'll be accessing during your evaluation period.

If, after your evaluation, you would like to learn more about how we might assist your enterprise, do not hesitate to contact us at [salesop@openpro.com](mailto:salesop@openpro.com) or call 714-378-4600. And again, thank you for your interest.

## On-line training processes

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On the [www.openpro.com](http://www.openpro.com) website you can find our on-line training, which walks you through the processes in this manual.

Or go to <https://openpro.com/training/#container>

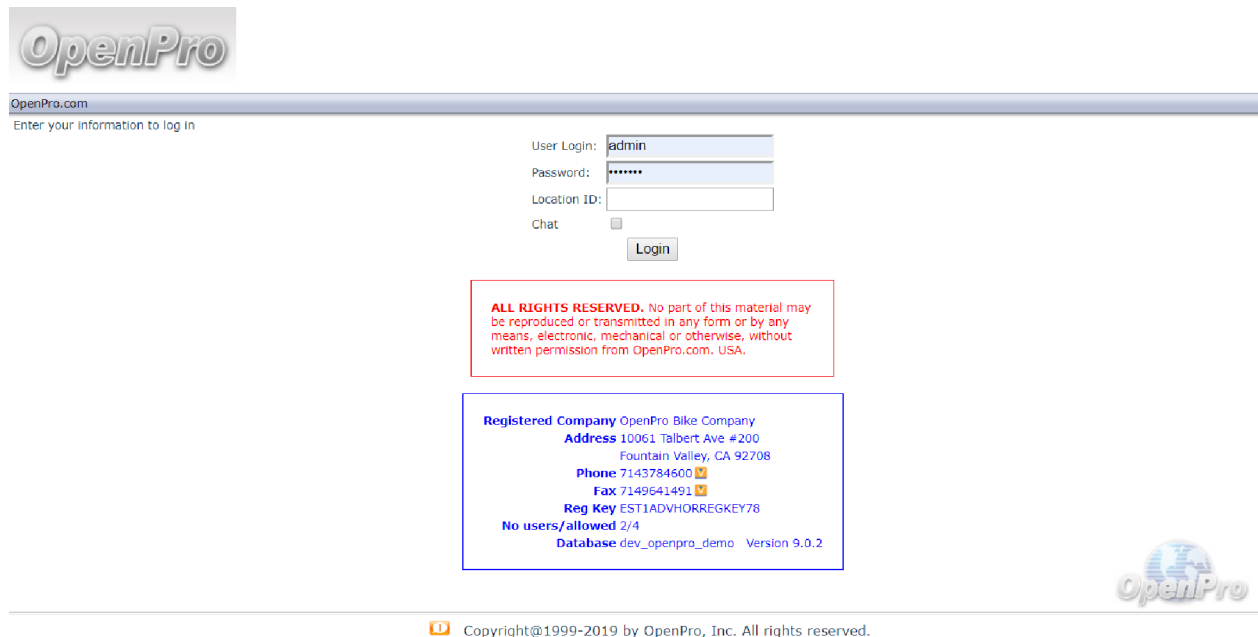
This has general information on the OpenPro ERP packages, as well as video training sessions by application.

## Log in to OpenPro ERP software

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**Figure 1.1: Login Screen for OpenPro Client for Windows**  
**Note**

This is a fully functional OpenPro Client. It is hard-coded to access a demonstration database on our company server. Due to heavy usage we must limit the number of concurrent connections to the software. If you don't connect the first time you try, please try again later.



When logging into the OpenPro Standard Solution, you are presented with the following options:

**User Login:** Enter the Username we assigned you when you requested your evaluation copy.

- This will be the same Username as the Username you use to log into the OpenPro website.

**Password:** Enter the password we assigned you when you requested your evaluation copy.

- This will be the same password as the password you use to log into the OpenPro website. The password you type into this field will not display on your screen, but will be represented by asterisks (\*) for security purposes.

**Company ID:** Enter the word “demo.”

Once you log in, you will notice at the top menu bar, to the far right of the screen, the following buttons are available:

**LOGOUT:** ends your session and brings you back to the login screen.

Note: Simply closing the web browser window will NOT log you out of the program.

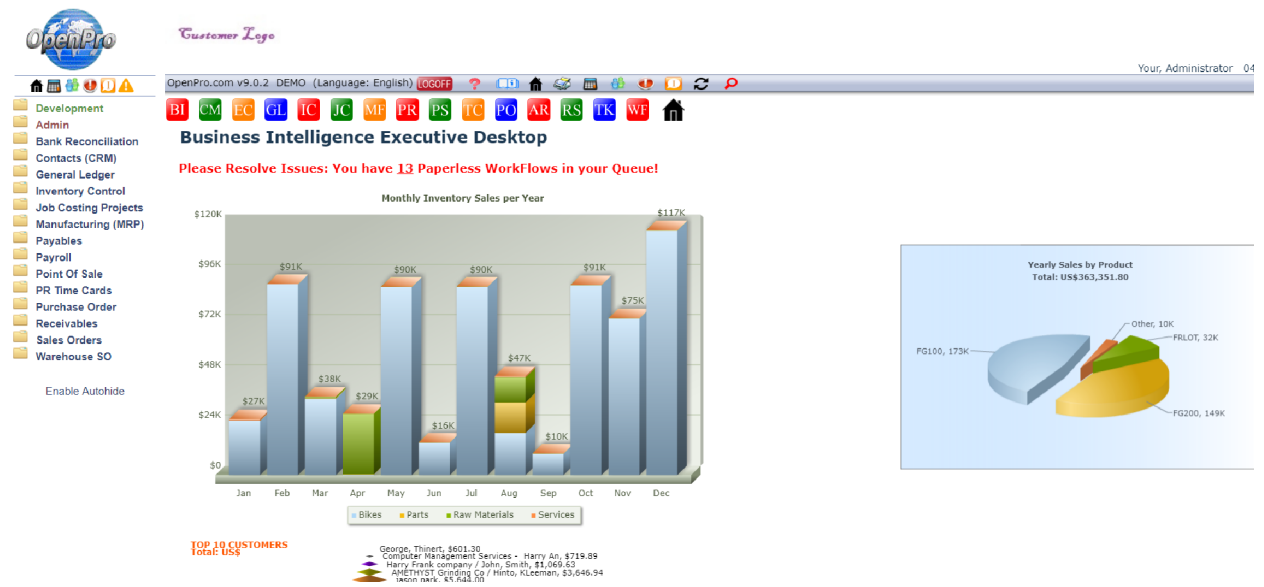
**HELP:** Click to see detailed help information about the screen you are working on.

**MANUAL:** Detailed manuals about each application, including policy and procedures.

**SUPPORT:** Online support during normal business hours, or can be emailed at [supportop@openpro.com](mailto:supportop@openpro.com)

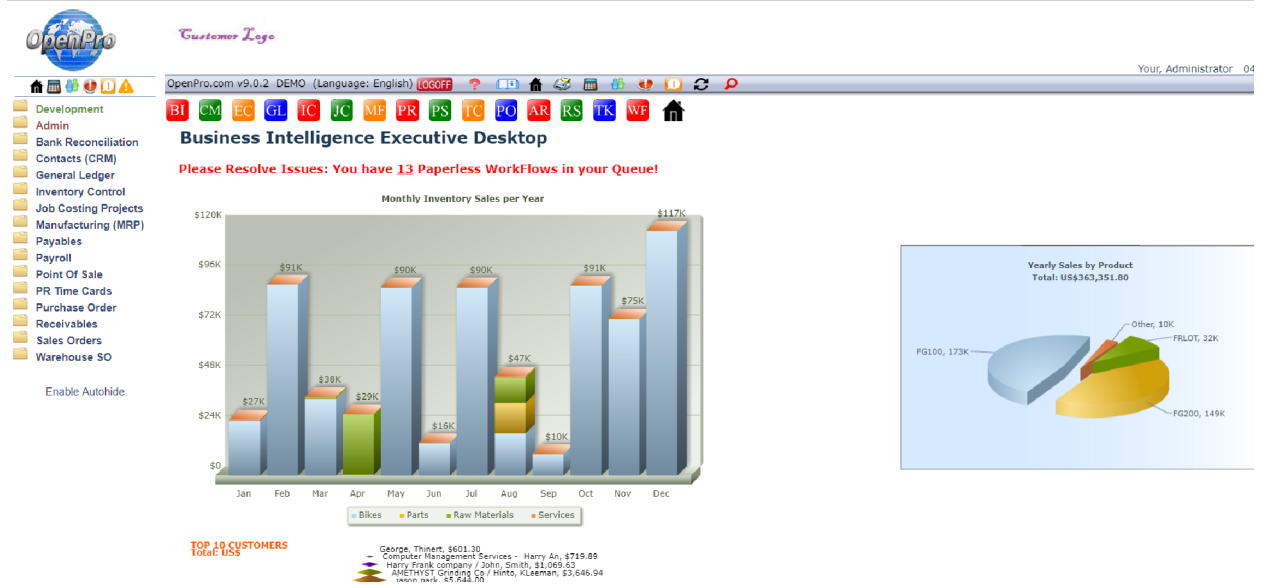
**HOME:** Takes you back to the main menu screen.

Once your Username and password have been successfully authenticated, the main application desktop will appear, as shown below.



**Figure 1.2: Main Application Desktop for the Windows Client**

If you do not reach the application desktop, verify that you have entered your Username and password correctly. Also keep in mind that we have limited the number of concurrent sessions. Our server may be busy when you try to log in initially. Try again later and see if this corrects the problem. If you are still experiencing difficulty, visit the Frequently Asked Questions (FAQ) section of our website. Or contact Customer Service at [infoop@openpro.com](mailto:infoop@openpro.com).



In the top **menu bar**, to the far left of the screen, the following buttons are available:

**Printer Icon:** Prints information on the screen to the right of the scroll down menu. This is used to print reports and screens. You can use right client print option as well.

**Calculator:** Opens an on-line 10 key calculator.

**Messenger Services:** This option can be used to send instant messages to anyone who is logged into the system.

**! Icon:** Brings up a list of incidents.

**Q:** Allows you to view current queues.

**Info Icon:** Shows your user information, IP address, and current activity.

The menu bar on the right side of the screen shows you what version of the software you are running, and who you are logged in as. This information is also stored into the database for historical purposes.

On the **application scroll down menu** section at the bottom of the menu:

**Enable Autohide:** This will make the menu disappear until you move the mouse over to the far left of the screen. This allows you to view more of the process on the right side of the screen and

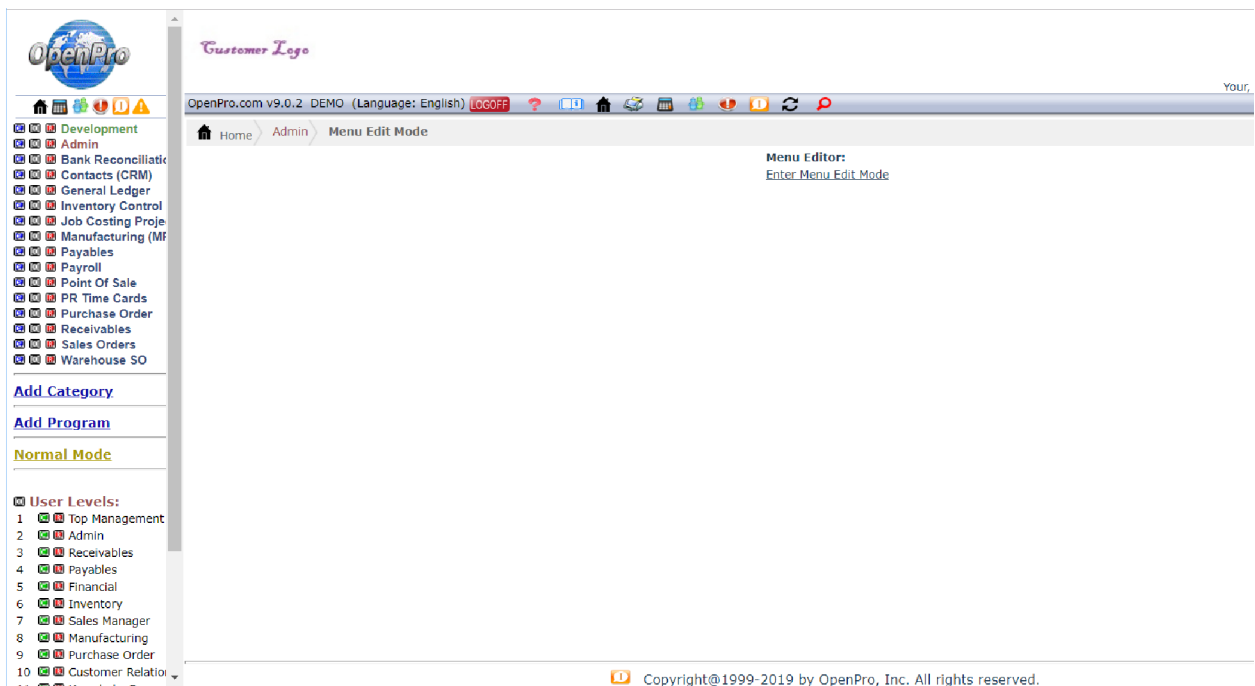
keep the menu hidden. Clicking on “Enable Autohide” will make it change to “Disable Autohide.”

**Disable Autohide.** This makes the menu fixed, always open and on the left side of the screen.

The Application menu is user definable; based upon your login id you can have different items on this menu.

If you login as an administrator this gives you the capability to change the menu, names of the fields etc.

The menu system is fully customizable. With the menu editor, you can add, change, and delete menu items per login type. For instance, it can be configured so that an employee in Accounts Payable can only see AP screen information.



## Application Fundamentals

The OpenPro Standard Solution contains a number of fundamental features designed to simplify your use of the software. In this section, we describe those fundamentals in an effort to familiarize you with their use. Let's look first at a sample Inventory Item screen, as shown below. We will use the Item Search screen to illustrate several of the application fundamentals to be found throughout the application, across multiple screens and modules. Go to **Inventory Control\Item Find**

The image displays two screenshots of the OpenPro software interface. The top screenshot shows the 'Inventory Control Shortcuts' menu, which includes options like 'Item Find', 'Reports', 'Transaction', 'History', 'Item Categories', and 'Inventory'. The bottom screenshot shows the 'Item Find' search form, which includes fields for 'Item Name', 'Part #/UPC', 'Vendor Part #', 'Vendor #', 'Min Price', 'Max Price', 'Manufacturer #', 'Min Weight', 'Max Weight', 'Status', 'Inventory Class', and 'Item Category'. There are also checkboxes for 'FAST', 'Stock on hand', 'exclude non-inventory items', 'exclude Labor Billables', and 'Search on Category Descriptors'.



## Search Screen

All the screens have many different options on searching records as well as sorting the data that is displayed on the screen. Also, if you just hit the search button it will reply with all the records in the database. OpenPro ERP software has very powerful options with every search screen but has also kept the logic simple for you.

In this example we can search items by the following categories:

Name or description, part #, vendor #, price, manufacturer #, weight and UPC #. Items can also be searched by class or category. If you have multiple warehouse locations you can narrow your search down by that single location. Each field can be searched using a **% for a wild card**. Example search **%FG%** to find all items that have FG in the item name. With our advance SQL database searches are fast and easy.

The screenshot displays the OpenPro ERP software interface. On the left is a navigation menu with categories like Development, Admin, Bank Reconciliation, Contacts (CRM), General Ledger, Inventory Control, Warehouse M S, Job Costing Projects, Manufacturing (MRP), and Payables. The main window shows the 'Inventory Control' > 'Item Find' screen. A search bar contains 'fg' and a 'GO' button. Below the search bar is a table titled 'Selected Items' with the following data:

Item Name	Part #	Price	Weight	On-Hand	Available	On Order	UPC #	ACTIONS
FG100 NEWBOM OpenPro Mountain Bike	FG100NBOM	100	12	0	0	44		[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG100 OpenPro Mountain Bike	FG100	100	12	3482	35	2709	01238882231	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG100B OpenPro Mountain Bike item name FG100B98012345								
FG100N OpenPro Mountain Bike	FG100N	100	12	127	124	1		[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG1500 Racing Mountain Bike123	FG1500	50000	200	0	0	0		[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG200 Deluxe Mountain Bike	FG200	995	7.5	21549	17930	1292	45671233211	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG2500 Racing Mountain Bike133	FG2500	50000	200	0	0	0		[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG300 Custom Mountain Bike	FG300	1875	10	20527	19241	9352	890812312313	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG400 Custom electric Bike	FG400	15547	35	4880	4672	9133	987987123123	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG500 Racing Mountain Bike	FG500	50000	200	34	34	0	123123123	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG650 OpenPro Mountain Bike	FG650	100	5.5	0	0	0	01238882231	[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]
FG8500 Racing Mountain Bike DUPLICATE	FG8500	50000	200	0	0	0		[INFO] [EDIT] [INV ADJ] [INV] [AVAIL] [HISTORY] [MRP]

Once you received the result listing you can **sort** the listing by clicking on the top header of each column that is underlined.

If you have a large result, you can search by using the **find** option on your browser (ctrl+f).

You can **print** the information by clicking on the Printer Icon from the menu bar or doing a right click print anywhere on the screen.

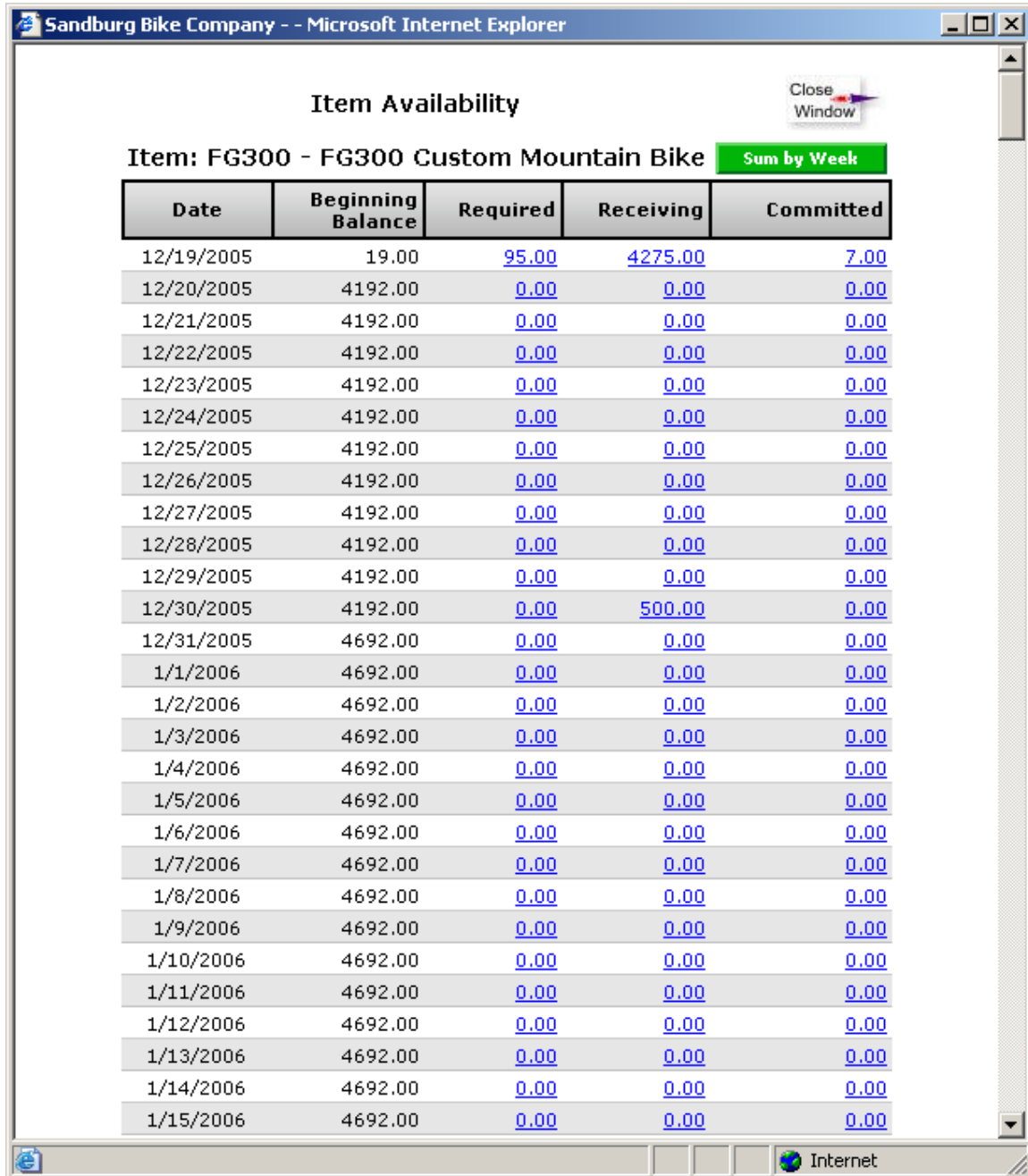
If at any time you want to change your search you can click on New Search or click Item Find on the left menu bar.

## Application Fundamentals

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On the right side of the listing are action icons, where you can drill down into more details about this record (items).

Here is the item availability (Availability icon) screen that is used for **available to promise** for your customers.



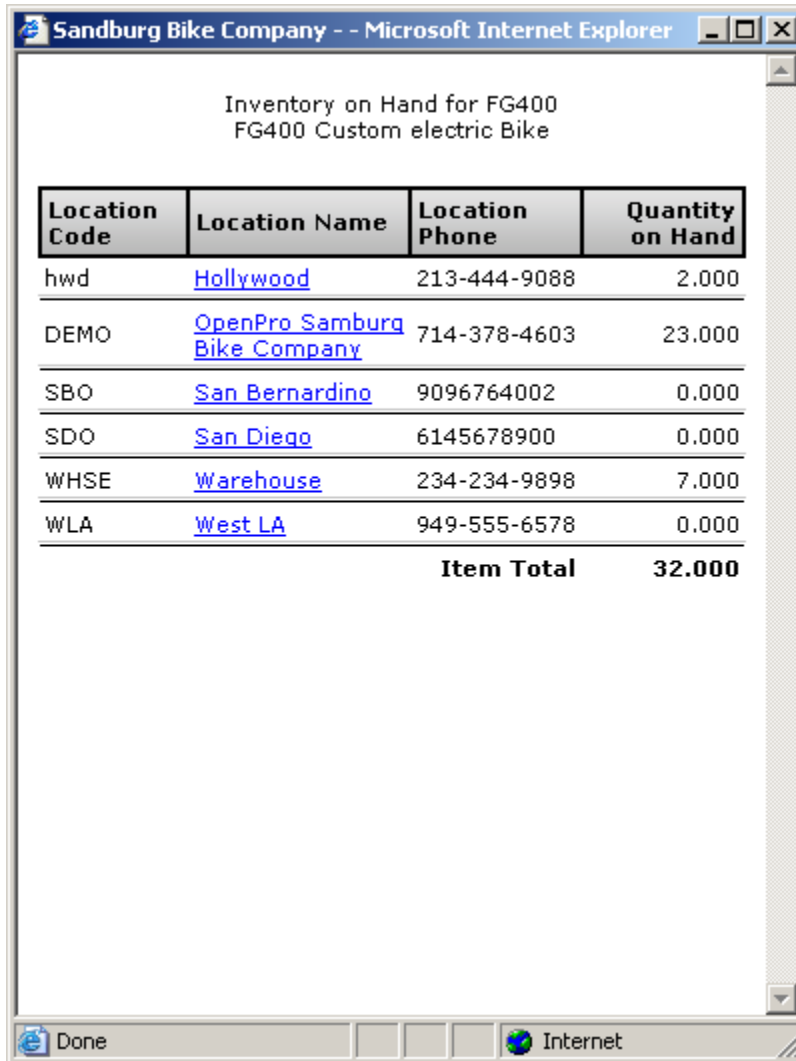
The screenshot shows a web browser window titled "Sandburg Bike Company - - Microsoft Internet Explorer". The main content area displays "Item Availability" for "Item: FG300 - FG300 Custom Mountain Bike". A green button labeled "Sum by Week" is visible. The table below shows the availability data from 12/19/2005 to 1/15/2006.

Date	Beginning Balance	Required	Receiving	Committed
12/19/2005	19.00	<a href="#">95.00</a>	<a href="#">4275.00</a>	<a href="#">7.00</a>
12/20/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/21/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/22/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/23/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/24/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/25/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/26/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/27/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/28/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/29/2005	4192.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
12/30/2005	4192.00	<a href="#">0.00</a>	<a href="#">500.00</a>	<a href="#">0.00</a>
12/31/2005	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/1/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/2/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/3/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/4/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/5/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/6/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/7/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/8/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/9/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/10/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/11/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/12/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/13/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/14/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>
1/15/2006	4692.00	<a href="#">0.00</a>	<a href="#">0.00</a>	<a href="#">0.00</a>

## Application Fundamentals

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Here is the **show inventory** screen (View All Inventory icon), displaying the current stock on hand at the different specified warehouse locations.





The screenshot shows a web browser window titled "Sandburg Bike Company - - Microsoft Internet Explorer". The page content is titled "Inventory on Hand for FG400 FG400 Custom electric Bike". Below the title is a table with four columns: "Location Code", "Location Name", "Location Phone", and "Quantity on Hand". The table lists six locations: hwd (Hollywood), DEMO (OpenPro Sandburg Bike Company), SBO (San Bernardino), SDO (San Diego), WHSE (Warehouse), and WLA (West LA). A total row at the bottom shows "Item Total" as 32.000. The browser's status bar at the bottom shows "Done" and "Internet".

Location Code	Location Name	Location Phone	Quantity on Hand
hwd	<a href="#">Hollywood</a>	213-444-9088	2.000
DEMO	<a href="#">OpenPro Sandburg Bike Company</a>	714-378-4603	23.000
SBO	<a href="#">San Bernardino</a>	9096764002	0.000
SDO	<a href="#">San Diego</a>	6145678900	0.000
WHSE	<a href="#">Warehouse</a>	234-234-9898	7.000
WLA	<a href="#">West LA</a>	949-555-6578	0.000
<b>Item Total</b>			<b>32.000</b>

# Application Fundamentals

Here is the Item Edit screen (Edit icon), displaying the item and all its characteristics.

 2  
 04-16-2019

**Item**

FG200 Deluxe Mountain Bike
  1
  Active

FG200

Ship Reference
  Sellable
  Taxable
  E-Commerce

General						
	Material	Labor	F.Overhead	V.Overhead	Outside	Total Cost
<b>Cost</b>	8.63500	3.75145	3.75145	1396.93000	0.00000	1413.0679

Regular
  FGItem - Finished Goods item

995.000
  990.000
  980.000
  970.000
  960.000

Bikes

Choose File No file chosen

45671233211
  Multiple UPC

Open Pro Demo company


FV200

OP

Blue
  17
  Lake

54

Description	Description 2
Deluxe Mountain Bike with wood side rails	candy apple red color



Current Image:

## Basic Process Flow

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This section is a continuation of Application Demonstration Guides I and II and is designed to introduce you to the basic process flow through the **Openpro Manufacturing Standard Solution**. We've assembled a series of related screenshots to illustrate a logical sequence of business scenarios. We hope you'll find the scenarios to be useful. Feel free to test them out yourself. Your evaluation database comes pre-loaded with the same sample data used to generate the screen shots in this section.

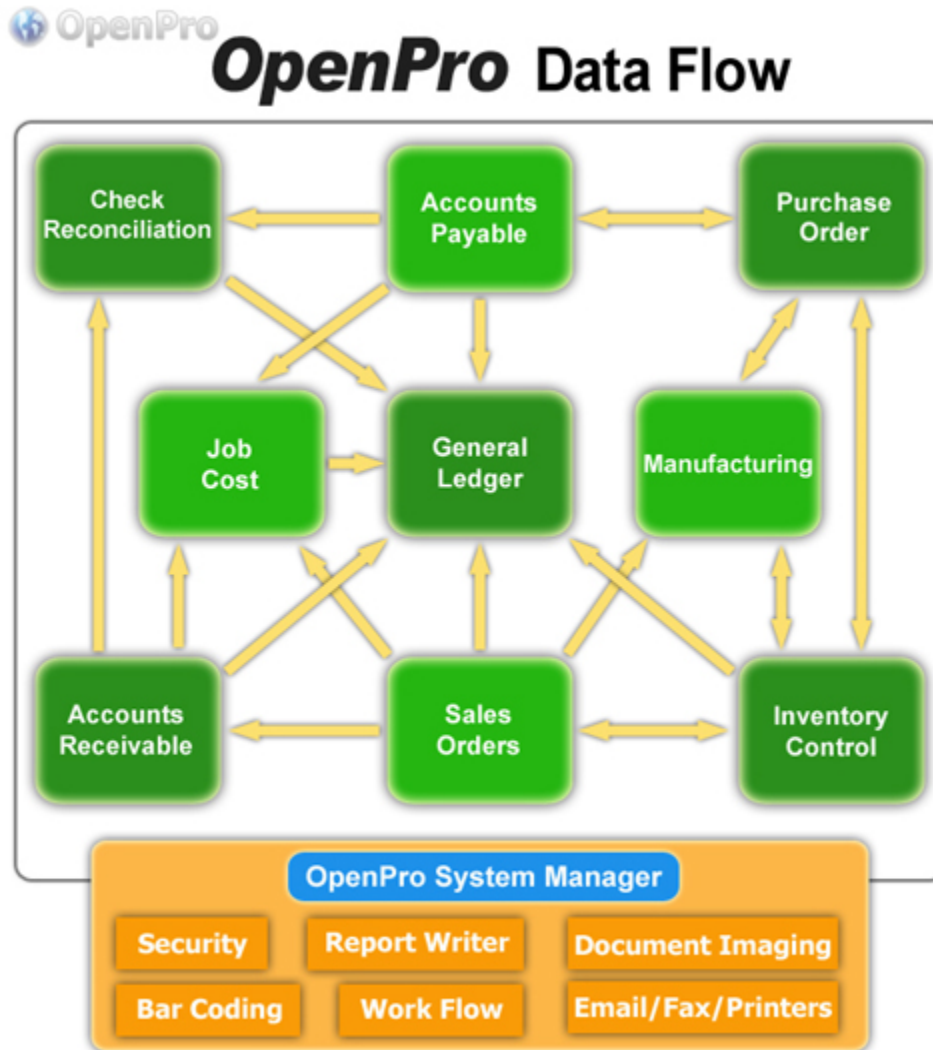
The basic flow starts with Manufacturing Bill of Materials, Routings, exploded Bills, Inventory Items Setup, Sales Order Manufacturing configurator, Work order processing and scheduling.

Key Corporate Benefits for ERP Manufacturing modules are as follows:

- Reduce Inventories, increase inventory turns and increase ability to meet clients' demand.
- Increase production capacity and improve asset use thereby reducing unnecessary capital expenditures.
- Increase profits by improving productivity and reducing cost through minimal scrap and manufacturing waste
- Catch costing trends before they happen through the automatic data checking and warning system.
- Lower cost by optimizing production
- Increase utilization through scheduling optimization
- Improve customer service with faster lead times and on-time deliveries.

## Basic Process Flow

- This section shows you the overall OpenPro system data flow and integration between systems.



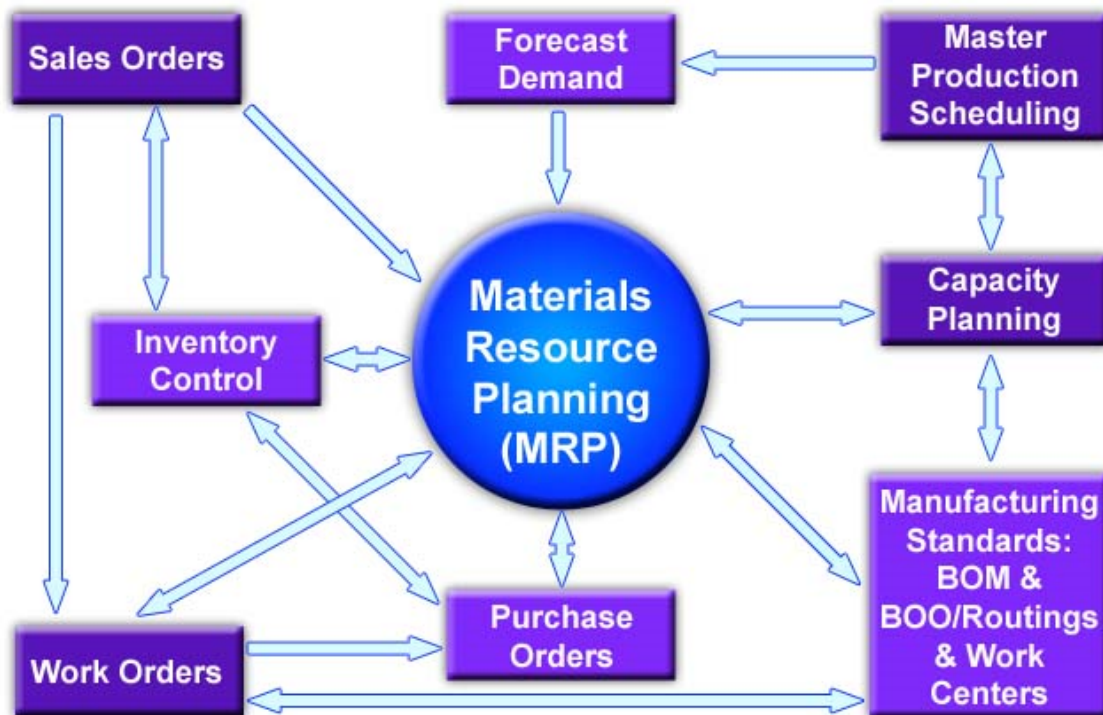
## Basic Process Flow

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This section is a continuation of Application Demonstration Guides I and II and is designed to show you the manufacturing system processes and flow for manufacturing standards and work order processing.

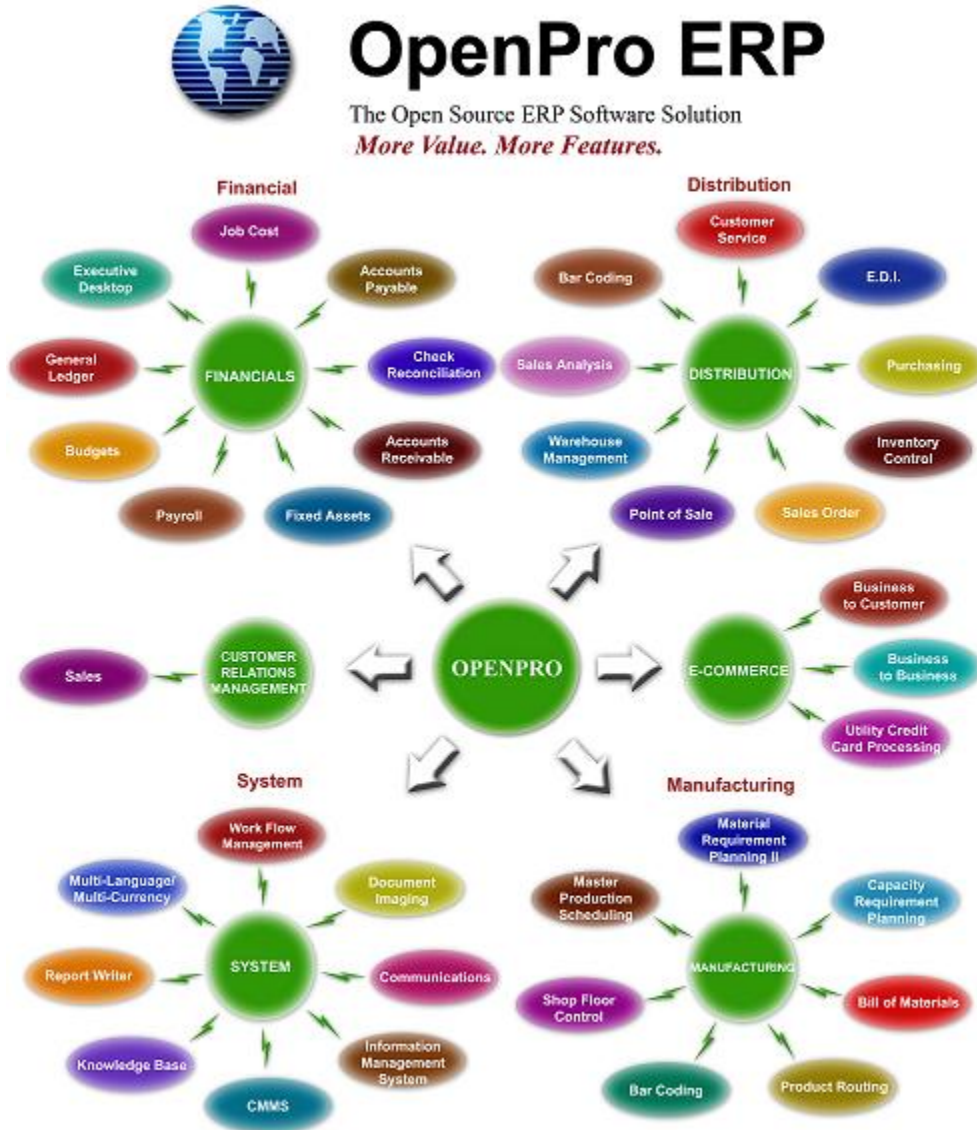


## Manufacturing Process Flow



## Basic Process Flow

- This section shows you the overall OpenPro system data flow and integration between systems.





## Getting Started with Manufacturing Standards

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After you Login go to Manufacturing sub menu.



## Getting Started with Manufacturing Bill of Materials

Try clicking on “Bill of Materials” first, using FG100 as an example of an item number.

OpenPro.com v9.0.0 DEMO (Language: English) (Logout) Home Manufacturing (MRP) Bill of Materials

Part: FG100 Build

**Bill of Materials**  
Part # EG100  
Name FG100 OpenPro Mountain Bike  
Description FG100 OpenPro standard model This is more detail for this item

Unit of Measure: Each  
Type: Build

Name: Begin Date: End Date:

Plans: Browse No file selected. Show Current

SEL	Seq No.	Part Number	Description	UOM	Issue	Quantity Per	Scrap Percent	Effective Date	Expire Date	ECN No.	Reference No.	Bill Of Operations Sequence	Config Link
<input type="radio"/>	10	D1000	D1000 Special Roll Metal	Each	Bflush	15.50000	10.00000	07/30/2004			10	20 Electroless Copper Plating	None
<input type="radio"/>	20	RMSTEEL	RAW STEEL BARS	Pound	Bflush	4.13000	10.00000	07/30/2004				10 Etch Copper	None
<input type="radio"/>	30	RM200134	RAW WOOD 1 X 4	Feet	Bflush	3.50000	0.00000	07/30/2004				10 Etch Copper	None
<input type="radio"/>	40	RM1200	METAL HANDLE	Each	Bflush	1.00000	0.00000	07/30/2004			14	10 Etch Copper	None
<input type="radio"/>	50	RM1001	SHEET METAL	Pound	Bflush	4.00000	0.00000	07/30/2004				10 Etch Copper	None

SAVE

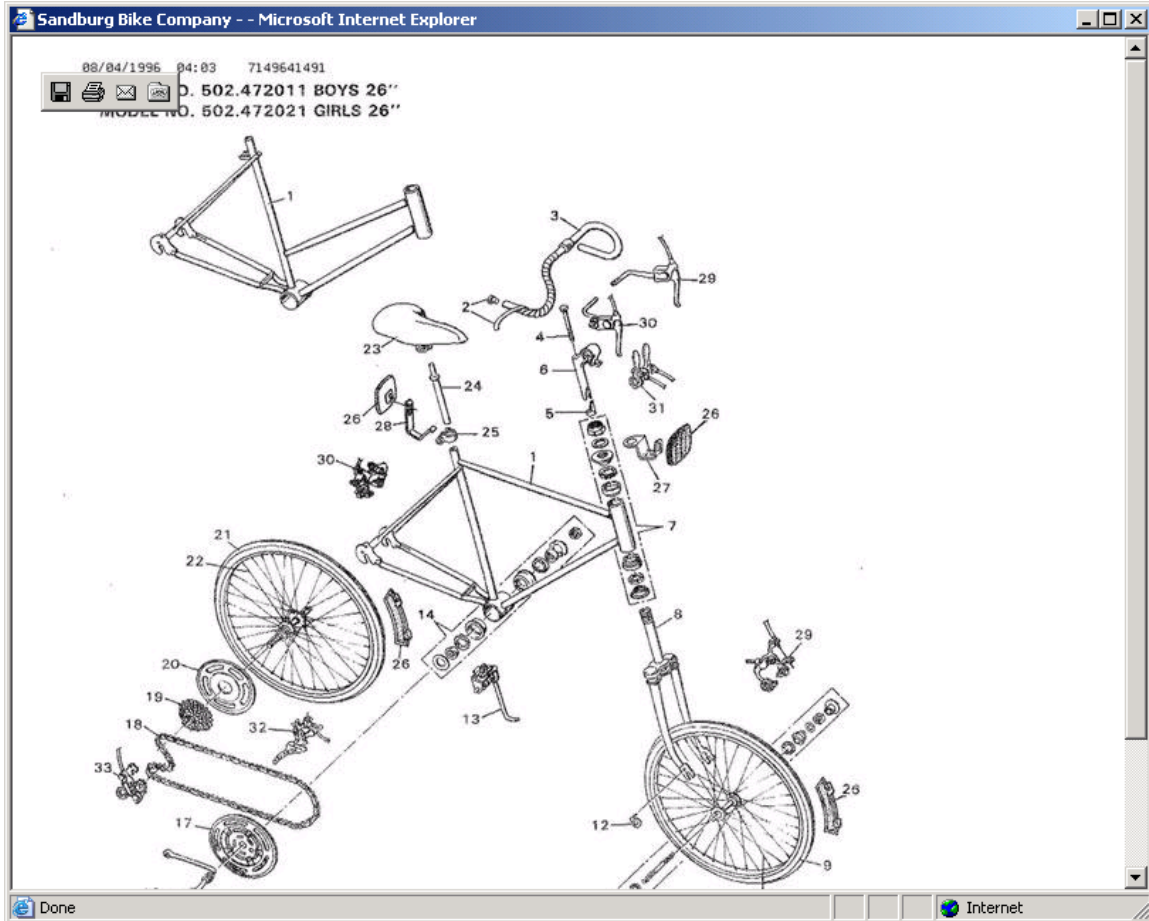
OpenPro Bill of Material features include:

- \* unlimited number levels of bill of material.
- \* “quantity per” can be up to 5 decimals to the right of the decimal place.
- \* handles phantom bills, soft bills, flow through bills, and back flushing.
- \* keeps track of scrap percent and costing, based upon both the engineering standard and actual.
- \* Optional uses Engineering change control (ECN) to maintain bills of materials.
- \* Optional use of Sequence link to the routing BOO.
- \* can show pictures of the engineering drawing.
- \* Optional link to configuration file where this item can be replaced if you are using a sales order configured item.

OpenPro has built-in complete manufacturing bill of materials that also integrates with the configurator.

## Getting Started with Manufacturing Bill of Materials

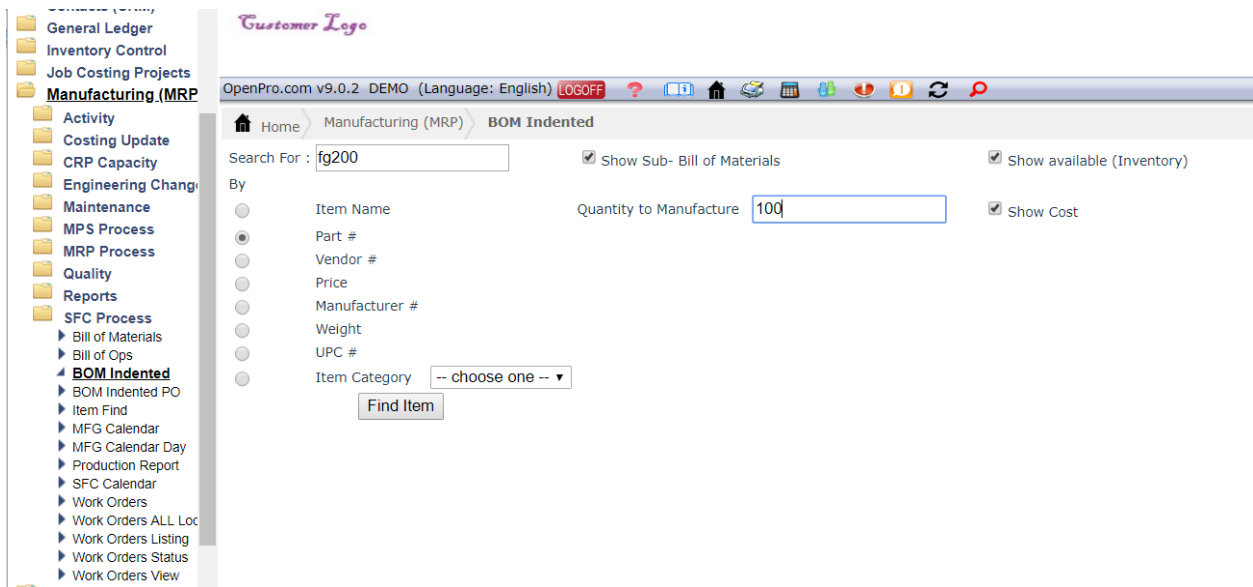
With the Bill of Materials attached can be the engineering drawing from a cad/cam system.



## Getting Started with Manufacturing Bill of Materials

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When you select BOM Indented, select part # and type in FG200, for instance, then enter in the quantity required.



Here you will see the both the BOM and the BOO (routing), work centers used, and specific machine if required for this operation. Also a detail description, setup time and cost associated to the Routing.

## Getting Started with Manufacturing Bill of Material Expanded Bill

Click on the “Find Item” button, which will bring you to another screen. From here, you can choose Show B.O.M. to view the item’s materials information. Otherwise, click on New Search to look for another item.

**Customer Logo**

Your, Administrator 11/27

OpenPro.com v9.0.0 DEMO (Language: English) LOGOFF

Home > Manufacturing (MRP) > BOM Indented

**Item FG200** FG200 Deluxe Mountain Bike  
Deluxe Mountain Bike with wood side rails  
candy apple red color  
UPC: 45671233211

[±]	Sequence #	Item #	Description	Unit Of Measure	# per Unit	Location Inventory	Total Inventory	Standard Unit Cost	Standard Total Cost	R
			<b>Operation</b>							
			<b>Work Center</b>							
	10	Edge Mill Operations	Bending work center						1.12000	
	20	Etch Copper	Cutting Work Center						1.92000	
	30	Electroless Copper Plating	Bending work center						4.06000	
	40	Quality Control Inspection	Quality Control Work Center						0.00000	
	50	DYEING							4.75000	
	60	Chassis Assembly							2.44000	
		<b>Total Labor</b>							14.29	
[±]	10	d1000	D1000 Special Roll Metal	Each	15.50000	873.90000	934.90000	0.77000	11.93500	
[±]	20	d1000	D1000 Special Roll Metal	Each	36.40000	873.90000	934.90000	0.77000	28.02800	
	30	RMSTEEL	RAW STEEL BARS 12312333 RAW STEEL BARS	Pound	4.13000	508.21000	568.51000	1.22000	5.03860	
[±]	40	RMPHANTOM	Raw Material Phantom Bill	Each	2.00000	-48.00000	-32.00000	0.00000	0.00000	
	50	RM2001X4	RAW WOOD 1 X 4 RAW WOOD	Feet	3.50000	46306.12000	46452.12000	0.66000	2.31000	
[±]	60	RM1200	METAL HANDLE upc1 RM1200 Metal handle bars	Each	1.00000	5.00000	29.00000	0.30000	0.30000	
	70	RM1001	SHEET METAL	Pound	4.00000	1111003.66703	1117466.47103	1.55000	6.20000	
			<b>Material Cost</b>						53.81160	

The top portion shows the expanded Bill of Materials. Also it expands the quantity required. The box below shows the material required to complete the quantity specified in the initial search and the red numbers show shortages of inventory.

Part	Part Name	Projected Work Order Quantity	Total Currently Available	Total Anticipated Changes	Net	Resulting Inventory
CAP	CAPSA403-WP304L8InSch40s	4.00000	28.00000	-3.00000	25.00000	21.00000
CG1/4	CGA182-F304L1/4In3000#F_Thrd	6.00000	-168.00000	0.00000	-168.00000	-174.00000
CG3/4	CGA182-F304L3/4In3000#F_Thrd	4.00000	-94.00000	0.00000	-94.00000	-98.00000
EL1	ELA403-WP3041InSch40_90°LR	8.00000	8.00000	-3.00000	5.00000	-3.00000
EL1/2	ELA403-WP3043/4InSch40_90°LR	6.00000	-168.00000	-1.00000	-169.00000	-175.00000
EL21/2	ELSA403-WP304L2 1/2InSch40_90°LR	4.00000	-94.00000	0.00000	-94.00000	-98.00000
FB1/2	FB1018 Cold Finish1/2x4	2.00000	-20.00000	0.00000	-20.00000	-22.00000
FB1/4	FBC110 Copper1/4x1	6.00000	-168.00000	0.00000	-168.00000	-174.00000
FB3/16	FBA363/16x1 1/2	4.00000	-94.00000	0.00000	-94.00000	-98.00000
FB3/8	FBA240-304L3/8x2 1/2	4.00000	-94.00000	0.00000	-94.00000	-98.00000
FL	FLSA182-F3043/4In300#WNRF	6.00000	-168.00000	0.00000	-168.00000	-174.00000
GSK	GSKViton200mm ODx150mm IDx6mm	4.00000	-94.00000	0.00000	-94.00000	-98.00000
RM1001	SHEET METAL	57.65550	1111003.66703	-7206.59900	1103797.06803	1103739.41253
RM1200	METAL HANDLE	1.00000	5.00000	-180.00000	-175.00000	-176.00000
RM2001X4	RAW WOOD 1 X 4	55.40000	46306.12000	-3867.00000	42439.12000	42383.72000
RMPHANTOM	Raw Material Phantom Bill	2.00000	-48.00000	-552.00000	-600.00000	-602.00000
RMSTEEL	RAW STEEL BARS	57.03000	508.21000	-4747.06000	-4238.85000	-4295.88000
d1000	D1000 Special Roll Metal	51.90000	873.90000	-16479.40000	-15605.50000	-15657.40000

## Getting Started with Manufacturing Bill of Material Where Used

When you select “Item Find,” select Item Category: Raw Materials.

The screenshot displays the OpenPro v9.0.0 DEMO web application interface. The top navigation bar includes the OpenPro logo, a "Customer Logo" placeholder, and the user name "Your, Administrator". The main content area is titled "Item Find" and contains the following elements:

- Find Item** section with a link to "Add new Item HERE".
- Item Name** text input field.
- Part #/UPC** text input field.
- Bin** text input field.
- Pallet** text input field.
- Vendor Part #** text input field.
- Vendor #** text input field.
- Min Price** text input field.
- Max Price** text input field.
- Manufacturer #** text input field.
- Min Weight** text input field.
- Max Weight** text input field.
- Status** dropdown menu set to "Active".
- Inventory Class** dropdown menu set to "-- choose --".
- Item Category** dropdown menu set to "Raw Materials".
- Show Inventory For Location** dropdown menu set to "--ALL--".
- For item availability** radio buttons: "By Month" (selected), "By Week", and "By Day".
- Checkboxes for: "Stock on hand", "exclude non-inventory items", "exclude Labor Billables", and "Search on Category Descriptors".
- A checked checkbox for "FAST".
- A green "Search" button.

The left navigation menu includes the following items:

- Development
- Admin
- Bank Reconciliation
- Contacts (CRM)
- General Ledger
- Inventory Control
- Job Costing Projects
- Manufacturing (MRP)**
  - Activity
  - Costing Update
  - CRP Capacity
  - Engineering Change
  - Maintenance
  - MPS Process
  - MRP Process
  - Quality
  - Reports
  - SFC Process
    - Bill of Materials
    - Bill of Ops
    - BOM Indented
    - BOM Indented PO
    - Item Find**
    - MFG Calendar
    - MFG Calendar Day
    - Production Report

## Getting Started with Manufacturing Bill of Material Where Used

Click search on the Item Find menu to pull the following screen. Try selecting the item “Metal Handle RM1200” and click on the “Used” icon.

Click on “Used” and you can see where this item is being used in the BOM

Seq No	Part Number	Description	UOM	Issue Method	Qty Per	Scrap Percent	Effective Date	Expire Date
10	<a href="#">FG300</a>	FG300 Custom Mountain Bike	Box	Allocate	1.00000	0.000	04/29/2004	
10	<a href="#">RMP100</a>	Ramp - 2 line	Box	Allocate	1.00000	0.000	12/10/2004	
30	<a href="#">RML0T1</a>	Lot Control RM Metal	Box		1.00000	0.000	04/01/2005	
40	<a href="#">FG100</a>	FG100 OpenPro Mountain Bike	Box	Bflush	1.00000	0.000	07/30/2004	
40	<a href="#">FG400</a>	FG400 Custom electric Bike	Box	Bflush	6.00000	0.000	04/26/2004	
40	<a href="#">BIKEFAMILY</a>	Make Multiple Bikes by FAMILY	Box	Bflush	1.00000	0.000	07/30/2004	
60	<a href="#">FG200</a>	FG200 Deluxe Mountain Bike	Box	Bflush	1.00000	0.000	07/30/2004	
60	<a href="#">FG100N</a>	FG100N OpenPro Mountain Bike	Box	Bflush	1.00000	0.000	07/30/2004	

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## Getting Started with Manufacturing Bill of Operations or Routings

From the Manufacturing (ERP) menu select Bill of Operations, and enter in FG100 as an example. The system will display the following BOO or product routing records.

You can open up the details of each operation and see details records by selecting an operation and clicking the icon on the right side of the screen.

The screenshot displays the OpenPro ERP interface. On the left is a navigation menu with categories like Development, Admin, and Manufacturing (MRP). The main window shows the 'Bill of Operations' for 'FG200 Deluxe Mountain Bike'. The form includes fields for 'Bill of Operations' (fg200), 'Revision #', 'Name', 'Begin Date', and 'End Date'. Below the form is a table of operations with columns for Selection, Sequence No, Standard Operations, Work Center, Machine, Description, Piece Rate, Effective, Expires, Setup Times, Run Time, Time UOM, Rate, Labor, Direct Labor, and Update Operations. A 'SAVE' button is located at the bottom of the table.

SEL	Sequence No	Standard Operations	Work Center	Machine	Description	Piece Rate	Effective	Expires	Setup Times	Run Time	Time UOM	Rate	Labor	Direct Labor	Update Operations
<input type="radio"/>	10	NCR Drill Op	Cutting - Cu		Drill holes in truck body, for wood mounting and handle mounting according to specs 454ace.	0.00	Always	Already	5.00000	10.00000	Minutes	14.33	3.58	2.39	<a href="#">DETAIL</a>
<input type="radio"/>	20	Copper Elect	Plating - Pl	Flash Oven	electroplate for the handle	0.00	Always	Already	15.00000	5.00000	Minutes	33.33	11.11	2.78	<a href="#">DETAIL</a>
<input type="radio"/>	30	Chassis Asse	CLEAN - Clea		assemble the truck body with the wheel assembly, clean off rough edge.	0.00	Always	Already	2.00000	2.00000	Minutes	13.22	0.88	0.44	<a href="#">DETAIL</a>
<input type="radio"/>	40	Quality Cont	Qty Assur -		qc inspection of the final product	0.00	Always	Already	1.00000	1.00000	Minutes	12.22	0.41	0.20	<a href="#">DETAIL</a>
<input type="radio"/>	50	packaging of	Qty Assur -		Place foam in finished product package, place warranty card, bag product and get ready for shipping	0.00	Always	Already	2.00000	5.00000	Minutes	12.22	1.43	1.02	<a href="#">DETAIL</a>
						<b>0.00</b>			<b>25.00</b>	<b>23.00</b> (minutes)		<b>\$ 17.41</b>	<b>\$ 6.83</b>		



## Getting Started with Manufacturing Bill of Operations or Routings

Bill of Operations or Routing specifies the tools, work centers and labor required to complete a certain task. Task are like assembly, Paint, etc.

With the BOO there is the capability to attach an engineering document that displays the process.

Sandburg Bike Company -- Microsoft Internet Explorer

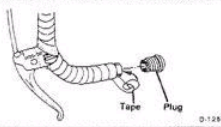
08/04/1996 04:01 7149641491

### ASSEMBLY

#### TAPE AND PLUGS

**NOTE**  
A piece of adhesive tape may be used to start wrapping.

1. Start tape 50 mm (2 inches) on each side of stem.
2. Start by wrapping tape one or two times around Handlebar.
3. Wrap toward end of Handlebar making sure tape is tightly wrapped. Each layer should overlap the previous one.
4. At end of Handlebar, push remainder of tape inside Handlebar and secure with plug.

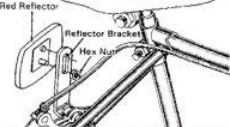


D-1287

#### REFLECTORS

##### REAR REFLECTOR

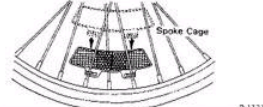
Attach red reflector to rear reflector bracket with hex nut. Be sure that both reflector studs are in the reflector bracket with the short stud above the long stud. Be certain reflector faces directly to the rear.  
**Note:** On some models a wing nut is used instead of a hex nut to secure the reflector. Reflector should face directly to the rear. Viewed from the side, be sure reflectors are vertical, NOT tilted upward or downward.



D-1290

##### WHEEL REFLECTOR

1. Put reflector within the spoke cage, i.e. between the spokes on each side of the rim.
2. Starting near the center of the wheel, attach the clamps to adjacent spokes on the SAME side of the wheel. (Use a screwdriver to open clamps slightly if necessary to assist you in the installation.)
3. Slide reflector toward wheel rim as far as possible.
4. Do not force installation or overband clamps.

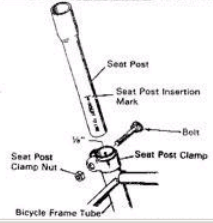


D-1291

**WARNING**  
Do not operate this bicycle without a reflectorization in place and in Functional Condition.

#### SEAT POST AND CLAMP

1. If not installed, install seat post clamp to frame being sure that top of seat post clamp is 3.2 mm (1/8 inch) below the top of the bicycle frame tube. The slot to the rear of frame tube should be centered in the open end of the seat post clamp.
2. Install bolt so that the square base under the bolt head is seated in the square hole in the seat post clamp. Put nut on bolt but do not tighten until seat post is inserted and adjusted to the correct height.
3. Insert seat post into bicycle frame tube. The seat post insertion mark must not show at the correct height. This will insure that at least 63.5 mm (2 1/2 inches) of the seat post is engaged within the bicycle frame.



D-1284

Done Internet

# Getting Started with Manufacturing Product Configurator in Sales Orders

From the menu select Sales Orders, Add Order. Search for a customer then select New Order.

The screenshot shows the 'Add order' page in the OpenPro system. On the left is a navigation tree with 'Sales Orders' highlighted. The main content area features a table of customer records:

Name	Reference #	Company	Phone #	City, State	Actions
	Z000012	C.E.I. ROOFING		WHITMORE LAKE, MI	[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]
	3428	COPPER LIGHTING COMPANY		WEST COLUMBIA, SC	[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]
AAAAAAAA, FF	486	CCC	1111111111111		[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]
Mathers, Harry	458HR	Computer Bike Services LLC	18005336595	Fountain Valley, CA	[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]
Smith, Frank	6	Cocanut Oil Dist CO	17149642140	Fountain Valley, CT	[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]
Smits, Joe	458	Computer Management Services L	18005335595	Westbrook, CT	[NEW ORDER] [MORE INFO] [CHANGE] [INVOICES]

Below the table is a 'Find Customer' form with fields for Last Name, First Name, Address, Company, E-Mail Address, Customer Reference #, Tax ID #, Date of Birth, Phone Number, Cell Number, and Ship to. A 'Search' button is at the bottom.

Select the Bikes category at the bottom of the page and click on the FG100 details link; see the add-on configured items below.

The screenshot shows the 'Add order' page with a product list. The 'Warehouse' is set to 'Bikes'. The product list is as follows:

Keep	Line Item	Type	Item Name	Part #	Quantity	Details	Discount	Unit Price	Total Price
						Discount Amount: 0.00			Total: 0.00
						Shipping UPS - Customer Pickup Pickup - 0.00			0.00
						Tax Code - none -			0.00
						Additional Charges: +			
						Rebate: 0.00			Grand Total: US\$0.00

Below the table, there are two items listed under the 'Bikes' category:

- FG100 OpenPro Mountain Bike** Part Number: FG100 Price: 100.00 Manufacturer: OpenPro Toy Company 1 UPC Code: 01238882231 Weight: 12.000 Retail Value: 100.00 Mfr. Number: Manufacture# Stock: 3154
- FG100B OpenPro Mountain Bike item name** Part Number: FG100B98012345 Price: 100.00 Manufacturer: OpenPro Toy Company 1 UPC Code: Weight: 12.000 Retail Value: 100.00 Mfr. Number: Manufacture# Stock: 127

# Getting Started with Manufacturing Product Configurator in Order Entry

When adding the items to the sales order, you can create an immediate **work order** by clicking on the line item “Show” button, then click on the Add W.O. link. The bill of material and routing will be expanded and a new Work Order will be created.

OpenPro.com v9.0.0 DEMO (Language: English) LOGOFF

Your Administrator 11/27/2018 11:35:04

Home Sales Orders Add order

Store: DEMO Territory: Los Angeles Quote: 8207 Order Type: Phone Order Copy Order: Generate Quote Pick Ticket Sales Order Proforma

6 Mr. Smith, Frank DD Coconut Oil Dist Fountain Valley, November 27, 2018 11:35 AM Entered By: Administrator Your

Keep	Line Item	Type	Item Name	Part #	Quantity	Details	Discount	Unit Price	Total Price
<input checked="" type="checkbox"/>	0001	+	ACTIV	FG100 OpenPro Mountain Bike	FG100	1.00 Each	0.00	90.00000	90.00 -144.93%GP
<input checked="" type="checkbox"/>	0002	+	ACTIV	FG200 Deluxe Mountain Bike	FG200	1 Pound	0	990.00000	990.00 94.55%GP
								Discount Amount:	0.00
								Override Discount Amount	
								Shipping	UPS - 2 day Air 2 Day Air - 10.00
								Tax Code	CAOR - CALIFORNIA ORANGE COUNTY
								Additional Charges: +	
								Total:	1,080.00

Total Price: 1,080.00 Total Cost: 1,790.20 Total Profit: 1,741.94 GP%: 13.52 Total Qty: 2 Total Volume: 47,916.00 Total Cases: 2 Total Pallets: 2 Total Weight: 20 Rebate: 0.00 Grand Total: US\$1,247.74

Quick Add Input Part # Input Serial

Show only stock Show 20 Sort By: Name Change Options

By: Name Search MATRIX IMPORT GSV ADVANCED SEARCH

Warehouse -- Bikes

**Add to Cart** FG100 OpenPro Mountain Bike Part Number: FG100 Price: 100.00 Manufacturer: OpenPro Toy Company 1 UPC Code: 01238882231 Weight: 12.000 Retail Value: 100.00 Mfr. Number: Manufacture# Stock: 3154

## Getting Started with Manufacturing Work Order Processing

After you have created a work order from the sales order, go to the menu and click on Manufacturing, Work Orders, and then **Find Work Order**.

From this list you can sort by any top menu item by clicking on the field header area. The following list is sorted by work order number and the selected work order is 1106.

The screenshot displays the OpenPro Manufacturing Work Orders interface. The top navigation bar includes the OpenPro logo and a breadcrumb trail: Home > Manufacturing (MRP) > Work Orders. Below the navigation, there are search filters for 'Search Items for new/current Work Orders' and 'Find Work Order by Customer'. The search form includes fields for Part #, Item Name, Work Order Number, Project, Sub-Pro, Work Order Status (with a dropdown menu showing options like ALL, Plan, Firm Plan, **Work Order**, Closed, Cancelled), Type (set to All), and Warehouse (set to DEMO - OpenPro Samburg Bike Company). There is also a checkbox for 'Fast'.

The main content area shows a table of Work Orders. The table has the following columns: Work Order #, Item #, Item Name, Work Order Quantity, Open Qty, Work Order Start, Work Order Due, Creator Representative, Sales Order, Order Status, Warehouse, Priority, Sales Quantity, Type, CUS ref, Company, and Name. The table is sorted by Work Order #.

Work Order #	Item #	Item Name	Work Order Quantity	Open Qty	Work Order Start	Work Order Due	Creator Representative	Sales Order	Order Status	Warehouse	Priority	Sales Quantity	Type	CUS ref	Company	Name
<a href="#">Edit</a> 1256	FG400	FG400 Custom electr	111	108	05/21/2018 00:00:00	05/24/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1255	FG400	FG400 Custom electr	100	100	05/21/2018 00:00:00	05/25/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1254	FG300	FG300 Custom Mountai	500	500	05/22/2018 00:00:00	05/25/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1260	RM1200	METAL HANDLE	2018	2018	05/22/2018 00:00:00	05/25/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1283	MYOB	Make your own bike	56	20	05/22/2018 00:00:00	05/25/2018 00:00:00	Administrator Your		W.I.P.	DEMO	High	0	Build			
<a href="#">Edit</a> 1312	FG100	FG100 OpenPro Mounta	100	71	05/24/2018 00:00:00	05/25/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1299	FG200	FG200 Deluxe Mountai	55	35	07/13/2018 00:00:00	07/20/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1313	BIKEFAMILY	Make Multiple Bikes	100	56	05/30/2018 00:00:00	05/31/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1315	CarrotsFamily	Carrots Family	90	90	06/21/2018 00:00:00	06/22/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			
<a href="#">Edit</a> 1339	FG200	FG200 Deluxe Mountai	125	119	07/13/2018 00:00:00	07/16/2018 00:00:00	Administrator Your		W.I.P.	DEMO	Standard	0	Build			

## Getting Started with Manufacturing Work Order Processing

By clicking on Edit, you can see the details of the work order.

The screenshot shows the OpenPro Manufacturing (MRP) interface. The main content area displays the details for Work Order # 1345. The form includes fields for Type (Build), Part # (FG200), Revision # (1), Name (FG200 Deluxe Mountain Bike), Description (Deluxe Mountain Bike with wood side rails), Dimensions (Width: 22.00 Height: 33.00 Depth: 33.00), Customer (Cocanut Oil Dist CO), Reference # (SO: 8207 Line: 0002), Unit of Measure (Feet), and Warehouse (DEMO-OpenPro Samburg Bike Company). There are also fields for Lead Time (1), Quantity Ordered (12.0000), Quantity Completed (0.0000), New Quantity Completed, Due Date (12/02/2018), Start Date / Time (12/01/2018 00:00:00), Completed Date, Priority (High), Issue By, Issue Date, Heat No, and Heat Code. A 'Production Notes' section contains the text 'Color: Blue Size: 17 Style: Lake Height: 54'. The interface includes a sidebar with navigation options like Development, Admin, Bank Reconciliation, and Manufacturing (MRP). The top right corner shows the user 'Your Administrator' and the date '11/27/2018 11:38:19'.

You can also use the links to see details of the BOM and BOO.

The screenshot shows the Bill of Materials (BOM) for Work Order # 71, item FG200. The table lists the components and their quantities. The columns are: SEL, Seq No, Part Number, Description, UOM, Issue Method, Qty Per, Projected Quantity, Scrap Percent, Actual Quantity, Actual Scrap, and Ref No. The table contains five rows of data.

SEL	Seq No	Part Number	Description	UOM	Issue Method	Qty Per	Projected Quantity	Scrap Percent	Actual Quantity	Actual Scrap	Ref No
	10	d1000	D1000 Special Roll Metal	Each	Call	15.50	0.00	10.00	0.00000	0.00000	
	20	RM1200	METAL HANDLE	Each	Call	1.00	0.00	0.00	0.00000	0.00000	
	30	RMSTEEL	RAW STEEL BARS	Pound	Call	4.13	0.00	10.00	0.00000	0.00000	
	40	RM2001X4	RAW WOOD 1 X 4	Feet	Call	3.50	0.00	0.00	0.00000	0.00000	
	50	RM1001	SHEET METAL	Pound	Call	4.00	0.00	0.00	0.00000	0.00000	

The system gives you the capability to build immediate purchase orders for raw materials in short supply.

When the work order is completed, the shipping department will be notified that the sales order is ready for shipping.


## Getting Started with Manufacturing Work Order Processing


From the work order you can print the manufacturing traveler and the material pick list below.

**Sandburg Bike Company - - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

### Manufacturing Routing

Work Order #: 9 

Item: FG100   
 FG100 OpenPro Mountain Bike FG100 OpenPro standard model This is more detail for this item




Warehouse: DEMO OpenPro Sandburg Bike Company Date: 06/04/2004

Unit of Meas.: Each Status: W.I.P.

Qty Ordered: 5.00 Start Date: 05/10/2006

Qty Completed: 0.00 Due Date:

Customer: joe Smith Reference: 904451

Seq. #	Wrk Center Std Oper.	Description	Tooling Reference	Labor Group	Setup Total Run Total	Setup Remain Run Remain
						
10	Cutting Mill	Cutting metal Edge Mill Operations	large Gold Racks		2.00 5.00	2.00 5.00
<b>Instructions:</b> - Setup machine for program CUT BED FG100 - Run test sample size (2) - Q.C test sample size - Process cutter Take sheets of Metal and cut into 2.5' by 4.2"						
						
20	Cutting Mill	Cutting metal Edge Mill Operations			22.43 172.20	11.49 172.20
<b>Instructions:</b> ertertter wergtewr						
						
30	BEND Mill	Metal Shaping (Press) Edge Mill Operations	Film Developer		43.66 270.00	43.66 270.00
<b>Instructions:</b> asdfasdfasdf						

**Production Notes**

Sandburg Bike Company - - Microsoft Internet Explorer

File Edit View Favorites Tools Help

## Manufacturing Routing

Work Order #: 9

Item: FG100

FG100 OpenPro Mountain Bike FG100 OpenPro standard model This is more detail for this item

Warehouse: DEMO OpenPro Samburg Bike Company Date: 06/04/2004

Unit of Meas.: Each Status: W.I.P.

Qty Ordered: 5.00 Start Date: 05/10/2006


Qty Completed: 0.00 Due Date:

Customer: joe Smith Reference: 904451

Seq. #	Wrk Center Std Oper.	Description	Tooling Reference	Labor Group	Setup Total Run Total	Setup Remain Run Remain
10	Cutting Mill	Cutting metal Edge Mill Operations	large Gold Racks		2.00 5.00	2.00 5.00
<b>Instructions:</b> - Setup machine for program CUT BED FG100 - Run test sample size (2) - Q.C test sample size - Process cutter Take sheets of Metal and cut into 2.5' by 4.2"						
20	Cutting Mill	Cutting metal Edge Mill Operations			22.43 172.20	11.49 172.20
<b>Instructions:</b> erteter wergtewr						
30	BEND Mill	Metal Shaping (Press) Edge Mill Operations	Film Developer		43.66 270.00	43.66 270.00
<b>Instructions:</b> asdfasdfsdf						

**Production Notes**

Also can keep track of cost and profit from processing work order.  
 As you can see below we show Engineered cost (Planned) and Actual Cost (from activity entry, material issued, scrapped, labor clock in and out).

 [LEARN](#)

**Costs** for Work Order # 1345, item FG200, Quantity: 12.0000 , Quantity Completed: 0.0000

### Material Costs

Sequence No	Part	Unit Cost	Planned	Actual	Difference	% Difference	Quantity
10	RM1001 SHEET METAL	6.20	74.40	0.00	-74.40	-100.00%	0.00
20	RM1200 METAL HANDLE	0.30	3.60	0.00	-3.60	-100.00%	0.00
30	RMSTEEL RAW STEEL BARS	5.04	60.46	0.00	-60.46	-100.00%	0.00
40	RM2001X4 RAW WOOD 1 X 4	2.31	27.72	0.00	-27.72	-100.00%	0.00
50	RMPHANTOM Raw Material Phantom Bill	0.00	0.00	0.00	0.00	0.00%	0.00
60	d1000 D1000 Special Roll Metal	28.03	336.34	0.00	-336.34	-100.00%	0.00
70	d1000 D1000 Special Roll Metal	11.94	143.22	0.00	-143.22	-100.00%	0.00
<b>Direct Total</b>		53.81	645.74	0.00	-645.74	-100.00%	
<b>Total Material Cost</b>		53.81	645.74	0.00	-645.74	-100.00%	

### Labor Costs

Sequence No	Operation	Work Center	Unit Cost	Planned	Actual	Difference	% Difference
20	Etch Copper	Cutting	0.60	8.49	0.00	-8.49	-100.00%
40	Quality Control Inspection	QC - San Sdgo	0.00	0.02	0.00	-0.02	-100.00%
50	DYEING	Paint wc	2.71	22.88	0.00	-22.88	-100.00%
60	Chassis Assembly	Package WC	0.44	5.00	0.00	-5.00	-100.00%
<b>Direct Total</b>			3.75	36.38	0.00	-36.38	-100.00%
<b>Fixed Overhead</b>			3.75	54.58	0.00	-54.58	-100.00%
<b>Total Labor Cost</b>			7.50	90.96	0.00	-90.96	-100.00%

### Labor Machine Costs

Sequence No	Operation	Work Center	Unit Cost	Planned	Actual	Difference	% Difference
10	Edge Mill Operations	Bending	1.12	9.53	0.00	-9.53	-100.00%
30	Electroless Copper Plating	Bending	4.06	17.20	0.00	-17.20	-100.00%
<b>Direct Total</b>			5.18	26.73	0.00	-26.73	-100.00%
<b>Fixed Overhead</b>			7.77	40.09	0.00	-40.09	-100.00%
<b>Total Labor Machine Cost</b>			12.96	66.81	0.00	-66.81	-100.00%



## Getting Started with Manufacturing Purchase Order Processing

The purchase order is created by going to “Purchase New” under the Purchase Order menu. Select a vendor, and click on New PO. Choose items and quantities to purchase and specify the Required Date. Click on Place Order to finalize the purchase.

**Purchase Order# 1434 Requisition Number: 1149 Status: Open [Close] Revision: 3** [DUPLICATE](#) [NOTE](#) [SEE NOTE](#) [+SCREEN](#) [WF](#) [Print Requisition](#) [Print PO](#) [Print Packing Slip](#) [?](#)

Steel, John Metal Supply Company 123 Real Metal Lane  
 Show Details Language: ENG Currency: EDI Vendor Printed Date: 10/01/2018 EDI Transactions [HISTORY](#) [TRACKING](#)

**Purchase Order Information**

Select Order Notes: Select

Order Notes:

U.D. fld 1: special notes  
 U.D. fld 2:

Buyer: Your Administrator PO Type: Purchase Order Regular  
 Planner ID: -- choose -- Store: DEMO-OpenPro Samburg  
 Approved By: Your Administrator Ship Method: FEDEX - Special delivery  
 Approved Date: 05/04/2018 (MM/DD/YYYY) Ship To Location:   
 Requisition Date: 10/01/2018 Ship Terms: SHIPC - Ship Complete  
 Required Date: 10/01/2018 Drop Ship  Ship to one location   
 Cancel Date:  Confirm Date:

Customer Purchase Order:

Payment Terms: net30 / payable net 30  
 Material Status: Ordered Sent  
 Follow-up Date:

Total Units: 5,001 Weight: 0.00 Cube: 0.00 Cases: 0.00 Pallets: 0.00

Line Item#	Item Name	Part Number	UOM	Due Date	Notes	History	Service	Freight To	Quantity Ordered	Quantity Received	Unit Cost	Extended Amount
1 - FRLOT	Lot Controlled Finish Reamer	FRLOT	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1000.00000	234.00000	1.00000	1000.00
2 - FRLOTDATE	FR Lot controlled and exp date	FRLOTDATE	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1000.00000	234.00000	1.00000	1000.00
3 - RMLOT1	Lot Control RM Metal	RMLOT1	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1000.00000	234.00000	1.00000	1000.00
4 - lot123	lot123	lot123	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1000.00000	234.00000	10.00000	10000.00
5 - Lotrm1	Lot Controlled raw mat 1	Lotrm1	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1000.00000	234.00000	13.25000	13250.00
6 - Lotrm2	Lot Controlled RM 2	Lotrm2	Each	10/01/2018	<a href="#">NOTES</a>	<a href="#">HISTORY</a>	G	TRUCK	1.00000	0.00000	15.75000	15.75
<b>Sub Total</b>	26265.75	Total Units: 5,001 Weight: 0.00 Cube: 0.00 Cases: 0.00 Pallets: 0.00										
<b>Tax Code</b>	LA / Los Angeles	Tax=2153.79										
<b>Freight</b>	0.00											
<b>Misc \$</b>	0.00											
<b>Additional Charges</b>	+											
<b>Total \$</b>	US\$28419.54	<a href="#">Update Order</a> <a href="#">Place Order</a>										

Vendor Part #  Add Item Search for Item(s) [IMPORT CSV](#) [Inventory Shortage](#) [ADVANCED SEARCH](#)  
 Item SKU#  Add Item

## Getting Started with Manufacturing Work Order Processing

Work orders can be review by looking at the Manufacturing Calendar.

The screenshot displays the OpenPro MFG Calendar interface. The browser window title is "Sandburg Bike Company - MFG Calendar - Microsoft Internet Explorer". The page header includes the OpenPro logo and the text "Your, Administrator 09/20/2006 17:06:09". Below the header, there is a navigation bar with "OpenPro.com v4.9 DEMO (Language: English)", "MFG Calendar", and "Logout Help Manual Support Home".

The main content area shows a calendar for "September 2006". The calendar grid has columns for days of the week (Sun to Sat) and rows for dates. Work orders are listed in the cells corresponding to the dates they are active. The work order details include the work order number, part number, and quantity.

Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1 W/O: 173 Pt: FG100 Qty: 6342.00 (C)	2
3	4 W/O: 174 Pt: FG100 Qty: 6342.00 (C)	5	6	7	8	9
10 W/O: 160 Pt: FG400 Qty: 500.00 (I)	11 W/O: 159 Pt: FG400 Qty: 500.00 (I)	12	13	14 W/O: 1119 Pt: FG200 Qty: 10.00 (I)	15	16
17	18 W/O: 175 Pt: FG100 Qty: 6342.00 (C)	19 W/O: 80 Pt: FG400 Qty: 3.00 (I) W/O: 142 Pt: FG400 Qty: 3.00 (I)	20	21	22	23
24	25	26	27	28	29	30

The sidebar on the left contains a navigation menu with the following items:

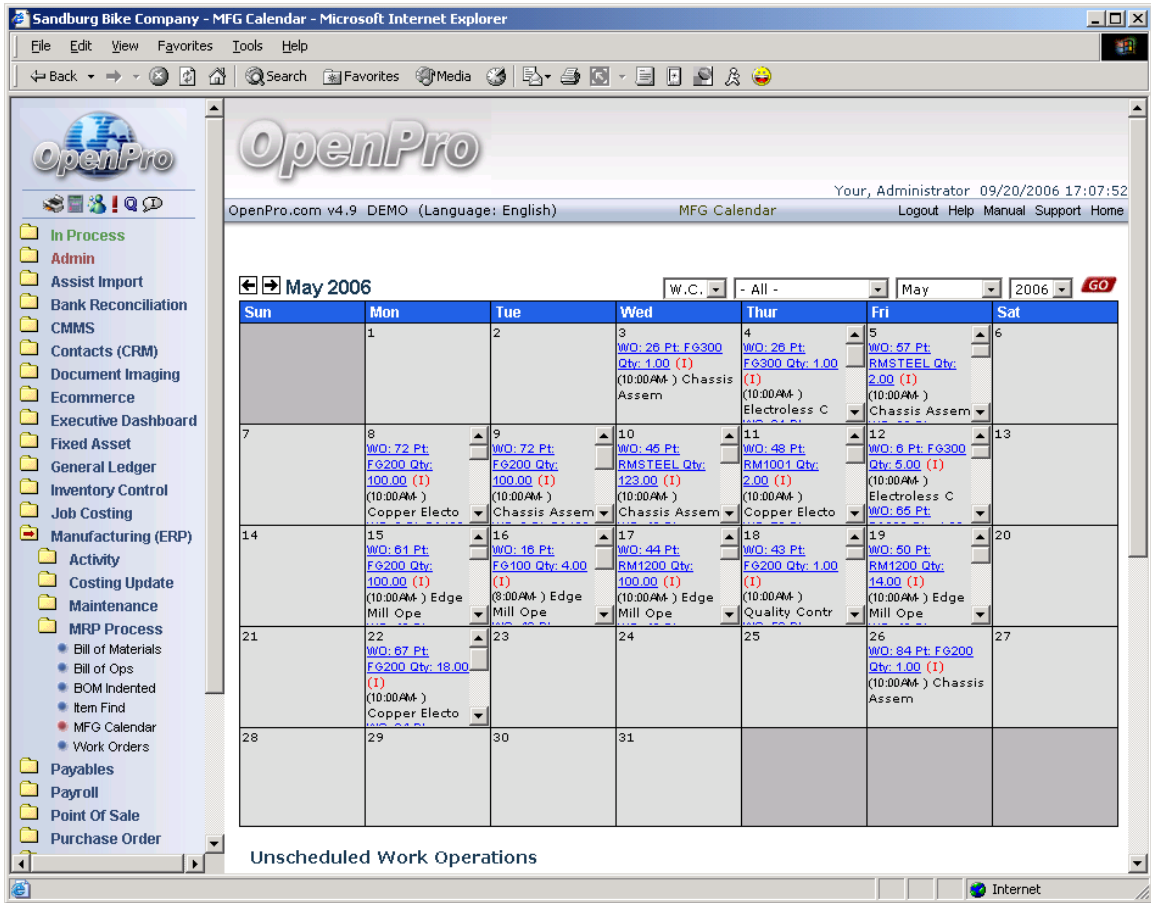
- In Process
- Admin
- Assist Import
- Bank Reconciliation
- CMMS
- Contacts (CRM)
- Document Imaging
- Ecommerce
- Executive Dashboard
- Fixed Asset
- General Ledger
- Inventory Control
- Job Costing
- Manufacturing (ERP)
  - Activity
  - Costing Update
  - Maintenance
  - MRP Process
    - Bill of Materials
    - Bill of Ops
    - BOM Indented
    - Item Find
    - MFG Calendar
    - Work Orders
- Payables
- Payroll
- Point Of Sale
- Purchase Order

The footer of the page contains the text "Copyright@1999-2006 by OpenPro, Inc. All rights reserved." and the status bar shows "Done" and "Internet".

This shows you what work orders are being process for each day. Click on the details of a work order and it shows you all aspects of the work order.

# Getting Started with Manufacturing Work Order Processing

With the shop calendar work centers and schedules can be reviewed.



This also has the capability to drill down to just one work center.

## Getting Started with Manufacturing Work Order Processing

Under activity, this is where time (both labor and machine) and material can be entered for processing work orders. Time can be entered in by clocking into and out of a work order, or during payroll time entry you can enter in time via a work order.

The screenshot displays the OpenPro software interface. On the left is a navigation menu with categories: Development, Admin, Bank Reconciliation, Contacts (CRM), General Ledger, Inventory Control, Job Costing Projects, and Manufacturing (MRP). Under Manufacturing (MRP), the 'Activity' sub-menu is expanded, showing options like Machine Time Entry, Piece Rate Time Entry, and Time Entry. The main window title is 'OpenPro.com v9.0.0 DEMO (Language: English) LOGOFF'. The breadcrumb trail is 'Home > Manufacturing (MRP) > Activity > Time Entry'. The 'Time Card Entry' form contains the following fields:

Employee	Administrator Your
Start Time	11/27/2018 11:44
Location	OpenPro Samburg Bike Company
Activity	Regular Work
Work Order #	1345
WO Operation #	10
Machine Code	milling - Milling machine
Die Number	
% completed	0%
Notes	

Below the form is a green 'ADD' button.

When opening up a work order, you can allocate material to that work order by going to EDIT/VIEW BOM. The work order needs to be in WIP status.

Then you get the material used in the work order. It will open up the fields Actual quantity and Scrap Quantity.

Customer Logo

Bill of Materials for Work Order # 1345, Item FG200

Auto Issue Qty Scrap Items UP DOWN ADD SAVE

SEL	Seq No	Part Number	Description	UOM	Issue Method	Qty Per	Projected Quantity	Scrap Percent	Actual Quantity	Actual Scrap	Ref No	BOM Seq	Order
	10	RM1001	SHEET METAL	Pound	Bflush	4.00000	48.00000	0.00	0.00000	0.00000		- choose -	Add P.O.
	20	RM1200	METAL HANDLE RM1200 Metal handle bars	Each	Bflush	1.00000	12.00000	0.00	0.00000	0.00000		- choose -	Add W.O.
	30	RMSTEEL	RAW STEEL BARS RAW STEEL BARS	Pound	Bflush	4.13000	49.56000	10.00	0.00000	0.00000		- choose -	Add P.O. Add W.O.
	40	RM2001X4	RAW WOOD 1 X 4 RAW WOOD	Feet	Bflush	3.50000	42.00000	0.00	0.00000	0.00000		- choose -	Add P.O.
	50	BMPHANTOM	Raw Material Phantom Bill	Each	Bflush	2.00000	24.00000	0.00	0.00000	0.00000		- choose -	Add P.O. Add W.O.
	60	#1000	D1000 Special Roll Metal Grade_ GRADE NUMBER	Each	Bflush	36.40000	436.80000	10.00	0.00000	0.00000		- choose -	Add P.O. Add W.O.
	70	#1000	D1000 Special Roll Metal Grade_ GRADE NUMBER	Each	Bflush	15.50000	186.00000	10.00	0.00000	0.00000		- choose -	Add P.O. Add W.O.

If the Issue method is CALL then you must issue the components to the work order.

Work order Activity, Operations Update lets the shop know what stage the work order is in.

The screenshot displays the OpenPro software interface. On the left is a navigation menu with categories like Development, Admin, and Manufacturing (MRP). The main area shows the 'Time Card Entry' form with the following fields:

Employee	Administrator Your
Start Time	11/27/2018 11:44
Location	OpenPro Samburg Bike Company
Activity	Regular Work
Work Order #	1345
WO Operation #	10
Machine Code	milling - Milling machine
Die Number	
% completed	0%
Notes	

At the bottom right of the form is a green 'ADD' button.

During this entry, you scan in with bar code reader, the work order, operation number and quantity completed. Also can update the date and time for start and stop time.

Work order Machine time entry is to keep track of machine cost with the work order.

The screenshot displays the OpenPro software interface. On the left is a navigation menu with categories like Development, Admin, Bank Reconciliation, and Manufacturing (MRP). The Manufacturing (MRP) section is expanded to show 'Activity', which includes 'Machine Time Entry'. The main content area shows the 'Time Card Entry' form with the following fields:

Employee	Administrator Your
Start Time	11/27/2018 11:44
Location	OpenPro Samburg Bike Company
Activity	Regular Work
Work Order #	1345
WO Operation #	10
Machine Code	milling - Milling machine
Die Number	
% completed	0%
Notes	

An 'ADD' button is located below the Notes field.

To complete and close out a work order you must put in the quantity completed.

Work order : 1345

Type: Build

Part #: FG200 Revision #: 1

Name: FG200 Deluxe Mountain Bike

Description: Deluxe Mountain Bike with wood side rails

Dimensions: Width: 22.00 Height: 33.00 Depth: 33.00

Customer: Cocanut Oil Diet CO [Change Customer](#)

Reference #: SO: 8207 Line: 0002 [Change Order](#)

Unit of Measure: Feet

Warehouse: DEMO-OpenPro Samburg Bike Company

Lead Time	1	Quantity Ordered	12.0000	Quantity Completed	0.0000	New Quantity Completed	
Due Date	12/02/2018	Start Date / Time	12/01/2018 00:00:00	Completed Date		Priority	High
Issue By		Issue Date		Heat No		Heat Code	

Production Notes: Color: Blue Size: 17 Style: Lake Height: 54

Scrap Items

Enter in the New Quantity Completed, and that will move the finish goods into inventory and process all inventory and GL transactions for the work order.



The following pop-up screen will show you the quantity completed and allow you to post the transactions.

Based upon rules different backflush options show up.

Transaction Date

**Record Finished Items into Inventory**

Note: This page must be finished successfully before you can finished editing the W.O.

Work Order: 8689

[Issue Components](#)

Item: FG100B - FG100B OpenPro Mountain Bike NAME

Items finished: 1

Location: OpenPro Samburg Bike Company Bin:

Back Flush  Use All Bins  Back Flush All Levels  Back Flush Phantom Items

**Warning:Component Part RM1001 Inventory warning. The bin selected doesn't have sufficient quantity to fulfill this request. Inventory will be taken from other bins.**

**Warning:Component Part RM2001X4 Inventory warning. The bin selected doesn't have sufficient quantity to fulfill this request. Inventory will be taken from other bins.**

Then when you click on the Green POST button

32.33324 Items of RM1001 have been issued from store : DEMO, Bin:row1sta52 cost=0.11000  
4.50000 Items of RM2001X4 have been issued from store : DEMO, Bin:row1sta52 cost=3.44000  
1 Items of FG100B have been entered into Inventory with Material cost=116.4056( labor cost = 6.88561 Fixed Overhead Cost = 23164.71449 Variable Overhead Cost = 26901.3635 ).

Please notify the appropriate party(s) that sales quote 7436  
has been filled for item FG100B - FG100B OpenPro Mountain Bike NAME, quantity: 1


[Box Label Creation](#)

Finish goods inventory goes into stock and the components will be issued from stock, then you can print inventory control labels.

Then work order then can be closed if you made all the components.

## Other setup of manufacturing process

The manufacturing tables have details on each flag for the product routing, MRP flags, labor grades and cost codes. This also stores the work order priority flags, Options and status codes.



- Development
- Admin
- Bank Reconciliation
- Contacts (CRM)
- General Ledger
- Inventory Control
- Job Costing Projects
- Manufacturing (MRP)**
  - Activity
  - Costing Update
  - CRP Capacity
  - Engineering Change
  - Maintenance
    - Calendar Plan
    - Calendar Plan EDIT
    - Departments
    - Item Quick Add
    - MFG Calendar Load
    - MFG Calendar Master
    - Pay Activities
    - Pay Periods
    - Table
    - Table Type
    - WO Extract
    - WO Import
    - Work Centers
  - MPS Process
  - MRP Process
  - Quality
  - Reports
  - SFC Process
    - Bill of Materials
    - Bill of Ops
    - BOM Indented
    - BOM Indented PO
    - Item Fad
    - MFG Calendar
    - MFG Calendar Day
    - Production Report
    - SFC Calendar
    - Work Orders
    - Work Orders ALL Location
    - Work Orders ALL Location MRP
    - Work Orders forms print
    - Work Orders Listing
    - Work Orders sfc extract
    - Work Orders Status
    - Work Orders View
  - Payables
  - Payroll
  - Point Of Sale
  - PR Time Cards
  - Purchase Order
  - Receivables
  - Sales Orders
  - Tech Knowledge
  - Warehouse SD

Enable Autohide

OpenPro.com v9.4.0 DEMO (Language: English) LOGOFF

Search:  Go

List

[Add New](#)

Edit	Copy	Description	BACKFLSH	LOCATION	BFDRIILL	SERIALLOT	Rounding	Note
		BACKFLUSH	YES	YES	NO	%y%m%d%H%M%S	0.00000	Options that show up on the work order processing
		update item master cost_1 field	updcost1	N	0	0	0.00000	This rule uses Y or N on location field. Y to update cost N to not update cost on ic history file
		jobcost	yes	.	.	.	0.00000	shows job cost linking on work order
		bomindent	y	.	.	.	0.00000	display exploded bom on work order main screen with current quantities on materials
		Add labor cost to the product cost	LABCOST	Y	50760-000	.	0.00000	This will add the labor cost to the cost of the item from cost_2 of ic_items
		Fixed Cost Variance Account	COSTFIX	Y	50755-000	.	0.00000	If the flag is turned on then all cost variance will be posted to this account, if not then no cost variance will be poste
		Variable Cost Variance Account	COSTVAR	Y	50750-000	.	0.00000	If the flag is turned on then all cost variance will be posted to this account, if not then no cost variance will be poste
		Post LIFO FIFO AVG LIKE STD	COSTSTD	Y	.	.	0.00000	This will post the finish goods in as standard cost and not add up all the details cost and post to this the difference wi
		Work order do not allow over qty	QTYOVER	Y	.	.	0.00000	This flag if Y will make it so you can NOT issue more than what is scheduled to be completed on work order
		WIP Transfer	N	13200-000	005-012	.	0.00000	Go inventory move for items on bom items on work orders when status is changed to wip, bfdrill should be bin and location
		Combine PO with MRP	MRPONEPO	Y	.	.	5.00000	When generating a purchase order during MRP combine line items for same supplier
		Item Instruct Notes	ITEMINSTRUCT	Y	.	.	0.00000	Item instructions notes default off
		bom_indented_view	Y	.	.	.	0.00000	on work orders, have a bom indented view button with availability on the report
		inv_create	Y	.	.	.	0.00000	if work order is created for serial or lot item, if status is changed to wip, create items and display the serial and lot
		disable and do not show serial or lot	dis_q_inv	Y	.	.	0.00000	disable and do not show serial or lot number assignment after quantity complete amount is entered, only backflush options
		Add MOLDS TO THE SCREENS	SHOWMOLD	N	N	N	0.00000	This will add molds to the screen
		Configured cost add to main item	CONF COST	ALL	N	.	0.00000	For sales order configured options add the base cost of those items to the main item
		Labor cost from standards	LABSTAND	ALL	Y	.	0.00000	This is post using the standard cost from boo labor cost instead of using actual labor applied to the work order
		Auto Allocated the issue qty	AUTOALLOC	ALL	Y	.	0.00000	This is post issue qty on the work order bom screen and select oldest inventory first lot number serial numbers
		Show Material Shortage screen	MATSHORT	ALL	Y	.	0.00000	This will show material shortage on the work order screen to auto create PO and WO
		Start date default	STARTDATE	Y	0	0	2.00000	Startdate default to today plus ROUNDING Amount days
		END date default	ENDDATE	Y	0	0	3.00000	ENDDATE default to today plus ROUNDING Amount days
		Print from the custom forms folder	CUSTOMFORM	N	.	.	0.00000	Print from the custom forms folder
		update item master cost_all bucket field	updcostall	Y	0	0	0.00000	This rule uses Y or N on location field. Y to update cost N to not update cost on item master file cost 1, 2, 3, 4, 5 base
		Change Backflush all levels to PHANTOM	BACKFLPHA	Y	0	0	0.00000	With this rule it will only backflush all PHANTOM levels items that are flagged as NONINV
		Change Backflush to only use WHSE loc	BACKFLLOC	Y	0	0	0.00000	With this rule it will only backflush all components in the warehouse located on the work order header otherwise it used LOGGED
		Post labor cost to other cost bucket	LABCSTSEP	Y	50760-000	.	0.00000	This will add the labor cost to the one of the other cost buckets based upon the WHERE LABOR posting business rule
		Family of completed items options	FAMILYITEM	N	.	.	0.00000	This will give you an option when processing a work order and completing items to put in quantity for more than ONE finished goo
		Labor cost account by work center	LABBYWC	Y	.	.	0.00000	Labor Cost account by work center this will get the work center account and post for direct labor cost and oh labor cost
		MRP use plan orders and quantity	MRPPLAN	Y	.	.	0.00000	MRP use plan orders and quantity when this flag is turned on in Location with a Y it will check all MRPlan status for requiremen
		BOM Convert UOM for work order	UOMBOMS	N	.	.	0.00000	BOM Convert UOM for work order
		MRP loop Count	MRPLOOP	Y	4	.	0.00000	When generating a MRP it will use this rule to set the MRP Loop count from BFDRIILL column, Location column will use to turn o
		Show Phantoms items on wo BOM for MRP	MRPSHOPHAN	Y	.	.	0.00000	When Running MRP processing and find a phantom, grab those components and insert them into the WO of the product if this rule is
		Drill down Phantoms for MRP	MRPDDPHAN	N	.	.	0.00000	When Running MRP processing and find a phantom, grab those components and insert them into the WO of the product
		notes for Pick List,Routing,Traveler	PRINTADNOTES	Y	.	.	0.00000	Add notes with time stamp on Generate Pick List Routing,Traveler default off
		Work order default status	WODSTATUS	Plan	.	.	0.00000	When creating a WO from Sales order this will be the default status Plan, Firm Plan, W.I.P., Closed, Cancelled, TearDown or MRPI

This process will review the options for work order processing.

## Work Order Setup Flags

1<sup>st</sup> process is backflush processing, you can state what options you want to see when posting work order based upon these rules.

Back Flush

Use All Bins

Back Flush All Levels

Back Flush Phantom Items

POST

**WOOPTIONS - Work Order Options Record**

<b>Description</b>	BACKFLUSH defaults on work order
<b>BACKFLSH</b>	YES
<b>LOCATION</b>	YES
<b>BFDRILL</b>	NO
<b>SERIALLOT</b>	%y%m%d%Hf
<b>Rounding</b>	0.00000
<b>Note</b>	Options that show up on the work order processing defaults for back flushing components during processing.

SAVE

Seriallot is the format for the auto created serial numbers or lots numbers.  
Rounding is used to round up to how many digits.

Back Flush Phantom items is based upon the rule below.

**WOOPTIONS - Work Order Options Record**

<b>Description</b>	Change Backflush all levels to PHANTOM
<b>BACKFLSH</b>	BACKFLPHA
<b>LOCATION</b>	Y
<b>BFDRILL</b>	0
<b>SERIALLOT</b>	0
<b>Rounding</b>	0.00000
<b>Note</b>	With this rule it will only backflush all PHANTOM levels items that are flagged as NONINV

SAVE

## Work Order Setup Flags

For clients who use job costing and work orders you can turn on Job costing so they are linked together by turning on this flag.

**WOOPTIONS - Work Order Options Record**

Description	jobcost
BACKFLSH	yes
LOCATION	.
BFDRILL	.
SERIALLOT	.
Rounding	0.00000
Note	shows job cost linking on work order

We have many different costing options for material and labor that are detailed out in the manual OpenPro Application Manufacturing Costing Options.

Here we can talk about the basic ones like **Material cost**.

If you are running LIFO, FIFO and Avg inventory you can have the item file cost 1 (material cost) updated every time we run a work order.

**WOOPTIONS - Work Order Options Record**

Description	update item master cost_all bucket field
BACKFLSH	updcostall
LOCATION	Y
BFDRILL	0
SERIALLOT	0
Rounding	0.00000
Note	This rule uses Y or N on location field. Y to update cost N to not update cost on item master file cost 1, 2, 3, 4, 5 base

If you have the business rule Cost Buckets what cost goes where you can update all the cost buckets

Search    Type Code: Cost Buckets what cost goes where    Go

List

[Add New](#)

Edit	Copy	Description	MATERIAL	OTHER	LABOR	FIXEDOH	VAROH	Note	Delete
<a href="#">Edit</a>	<a href="#">Copy</a>	What cost buckets go where during rollup	COST1	COST5	COST2	COST3	COST4	This gives the customer the flexibility to move the cost from bucket to bucket during rollup process	<a href="#">Delete</a>

## Work Order Setup Flags

Update top level item cost options, you can have it so it takes standard cost from the finished goods item cost and uses that for each work order, or you can have it take the cost of the components add them up and put that in the finished goods top level item.

### WOOPTIONS - Work Order Options Record

<b>Description</b>	Configured cost add to main item
<b>BACKFLSH</b>	CONFCOST
<b>LOCATION</b>	ALL
<b>BFDRILL</b>	Y
<b>SERIALLOT</b>	.
<b>Rounding</b>	0.00000
<b>Note</b>	For sales order and WO configured options add the base cost of those component items to the main item

If CONFCOST does not exist or says Y in BFDRILL field it will take the finished goods top level item cost and use that cost for posting the finished goods top level item into inventory.

See below:

If CONFCOST has a N in the BFDRILL field then it will add up the components for the work order cost and post that to finished goods top level item into inventory.

### WOOPTIONS - Work Order Options Record

<b>Description</b>	Configured cost add to main item
<b>BACKFLSH</b>	CONFCOST
<b>LOCATION</b>	ALL
<b>BFDRILL</b>	N
<b>SERIALLOT</b>	.
<b>Rounding</b>	0.00000
<b>Note</b>	For sales order and WO configured options add the base cost of those component items to the main item

## Work Order Setup Flags

Other options are posting of labor, you can post direct or indirect labor, you can post a standard percentage, you can post actual labor to work orders and they will add that cost to the finished goods items.

Add labor cost to the product cost	LABCOST	Y	50760-000	.	0.00000	This will add the labor cost to the cost of the item from cost_2 of ic_items
Fixed Cost Variance Account	COSTFIX	Y	50755-000	.	0.00000	If the flag is turned on then all cost variance will be posted to this account, if not then no cost variance will be poste
Variable Cost Variance Account	COSTVAR	Y	50750-000	.	0.00000	If the flag is turned on then all cost variance will be posted to this account, if not then no cost variance will be poste
Labor cost from standards	LABSTAND	ALL	Y	.	0.00000	This is post using the standard cost from boo labor cost instead of using actual labor applied to the work order
Post labor cost to other cost bucket	LABCSTSEP	Y	50760-000	.	0.00000	This will add the labor cost to the one of the other cost buckets based upon the WHERE LABOR posting business rule

Other options are showing default status of the work order

Work order default status	WODSTATUS	Plan	.	.	0.00000	When creating a WO from Sales order this will be the default status Plan, Firm Plan, W.I.P., Closed, Cancelled, TearDown or MRPI
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### Auto setup default dates

Start date default	STARTDATE	Y	0	0	2.00000	Startdate default to today plus ROUNDING Amount days
END date default	ENDDATE	Y	0	0	3.00000	ENDDATE default to today plus ROUNDING Amount days

### MRP processing and Phantom items options

MRP use plan orders and quantity	MRPPLAN	Y	.	.	0.00000	MRP use plan orders and quantity when this flag is turned on in Location with a Y it will check all MRPlan status for requiremen
BOM Convert UOM for work order	UOMBOMS	N	.	.	0.00000	BOM Convert UOM for work order
MRP loop Count	MRPLOOP	Y	4	.	0.00000	When generating a MRP it will use this rule to set the MRP Loop count from BFDRILL column. Location column will use to turn o
Show Phantoms items on wo BOM for MRP	MRPSHOPHAN	Y	.	.	0.00000	When Running MRP processing and find a phantom, grab those components and insert them into the WO of the product if this rule is
Drill down Phantoms for MRP	MRPDDPHAN	N	.	.	0.00000	When Running MRP processing and find a phantom, grab those components and insert them into the WO of the product

## other manufacturing options Setup Flags

The screenshot displays the 'Company Locations' setup page in the OpenPro v9.0.0 DEMO application. The page features a navigation menu on the left with categories like 'Development', 'Admin', and 'Maintenance'. The main content area is titled 'Location' and contains a form with the following fields:

ID:	DEMO
Location Image:	Browse... No file selected.
Name:	OpenPro Samburg Bike Company
Address:	10061 Talbert Ave #200
Phone:	714-378-4603
Fax:	7149641491
Toll Free:	
Website:	
Email:	
City:	Fountain Valley
State:	CA
Zip:	92708
Country:	USA
Tax ID:	
Local Tax Reseller Number:	
Region:	West Coast
Tax:	0.07500
Default Sales Order Required Offset (days):	0
Fixed Overhead:	1.500000
Variable Overhead:	0.000000
Overhead Method:	Labor Time

The 'Default Location' section includes the following fields:

Bin Name:	row1sta52
Turn off City in Default Entry:	<input type="checkbox"/>
Turn off State in Default Entry:	<input type="checkbox"/>
Location Type:	STORES
Form Prefix:	

An arrow points to the 'Fixed Overhead' and 'Variable Overhead' fields, indicating their importance in the costing setup.

**Fixed and Variable overhead amounts needs to be setup by company. This is the percentage of the cost (labor, material and machine cost) that is used to calculate the total cost of the product.**

**Detail guide is setup to figure out costing options when processing work orders, using standard costing and other options.**

## other manufacturing options Setup Flags

In the manufacturing work order, you can drill down the detail cost.

The screenshot displays the OpenPro Manufacturing (MRP) Work Orders interface. The main content area shows details for Work order 1345, including fields for Type (Build), Part # (FG200), Revision # (1), Name (FG200 Deluxe Mountain Bike), Description (Deluxe Mountain Bike with wood side rails), Dimensions (Width: 22.00 Height: 33.00 Depth: 33.00), Customer (Cocanut Oil Diet CO), Reference # (SO: 8207 Line: 0002), Unit of Measure (Feet), and Warehouse (DEMO-OpenPro Samburg Bike Company). A sidebar on the left lists various system modules under 'Manufacturing (MRP)'. The main area also includes a 'Production Notes' section with a 'COST' button highlighted by a red arrow. Other buttons like 'Tasks', 'NOTE', 'SEE NOTE', 'Scrap Items', and '+SCREEN' are visible. The top navigation bar shows 'Home > Manufacturing (MRP) > Work Orders' and the user 'Your Administrator' is logged in.



Costs for Work Order # 1345, item FG200, Quantity: 12.0000 , Quantity Completed: 0.0000



**Material Costs**

Sequence No	Part	Unit Cost	Planned	Actual	Difference	% Difference	Quantity
10	RM1001 SHEET METAL	6.20	74.40	0.00	-74.40	-100.00%	0.00
20	RM1200 METAL HANDLE	0.30	3.60	0.00	-3.60	-100.00%	0.00
30	RMSTEEL RAW STEEL BARS	5.04	60.46	0.00	-60.46	-100.00%	0.00
40	RM2001X4 RAW WOOD 1 X 4	2.31	27.72	0.00	-27.72	-100.00%	0.00
50	RMPHANTOM Raw Material Phantom Bill	0.00	0.00	0.00	0.00	0.00%	0.00
60	d1000 D1000 Special Roll Metal	28.03	336.34	0.00	-336.34	-100.00%	0.00
70	d1000 D1000 Special Roll Metal	11.94	143.22	0.00	-143.22	-100.00%	0.00
<b>Direct Total</b>		53.81	645.74	0.00	-645.74	-100.00%	
<b>Total Material Cost</b>		53.81	645.74	0.00	-645.74	-100.00%	

**Labor Costs**

Sequence No	Operation	Work Center	Unit Cost	Planned	Actual	Difference	% Difference
20	Etch Copper	Cutting	0.60	8.49	0.00	-8.49	-100.00%
40	Quality Control Inspection	QC - San Sdgo	0.00	0.02	0.00	-0.02	-100.00%
50	DYEING	Paint wc	2.71	22.88	0.00	-22.88	-100.00%
60	Chassis Assembly	Package WC	0.44	5.00	0.00	-5.00	-100.00%
<b>Direct Total</b>			3.75	36.38	0.00	-36.38	-100.00%
<b>Fixed Overhead</b>			3.75	54.58	0.00	-54.58	-100.00%
<b>Total Labor Cost</b>			7.50	90.96	0.00	-90.96	-100.00%

**Labor Machine Costs**

Sequence No	Operation	Work Center	Unit Cost	Planned	Actual	Difference	% Difference
10	Edge Mill Operations	Bending	1.12	9.53	0.00	-9.53	-100.00%
30	Electroless Copper Plating	Bending	4.06	17.20	0.00	-17.20	-100.00%
<b>Direct Total</b>			5.18	26.73	0.00	-26.73	-100.00%
<b>Fixed Overhead</b>			7.77	40.09	0.00	-40.09	-100.00%
<b>Total Labor Machine Cost</b>			12.96	66.81	0.00	-66.81	-100.00%

**This cost is being added during the manufacturing process, as material is being issued, time card labor is being clocked in and out. And machine time is being added.**

## other manufacturing options Setup Flags

The manufacturing tables have details on each flag for the product routing, MRP flags, labor grades and cost codes. This also stores the work order priority flags, Options and status codes.

The screenshot displays the OpenPro web application interface. On the left is a vertical navigation menu with the following items: Development, Admin, Bank Reconciliation, Contacts (CRM), General Ledger, Inventory Control, Job Costing Projects, **Manufacturing (MRP)** (highlighted), Activity, Costing Update, CRP Capacity, Engineering Change, and **Maintenance** (highlighted). Under Maintenance, there are sub-items: Calendar Plan, Calendar Plan EDIT, Departments, Item Quick Add, MFG Calendar Load, MFG Calendar Master, Pay Activities, Pay Periods, **Table** (highlighted), Table Type, WO Extract, WO Import, and Work Centers. The main content area at the top right shows a browser window with the address bar containing "OpenPro.com v9.0.0 DEMO (Language: English) LOGOFF" and navigation icons. Below the address bar is a breadcrumb trail: Home > Manufacturing (MRP) > Maintenance > Table. A search bar is present with the text "Type Code: BOM Options" and a "Go" button.



**OpenPro ERP Software**

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