# **Work Orders**

A Work Order enables you to build an Assembly based on a Bill of Materials.

There are two types of work orders, although you will most likely only use one or the other.

- I. **Single warehouse:** All work order activity stays within one warehouse.
  - i. BOM components are drawn from the same warehouse that the finished good will be added to.
- II. <u>Multi-warehouse:</u> The system creates automatic warehouse transfers to move inventory between warehouses.
  - i. BOM components are transferred from the source warehouse to the work-in-process warehouse.
  - ii. When the assembly process is completed, the BOM components are drawn from the work-in-process warehouse and the finished good is added to the destination warehouse.
  - iii. This approach can be helpful when dealing with long-cycle builds or when you wish to have a clear understanding of the value and quantity of work-in-process inventory.

The following is applicable to either type of Work Order:

- BOM components & quantities can be adjusted on-the-fly, if necessary.
- Work Orders can include soft costs such as labor or other non-Inventory items.
- A "Work Order Process" (e.g. Step 1, Step 2, Step 3) can be added to the Product BOM and passed through to the Work Order.

# Setup

# GL Accounting settings

- 1. Navigate to **Administration ► System Setup**.
- 2. Select Inventory & Marketing from the drop-down menu.
- 3. There are three GL Accounts to enter:
  - Work Order Setup (optional): The Work Order Setup account allows you to enter a "setup fee" on the BOM. This is a <u>flat fee</u> per work order. It does not change with the number of units being built. This account is not required in order to use the Work Order function.

- Work Order Passthrough (required): The account will be *debited* when components are drawn out of inventory and *credited* when the finished good is added to inventory.
- **Exploded WO Balancing (required for WO explodes)**: This account functions just as the Work Order Passthrough account does except it only applies to exploding an existing Assembly.
- 4. Click **OK** to save.

	System Setup	
	Inventory & Marketing 😒	
Inventory Setup Cost Adjustment » 81000-000-000 (E) Scrap Default » 80000-000-000 (E)	Exclude from Available  Reserved Sales  Reserved Warehouse Transfer  Reserved Data Entry Reserved Backorder	
Warehouse Transfer Freight » 82000-000-000 (E) Accrued Inventory Payable » 22000-000-000 (L)	<ul> <li>✓ Reserved Work Order</li> <li>✓ Reserved Locked</li> </ul>	
External Inventory Adjustment » 81000-000-000 (E) New Lot Prefix	Warehouse Transfers  Auto Pick Quantity	
LOT PO Lot Prefix	Lot Locking	
PO_LOT Costing Method Moving Average	Decimal Precision	
Work Order Setup » 51000-000-000 (E) Work Order Pass Through »	Cost 2 Sell	
51111-000-000         (E)           Exploded WO Balancing »           51111-000-000           (F)	Quantity 2	
ustom Form Sandbox		K

# Warehouse settings

- 1. Navigate to **Administration > System Configuration**.
- 2. Select **Work Order** from the drop-down menu.
- 3. Find the setting **Use multiple warehouses:** 
  - If you want to use a **single warehouse** on each Work Order, set this to **False**. *This is the default setting*.
  - If you want to enable **multiple warehouses** on each Work Order, set this to **True**. You will also need to set each of the warehouse settings:
    - **Default warehouse: Component:** The warehouse where the BOM components will be drawn from.
    - **Default warehouse: Finished Good:** The warehouse where the Finished Good Assembly will be added to when complete.
    - **Default warehouse: Production:** The warehouse where BOM components will be transferred to during work-in-process.

4. Click **OK** to save.

	Sustan		configuration
	System Ma	rketing Product O	pportunity Line Items Custom Lists
Work Order	0		
Group	Name	Value	Desc
Work Order	Auto-fill Related Sales Orders	Ask	Fill open Sales Orders and Back Orders when a Work Order is saved.
Work Order	Custom Alpha 01 Field Label	Custom Alpha 01	The label for custom alpha field 01 on the Work Order screen.
Work Order	Custom Alpha 02 Field Label	Custom Alpha 02	The label for custom alpha field 02 on the Work Order screen.
Work Order	Custom Alpha 03 Field Label	Custom Alpha 03	The label for custom alpha field 03 on the Work Order screen.
Work Order	Custom Alpha 04 Field Label	Custom Alpha 04	The label for custom alpha field 04 on the Work Order screen.
Work Order	Custom Alpha 05 Field Label	Custom Alpha 05	The label for custom alpha field 05 on the Work Order screen.
Work Order	Custom Boolean 01 Field Label	Custom Checkbox 01	The label for custom checkbox 01 on the Work Order screen.
Work Order	Custom Boolean 02 Field Label	Custom Checkbox 02	The label for custom checkbox 02 on the Work Order screen.
Work Order	Custom Boolean 03 Field Label	Custom Checkbox 03	The label for custom checkbox 03 on the Work Order screen.
Work Order	Custom Boolean 04 Field Label	Custom Checkbox 04	The label for custom checkbox 04 on the Work Order screen.
Work Order	Custom Boolean 05 Field Label	Custom Checkbox 05	The label for custom checkbox 05 on the Work Order screen.
Work Order	Custom Date 01 Field Label	Custom Date 01	The label for custom date field 01 on the Work Order screen.
Work Order	Custom Date 02 Field Label	Custom Date 02	The label for custom date field 02 on the Work Order screen.
Work Order	Custom Date 03 Field Label	Custom Date 03	The label for custom date field 03 on the Work Order screen.
Work Order	Custom Real 01 Field Label	Custom Real 01	The label for custom real field 01 on the Work Order screen.
Work Order	Custom Real 02 Field Label	Custom Real 02	The label for custom real field 02 on the Work Order screen.
Work Order	Custom Real 03 Field Label	Custom Real 03	The label for custom real field 03 on the Work Order screen.
Work Order	Custom Real 04 Field Label	Custom Real 04	The label for custom real field 04 on the Work Order screen.
Work Order	Custom Real 05 Field Label	Custom Real 05	The label for custom real field 05 on the Work Order screen
Work Order	Default warehouse: Component	Downtown (Comp)	Which warehouse is the default Component warehouse.
Work Order	Default warehouse: Finished Good	Black Mountain (Fin)	Which warehouse is the default Finished Good warehouse.
Work Order	Default warehouse: Production	Mountain Village (WIP)	Which warehouse is the default Production/WIP warehouse.
Work Order	Use multiple warehouses	False	Use multiple warehouses for component, product and finished good.
			Cancel

# **Work Order instructions**

## 1. Create a New Work Order

Navigate to Warehouse Management ➤ Work Order.

Click the **Create New Record** icon or use the keyboard shortcut Command + N.

Quick Search			Filter by			Result				Show All	
(None select	ed)	0	(None selected)			이 New list				Undo	
Starting Ending			Cross reference No related selections			Find with	in			Power Search	
						<ul><li>Add to</li><li>Remove from</li></ul>				New List	
գ∣⊹ ✓	0   = -		* 0-	Open recor	d in new w	vindow					
D atus P	roduct Name	Part Number	Open_Date	Required_Date	Quantity	Cost Per Unit	Cost Total	EntryBy			

## 2. Work Order Info (Inventory)

#### **Header area:**

- **Part Number & Product Name**: This is the Assembly item that will be added to Inventory after this Work Order is posted.
- **Quantity**: The quantity of Finished Good items to build. Any shortage of Assembly Components will appear in red in the *Qty Avail After Build* column in the detail area.
- Warehouse: The fields you see here are determined by the <u>System Configuration setting</u> <u>above</u>.
  - If you have this set to *False*, you'll see only a single warehouse field. You can enter the warehouse manually here.
  - If you have this set to *True*, you'll see three warehouse fields where each corresponds to the warehouses entered in System Configuration.
- Lot Number & Expiration Date: You can designate a Lot Number & Expiration Date to assign to the Finished Assembly Product.
- **Open Date**: The date the Work Order is created (or planned).

- **Required Date**: The date that the Assembly build should be completed by.
- **Complete/Post Date**: The date that GL Transactions related to the Work Order will be posted.

#### **Status:**

**<u>CLICK THIS LINK</u>** for more information about inventory levels for each work order status below.

- **Planned**: The status of a newly created work order is **Planned**. There is neither any GL activity nor any Inventory activity at this status.
- **In Process**: BOM component inventory will be *reserved* for the Work Order (if this option is selected in System Setup).
- **Picked**: BOM component inventory will be *drawn* from stock. All inventory transactions are in non-posted status. The individual transactions will be posted automatically when the Work Order is posted.
- **Ready to Post**: Finished good assembly inventory will be added to stock. All inventory transactions are in non-posted status. The individual transactions will be posted automatically when the Work Order is posted.

#### **Totals:**

- **Setup:** This is a flat setup fee entered on the Product BOM.
- **Material:** Inventory value of the BOM components.
- **GL:** Total value of non-inventory work order charges.
- Total: Total value of the work order including all of the above charges.
- **Per Unit:** Total value of one unit including all of the above charges.

#### Inventory tab:

- 1. The warehouse area will display either one or three warehouse fields, depending on your setup.
- 2. The line items on the Inventory tab will reflect the Assembly Product's Recipe Components (entered on the Product record). These can be modified if necessary. For example, if you have a shortage of a particular component, you can delete that line item and add a new component as a replacement.
- 3. You can change the quantities of each component.
- 4. You can designate a Lot/Serial Number to draw from for each component.

# 2.1. Single Warehouse example

	•										
					Work Order Info						
	umber »			Open Date	Required Date			Custom Real 01	Custom	n Alpha 01	
4-1				10/10/22	00/00/00	31 00/00/0		0			
	ct Name »			Complete/Post Date	Custom Date			Custom Real 02	Custom	n Alpha 02	
	ssembly		🖉	10/17/22	00/00/00	31 00/00/0		0			
uanti	ity				Notes			Custom Real 03	Custom	n Alpha 03	
								0			
	ouse »							Custom Real 04	Custom	n Alpha 04	
ownto	own (Com	p)						0			
ot Nu	imber »		p Date »					Custom Real 05	Custom	n Alpha 05	
		00/00	/00					0			
					Inventory	Non-Invento	ry				
<b>d</b> 1	Û										
_	Sub WO	Part Number	Product Name	Qty Avail After Build	Std. BOM Qty	WO BOM Qty	Qty Required	Unit Cost	WO Total Cost	Lot#/SN	Location Sc
1		1001	1001	28	1	1	1	10.86	10.86		Sto
2		1002	1002	35	2	2	2		22.92		Sto
3		1003	1003	28	3	3	3		36.6 40		Sto
4		1004	1004	13	5	5			22.5		Sto
6		1006	1006	14	6	6	6	4.5	27		Sto
7		1007	1007	13	7	7	7		70		Sto
8		1008	1008	12	8	8	8		80		Sto
9		1009	1009	-1	10	9	9		90 100		Sto
11	х	TSA-1	Test Sub Assembly	-1	1	1	1		1030		WO
					~						
									-		
			Custom Chec	kbox 01			emo llo world this is	the recipe memo		otals Setup	\$50.00
_	Planned		Custom Chec				no wond this is	che recipe memo		Material	\$1.529.88
_		ss		There is a	shortage of tw	0					
0	In Proce		Custom Chec		ponents.					GL	\$415.00
0			Custom Chec	kbox 04						Total	\$1,994.88
•	Picked			LL OF						Per Unit	\$1,994.88
•		e/RTP	Custom Chec	KDOX U5							
•	Picked	e/RTP	Custom Chec	KDOX US							

### 2.2. Multi Warehouse example

					Work Order Inf	Other Info	Process				
Dort mu	umber »			Open Date	Required Dat			Custom Real 01	Custom	Alpha 01	
rart nu FA-1	umber »			10/10/22 (31)	00/00/00	I 00/00/0		O CUSTOM Real OT	Custon	I Alpha UT	
			<i>•</i>								
	t Name »			Complete/Post Date	Custom Date 00/00/00	e 01 Custom		Custom Real 02	Custom	Alpha 02	
	ssembly				_	31 00/00/0		0			
Quantit	ty			Whse: Component	Notes			Custom Real 03	Custor	n Alpha 03	
		1		Downtown (Comp)				0			
				Whse: Work In Process	s			Custom Real 04	Custom	n Alpha 04	
			-	Mountain Village (WIP)				0			
ot Nur	mber »	Lot Ex	p Date »	Whse: Fin. Good				Custom Real 05	Custom	Alpha 05	
		00/00	0/00	Black Mountain (Fin)				0			
						Alex Income					
					Inventory	Non-Invento	ory				
<b>+</b> f											
	Sub WO	Part Number	Product Name	Qty Avail After Build	Std. BOM Qty	WO BOM Qty	Qty Required	Unit Cost	WO Total Cost	Lot#/SN	Location Sc
1		1001	1001	38	1	1	1	11	11		Sto
2		1002	1002	35	2	2		2 12	24		Sto
3		1003	1003	28	3	3		13	39 56		Sto
4		1004		33	4	4		14	75	0	Sto
6		1005	1005 2	14	6	6		0	0		Sto
7		1007	1007	13	7	7	~		70	-	Sto
8		1008	1008	12	8	8		3 10	80		Sto
		1009	1009	0	9	9	9	10	90		Sto
9			1010	-1	10						
9 10	~					10	10		100		Sto
9	x	TSA-1	Test Sub Assembly	-1	1	10	10		100 1030		Sto WO
9 10	x										
9 10	x										
9 10 11						1			1030	intals	
9 10 11			Test Sub Assembly	-1		1 N	emo	1030	1030	otals	wo
9 10 11 Status			Test Sub Assembly	kbox 01	'	I N	emo		1030	Setup	\$50.00
9 10 11 Status	s Planned	TSA-1	Custom Chec	kbox 01 kbox 02 There is a	shortage of tw	I N	emo	1030	1030		wo
9 10 11 Status	s	TSA-1	Test Sub Assembly	kbox 01 kbox 02 There is a	shortage of tw	I N	emo	1030	1030	Setup	\$50.00
9 10 11 Status	s Planned	TSA-1	Custom Chec     Custom Chec     Custom Chec     Custom Chec     Custom Chec	kbox 01 kbox 02 kbox 03 BOM comp	shortage of tw	I N	emo	1030	1030	Setup Material GL	\$50.00 \$1,575.00 \$415.00
9 10 11 Status	s Planned In Proce Picked	TSA-1 SS	Custom Chec     Custom Chec	kbox 01 kbox 02 kbox 03 BOM comp kbox 04	shortage of tw	I N	emo	1030	1030	Setup Material	\$50.00 \$1,575.00 \$415.00 \$2,040.00
9 10 11 Status	s Planned In Proce	TSA-1 SS	Custom Chec     Custom Chec     Custom Chec     Custom Chec     Custom Chec	kbox 01 kbox 02 kbox 03 BOM comp kbox 04	shortage of tw	I N	emo	1030	1030	Setup Material GL	\$50.00 \$1,575.00 \$415.00

### 3. Work Order Info (Non-Inventory tab)

If the Product BOM contains non-Inventory GL Accounts, they will appear here.

- **GL Account Code & Name**: You can enter a GL account to charge any soft costs for the Work Order.
- WO BOM Qty: The quantity of the non-Inventory items for the Work Order.
- **Unit Cost**: The cost of any non-Inventory items for the Work Order.
- **WO Total Cost:** The sum of the items in this column will tie out to the GL amount in the *Totals* section.

•			Work Order	Nork Order IE	o Process				
rt number »		Open Date	Required I		om Date 02	Custom Real 01		ustom Alpha 01	
A-1 oduct Name »		Complete/Post Da			0/00 🛐	Custom Real 02		ustom Alpha 02	
st Assembly							0	astorn Alpha oz	
uantity			Notes			Custom Real 03		ustom Alpha 03	
1							0		
arehouse » wntown (Comp)						Custom Real 04		ustom Alpha 04	
t Number » L	ot Exp Date »					Custom Real 05	0	ustom Alpha 05	
	00/00/00						0		
<b>4 8</b>			Invento	ry Non-Inve	ntory				
Description	GL Account Code	GL Account Name	Std. BOM Qty	WO BOM Qty	Qty Required	Unit Cost	WO Total Cost		
desc1 desc2	72000-000-000 54000-000-000	Office Supplies Contract Labor	1 20	1 20	1 20	15 20	15 400		
itatus			_		Memo			Totals	
	Custom Ch	neckbox 01				is the recipe mem	0	Setup	\$50.00
<ul> <li>Planned</li> </ul>	Custom Ch	neckbox 02			in the month of the			Material	\$1.529.88
	Custom Ch	neckbox 03						GL	\$415.00
<ul> <li>In Process</li> </ul>		neckbox 04						Total	\$1,994.88
<ul> <li>In Process</li> <li>Picked</li> </ul>	Custom Ch								
		neckbox 05						Per Unit	\$1.994.88
<ul> <li>Picked</li> </ul>		neckbox 05						Per Unit	\$1,994.88

### 4. Process tab

- The Process is derived from the Product BOM. Here on the work order, you can manage the Process tasks as it relates to this work order without affecting the default BOM.
  - **Assign**: You can assign a Process step to an employee.
  - **Start**: This assigns the step a start date.
  - **Complete**: This assigns the step a completed date.

You can also drill into the detail by double-clicking on any step.

- <b>(</b>	A	ssign	Start	Complete			Info Process wn the Alt/Option key to drag a step and adjust the sequence	
Seq Step			Description	Assigned To	Start Date		Completed By	
1 Stag		gather	the parts	Cliff	10/10/22	10/10/22		
	embly	assemb	ole the parts					
3 QA		check t	he build quality		00/00/00	00/00/00	0	

### 4.1. Work Order Process detail

Upon drilling in to the step detail, you can see more information such as the time/date started, time/date completed and short & long descriptions There are also a number of custom fields that can be leveraged in many different ways.

•	Work Order ID 5	;	
rocess Information			
Process Status       Assigned     Date Started       Cliff     10/10/22       Completed     Date Completed       Cliff     10/10/22       Seq.     Step Name       1     Staging	Time Started 00:00:00 Time Completed 00:00:00 Custom Aloha 01 Label	Custom_Date_01 Label 00/00/00 Custom_Date_02 Label 00/00/00 Custom Text 01 Label	Custom Boolean 01 Label Custom Boolean 02 Label Custom Boolean 03 Label
Short Description gather the parts	Custom Alpha 02 Label		
Long Description Gather all of the required parts and	Custom Alpha 03 Label		
materials. Stage them in the production area. Assembly will begin next week.	Custom Aloha 04 Label Custom Aloha 05 Label		
	Custom Real 01 Label	Custom Text 02 Label	
	Custom Real 02 Label		
	Custom Real 03 Label		
	Custom Real 04 Label		
	Custom Real 05 Label 0		
			Cancel OK