

## **Attaching a Routing and Bill of Material (BOM) to a Work Order**

### **Overview**

After a work order is entered, a routing and BOM needs to be attached to the work order.

#### **Routings**

A routing lists manufacturing operations required to make the item and the approximate time each operation should take to complete. Each operation will be assigned to a “work center”. A work center is an area within a CSI shop where manufacturing occurs. A work center can be defined as a machine, group of machines, a shop area or even the entire shop. Most CSI shops have only one work center that will include the entire shop. However some shops may have more than one work center. For example, the LCC wood shop will have a work center for the CNC router, a work center for the edgebander, and a work center for all other traditional shop operations. A routing for a CNC product may similar to the following:

<b>Operation Sequence</b>	<b>Description</b>	<b>Time</b>
1	CNC Router	2.00 Machine Hours
2	Edgebander	1.75 Machine Hours
3	LCC wood shop	3.00 Labor Hours

Routings can be created for each item and also each Branch/Plant. For example, the same bookcase could be built in the OCC wood shop and the LCC wood shop using different processes. At OCC the bookcase may have one operation that indicates that the bookcase would be built using the traditional machinery. At LCC the routing may instruct the bookcase to first be cut in the CNC work center and final building, sanding and assembly to be completed in the general LCC wood shop work center.

#### **Bill of Material (BOM)**

A BOM provides a parts list that for materials required to build an item. The BOM will be used by inventory control to plan material requirements and plan transfers of material to the shop. The shop will use the BOM to help guide allocation of materials to the work order.

BOMs can be created for each item and also specific for each Branch/Plant. For example (hypothetical), the same desk could be built in the LCC wood shop and the NSP wood shop. At LCC the BOM could list all raw materials required to build the desk. However suppose NSP did not have the capability to make dovetailed drawers. The NSP BOM could list drawers as a completed item that it acquires from another shop instead of being broken down into raw materials. All other BOM materials would be listed out as normal.

## NIS Policies

The tasks in this documentation provide end users with the tools to enter data and collect data in NIS. It is the responsibility of the agencies to comply with State Statutes, Federal Rules and Regulations, and State policies. For further information concerning State Statutes and policies, please refer to both internal agency resources and the Department of Administrative Services website: <http://www.das.state.ne.us/>.

## Navigation

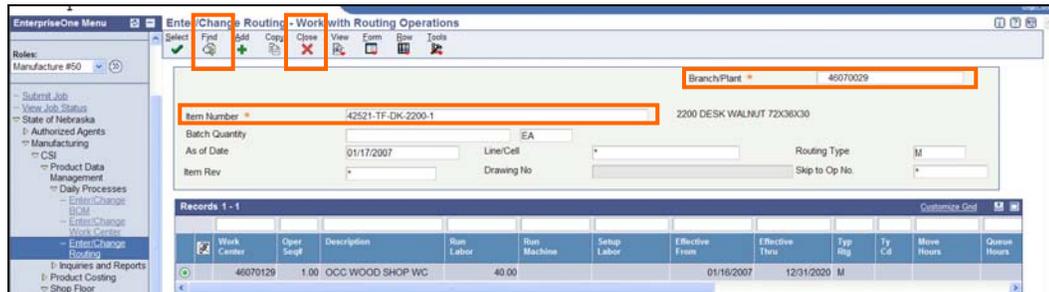
NIS State of Nebraska > Manufacturing > CSI > Shop Floor Management > Daily Processes > Enter/Change Routing

NIS State of Nebraska > Manufacturing > CSI > Shop Floor Management > Daily Processes > Enter/Change BOM

-  If it is unknown whether or not a routing and BOM have been entered for an Item No. – Branch/Plant combination, the first step is to verify if they exist.
-  Go to Manufacturing >CSI >Product Data Management > Daily Processes > Enter/Change Routing

## Steps

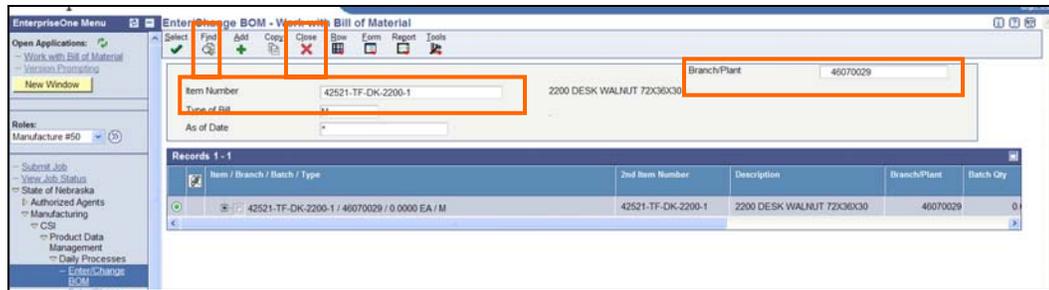
The **Enter/Change Routing – Work with Routing Operations** screen appears.



Work Center	Oper Sngl	Description	Run Labor	Run Machine	Setup Labor	Effective From	Effective Thru	Typ Rtg	Ty Cd	Move Hours	Queue Hours
46070129	1.00	OCC WOOD SHOP WC	40.00			01/16/2007	12/31/2020	M			

1. To verify the **Routing** exists:
  - Enter Item Number.
  - Enter Branch/Plant.
  - Click Find.
  - All existing routings will be displayed in the rows on the bottom half of the screen.
  - Click Close.
2. Go to Manufacturing > CSI > Product Data Management > Daily Processes > Enter/Change BOM

The **Enter/Change BOM – Work with Routing Operations** screen appears.



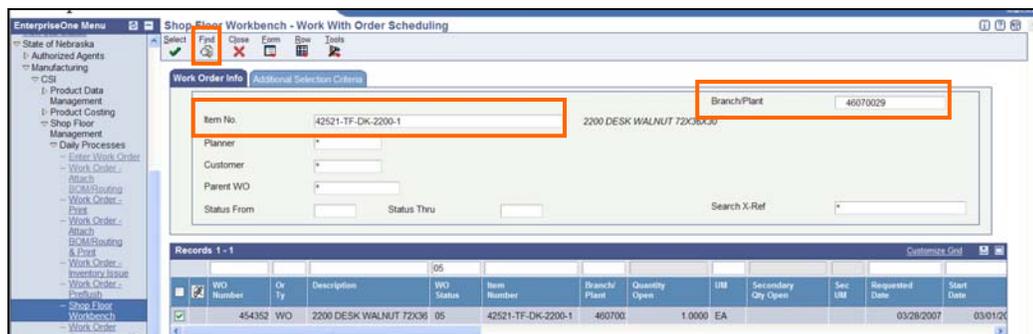
3. To verify **BOM** exists:

- Enter Item Number.
- Enter Branch/Plant.
- Click Find.
- All existing BOMs will be displayed in the rows on the bottom half of the screen.
- Click Close.

 In order to attach a **BOM & Routing** you must know the **Work Order** number.

4. Go to Manufacturing > CSI > Shop Floor Management > Daily Processes > Shop Floor Workbench

The **Shop Floor Workbench – Work With Order Scheduling** screen appears:



5. If the **Work Order** number is unknown you can look it up by using the following steps:

- Enter **Item No.**, **Branch/Plant** and/or other known fields to narrow the search for existing **Work Orders**.

 Newly created (not processed) work orders should have **WO Status of 05**.

- Click **Find**.
- Write down the appropriate **WO Number(s)** from the results.

**Attaching BOM/Routing**

1. Go to Manufacturing > CSI > Shop Floor Management > Daily Processes
2. Select **Work Order – Attach BOM/Routing**.

The **Version Prompting** screen appears:



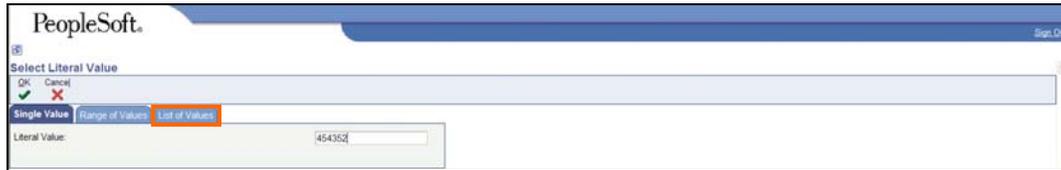
3. Check the box for **Data Selection**.
4. Click **Submit**.

The **Data Selection** screen appears.



5. In the **Right Operand** pull down box, click **Literal**.

The **Select Literal Value** screen appears.



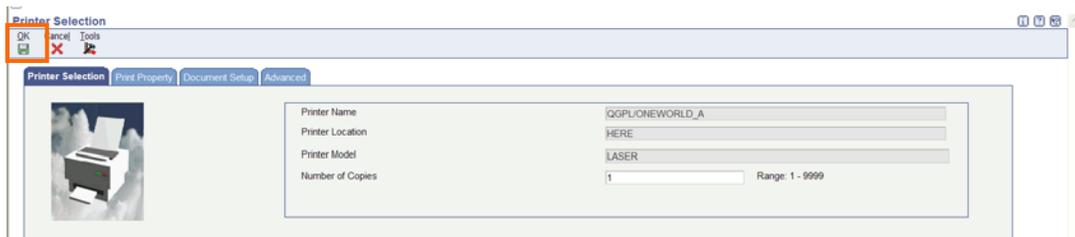
6. Click the **List of Values** tab.
7. Enter your **WO Numbers**.
8. Click **OK**.

The **Data Selection** screen reappears.



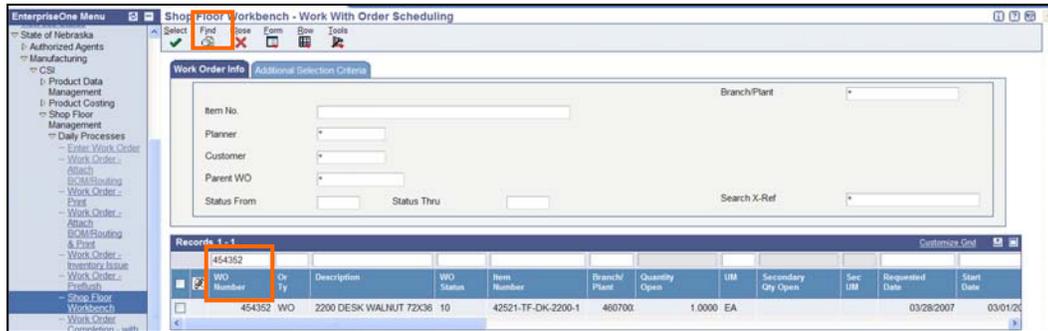
9. Click **OK**.

The **Printer Selection** screen appears.



10. Click **OK** on the **Printer Selection** screen.
11. Go to Manufacturing > CSI > Shop Floor Management > Daily Processes > Shop Floor Workbench

The **Shop Floor Workbench – Work With Order Scheduling** screen appears:



12. Enter the **WO Number** in the QBE line.

13. Click **Find**.

The **WO Status** should now be 10.

14. Click **Close**.