**EXERCISE**

**PP 1: Display Stock/Requirements List**

**Exercise** Use the SAP Easy Access Menu to display the Stock/Requirements List.  
**Time** 5 min

**Task** Review the material status of your Deluxe Touring bike (finished good) in the Dallas plant using the Stock/Requirements list.

**Name (Position)** Lars Iseler (Production Order Worker)

The Stock/Requirements list contains up-to-date information on the current status of inventory on hand, requirements, and receipts. It is a dynamic list that allows you to view changes made to material status.

To review the material status, follow the SAP Easy Access menu path:

**Menu path**

Logistics ► Production ► Production Planning ► Demand Management ► Environment ► Stock/Requirements List

The following screen will appear.

First of all, you need to find the material number(s) for your Deluxe Touring bikes. In order to do so, click in the Material field and press **F4** (or click on the search icon next to the field). This will produce the Material Number search screen.
EXERCISE

Make sure that you are on the Material by Material Type tab. If not, you can use the icon (in the top-right corner) to display a list of all search tabs available.

In the Material Type field, select **Finished Product (FERT)**. In order to display your Deluxe Touring bikes only, you need to define two more search criteria. First, in the Material Description field type **Deluxe***. Second, in the Material field (which is the field for the unique material number) type ***###**. Remember to replace ### with your three-digit number, e.g. *014 if your number is 014.

Compare your entries with the screen below before pressing Enter or clicking on to start the search.

The result of this search should give you a list of:
a) all finished goods,

b) which name (short description) starts with Deluxe,

c) which material numbers end with your number (###).

You should get a list of three different Deluxe Touring bikes – black, red and silver (please note that the material numbers in your screen will be different). Double-click on your red Touring bike which will copy its unique material number (DXTR3###) into the Material field.

In addition to the material number, in the Plant field select GBI’s manufacturing facility in Dallas (DL00). Then, press Enter or click on .

You should be displayed a screen similar to the one shown below.

As you can see, GBI has currently no red Deluxe Touring bikes on stock. Repeat the same procedure for the other two deluxe bikes (black and silver).

How many black Deluxe Touring Bikes are available in Dallas?
How many silver Deluxe Touring Bikes are stored in the DL00 plant?

Click on 🎯 to return to the SAP Easy Access Menu.
EXERCISE

PP 2: Display Bill of Material

Exercise Use the SAP Easy Access Menu to display a bill of material. 

Task Review the components of your black Deluxe Touring bike and the components of the Touring Aluminum Wheel Assembly within the finished bike bill of material.

Name (Position) Jun Lee (Production Supervisor)

A bill of material (BOM) is a list of the components that are needed to create a given product. The list contains the description, the quantity, and unit of measure. The BOM can contain items of different item categories such as stock items, non-stock items, document items, and text items.

To review a bill of material, follow the menu path:

   Logistics ► Production ► Master Data ► Bills of Material ► Bill of Material ► Material BOM ► Display

This will produce the following screen.

The system should have already defaulted in the material number (DXTR1###) and the plant (DL00) from the previous exercise. It also assumes that you would like to display the BOM valid today (note Valid
From and Valid to dates). In addition, the system requests the BOM usage. Click in the BOM Usage field and use F4 to display possible usage types. Select usage type 1 for plant DL00. Then, press Enter to display the BOM of your black Deluxe Touring bike.

The assembly indicator (column Asm; see circled area above) marks the item with components that have their own BOM. In this case, it is the Touring Aluminum Wheel Assembly.

Double-click on this checkbox (indicator for Wheel Assembly TRWA1###). This will produce the following screen.
In the Display assembly screen, click on **Continue**. This will display the materials that make up the assembly of TRWA1###.

Repeat the procedure for your red and the silver Deluxe Touring bike to identify the differences in their bills of materials. You may open another (parallel) session to compare the BOMs in separate screens (use the **icon in the system tool bar).

Click on **twice to return to the SAP Easy Access Menu.
**EXERCISE**

PP 3: Display Multi-Level Bill of Materials

**Exercise** Use the SAP Easy Access Menu to display a multi-level BOM. **Time** 5 min

**Task** Review the BOM for your black Deluxe Touring bike from a multi-level hierarchy level.

**Name (Position)** Jun Lee (Production Supervisor)

To display a multi-level BOM, follow the menu path:

**Menu path**

- **Logistics ► Production ► Master Data ► Bills of Material ► Reporting ► BOM Explosion ► Material BOM ► Multilevel BOM**

In the following screen, enter (or find) Material **DXTR1###** (replace ### with your number), Plant **DL00**, and BOM Application **PP01** (Production-General). Then, click on to display the BOM structure for your bike valid today. If the system requests a quantity, enter 1.

| Explosion line | Item | Component number | Object description | Qty | Comp. Qty (Qun) | Unit | Est. Est.
|----------------|------|------------------|-------------------|-----|----------------|------|--------
| 1              | 0010 | TWWA1000         | Touring Aluminum Wh. | 2   | EA L           |      |        |
| .2             | 0010 | TRTR1000         | Touring Tube       | 2   | EA L           |      |        |
| .2             | 0020 | TRTR1000         | Touring Tube       | 2   | EA L           |      |        |
| .2             | 0040 | TRTRH1000        | Touring Tube       | 2   | EA L           |      |        |
| .2             | 0045 | TRTRH1000        | Hex Nut 5 mm       | 2   | EA L           |      |        |
| .2             | 0050 | LWTH1000         | Lock Washer 5 mm   | 4   | EA L           |      |        |
| .2             | 0060 | BOL7100          | Socket Head Bolt 5x20 | 2 | EA L |      |        |
| 1              | 0020 | TRFL1000         | Touring Frame-Black | 1   | EA L |      |        |
| 1              | 0020 | OGMH1000         | Derailleur Gear Assembly | 1 | EA L |      |        |
| 1              | 0040 | TRSK1000         | Touring Seat Kit   | 1   | EA L |      |        |
| 1              | 0050 | TR-901000        | Touring Handlebar | 1   | EA L |      |        |
| 1              | 0060 | PEDL1000         | Pedal Assembly     | 1   | EA L |      |        |
| 1              | 0070 | CHA1000          | Chain              | 1   | EA L |      |        |
| 1              | 0080 | BRKT3000         | Brake Kit          | 1   | EA L |      |        |
| 1              | 0090 | WDCT1000         | Warranty Document  | 1   | EA L |      |        |
| 1              | 0300 | PKG3000          | Packaging          | 1   | EA L |      |        |

Click on to go back to the initial screen. There, you click on (View). On the following screen, in the Display field group select **Variable list** and click on .

**Variable list**
After reviewing the components of your Finished Bike, find and select the following item in the system menu:

**Goto ➤ Graphic**

This should produce the following BOM hierarchy graphic.

You can use the Zoom in and Zoom out buttons to resize the graphic.

Click on to exit the graphic screen. Then, click on again to return to the SAP Easy Access Menu.
**EXERCISE**

**Exercise** Use the SAP Easy Access Menu to display a routing.

**Task** Review the routing for your black Deluxe Touring bike.

**Name (Position)** Jun Lee (Production Supervisor)

A routing is a series of sequential operations carried out to produce an end product. Routings contain information on where work is to be performed, steps that need to be completed, and time lines assigned for each operation.

To review a routing, follow the menu path:

**Logistics ► Production ► Master Data ► Routings ► Routings ► Standard Routings ► Display**

Enter Material **DXTR1###** and Plant **DL00**. Then, click on **to display** the following list of operations.

Select **CompAllot** to display the list of components. None of them is assigned to any specific operation (note that column Oper./Act. is empty).
Select ✖ Operation to go back to the operation overview. Then, click on ✖.

This will display the following operation graphic.

Click on ✖ to go back to the operation overview. Then, find the following system menu item:

**Extras ► Scheduling ► Schedule**

This should produce the following screen.
Enter Scheduling type 1 and Lot size 10. Click on ✓. In the following screen, find or enter overview variant 00000000001 (Operation segments). Confirm your entry with ✓.

In order to view the schedule in a Gantt chart, click on ▶. Find the following system menu item:

**Time unit ▶ Minute**

Also, display the legend by clicking on Legend.

Click on ✗ and on Yes to quit the Gantt chart. Then, click on ✗ to return to the SAP Easy Access Menu.
EXERCISE

PP 5: Display Routing/BOM in Engineering Workbench

Exercise Use the Engineering Workbench to display a routing and a BOM.

Task Review the BOM and routing simultaneously.

Name (Position) Jun Lee (Production Supervisor)

The Engineering Workbench (EWB) provides an environment where you have the ability to create, change, and delete BOM and routings. More importantly, it gives us the ability to create work lists and work on specific parts of a BOM or routing without locking the entire object.

To review BOMs and routings simultaneously, follow the menu path:

Logistics ► Production ► Master Data ► Engineering Workbench

In the following window, use the F4 help to find and select Current Working Area FK (Test Work Area). Then, click on 🔄.

In the EWB: Selection Criteria for BOM Headers screen, enter (or find) Material DXTR1### (replace ### with your number) and Plant DL00. Then, click on 🔄. If the system requests a Change number in a separate screen, leave it blank and click on 🔄.

In the EWB: BOM Headers Overview screen, if the 🔄 icon is not grayed out, click on it to activate the browser. If the system requests an Application, enter PP01 and click on 🔄.

In order to see the icons 🔄 and 🔄, use the mouse to widen the browser window (as shown below).
Click on (left) to select the line DXTR1##, DL00, Deluxe Touring Bike (black). Then, click on to expand the tree completely. This might take a few seconds and will result in the following screen.
The subtree marked with a blue square comprises the entire BOM for your Deluxe Touring Bike, the subtree marked with a red square lists all routing operations.

Double-click on operation **0020 (Attach seat to frame)** to call up specific information. Here, you could change the routing details for this operation if necessary.
Click on 📚 and on Yes to return to the SAP Easy Access Menu.
**EXERCISE**

### PP 6: Display Work Center

<table>
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<th>Exercise</th>
<th>Use the SAP Easy Access Menu to display a work center.</th>
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<tr>
<td>Task</td>
<td>Review a work center in GBI’s plant in Dallas.</td>
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<tr>
<td>Name (Position)</td>
<td>Jun Lee  (Production Supervisor)</td>
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A work center is a location where operations are carried out for a production order. Capacities (setup, machine, and labor) are assigned to work centers so that they can be allocated and consumed within an order in a controlled and predictable manner. The work center capacity is created in and assigned to a single work center.

To review a work center and the capacity assigned to it, follow the menu path:

- **Logistics ➤ Production ➤ Master Data ➤ Work Centers ➤ Work Center ➤ Display**

Enter Plant **DL00**. In the Work center field, use the **F4** help and Enter to display all work centers in Dallas. In the search results, double-click on the DL Assembly work center to select it which should copy its number (**ASSY1000**). Click on **✓**.

On the Basic Data tab, find out who is the person responsible.

On the Default Values tab, click in the Control key field (**ASSY**) and select **F4**. On the following screen, single-click on the ASSY. Then, select **ASSY** which indicates what data is required when ASSY is used.
Select ✔ Continue. Click on the Scheduling tab.

On the Scheduling tab, click in the Processing formula field and select ▶️ Form (Display formula). After acknowledging the formula, press ✔️ to continue.

After selecting ▶️ Form... (Test formula), enter Operation Quantity 100 EA, Base Quantity 1, No. of Splits 2, Setup 7 MIN, and Labor 7 MIN. Then, select ✅ (Calculate). The following screen will appear.

Click on ✅ to continue. Did the Processing formula work correctly?
Select to go back.

On the Costing tab, which Controlling Area and Cost Center is this work center assigned to?

Click on to return to the SAP Easy Access Menu.