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)

Stock/Requirements List

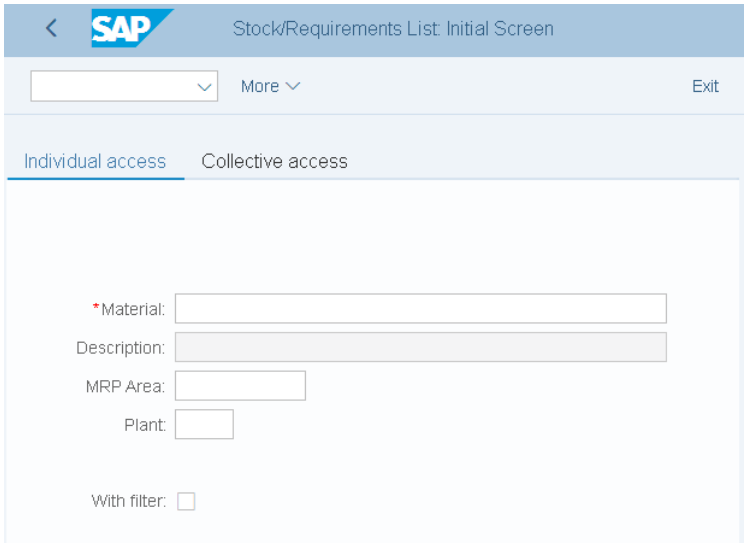
The Stock/Requirements list contains up-to-date information on the current status of inventory on hand, requirements, and receipts. It is a dynamic list that allows you to view changes made to material status.

Menu path

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

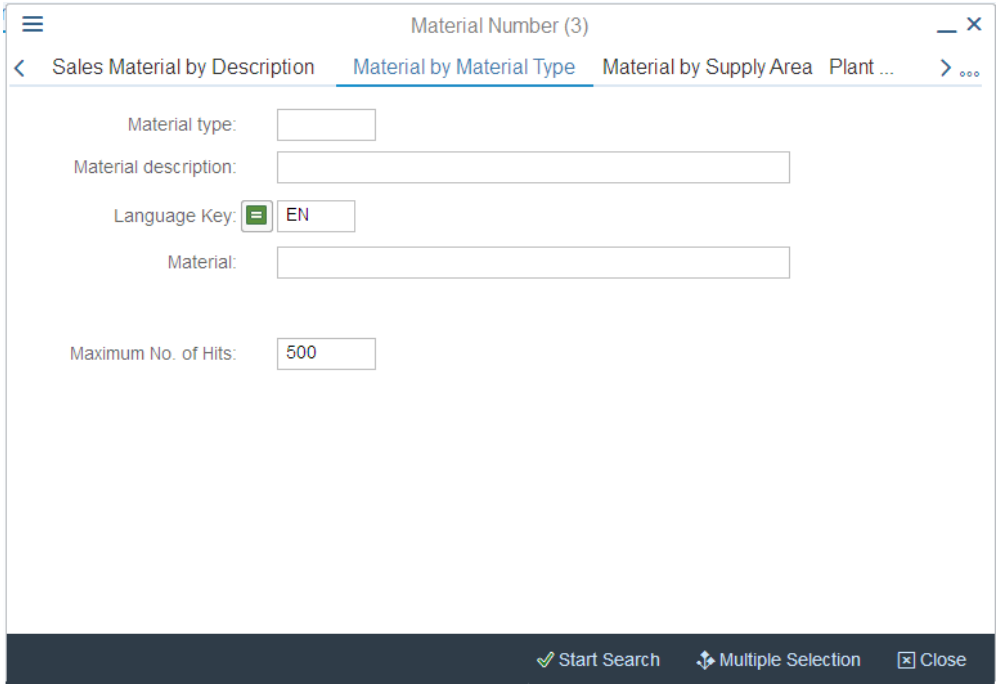
Logistics ► Production ► Production Planning ► Demand Management ► Environment ► Stock/Requirements List

The following screen will appear.



F4

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.



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.

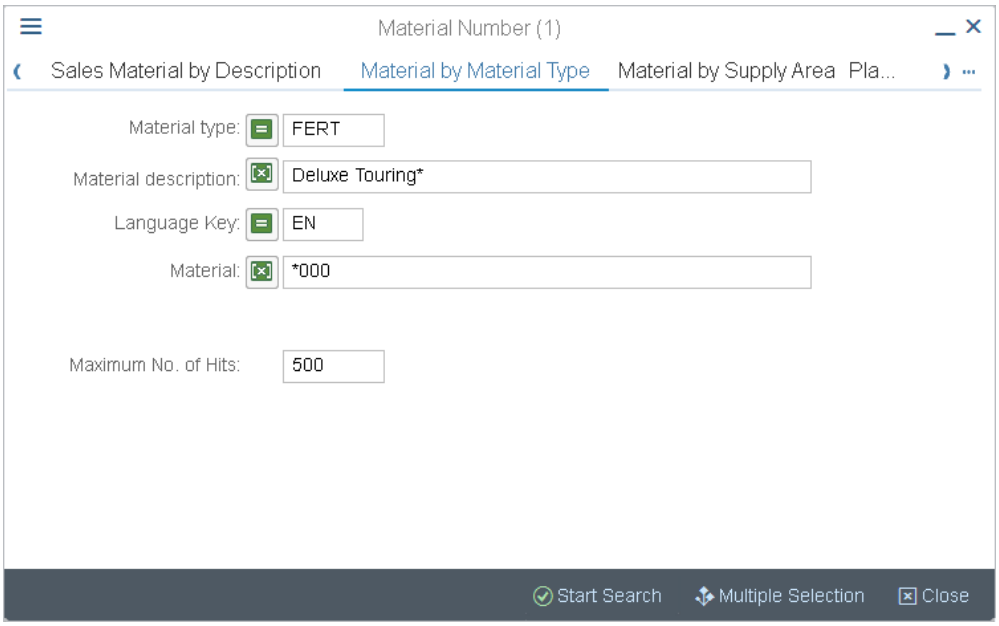
In the Material Type field, select **Finished Product** (**FERT**). In order to display your Deluxe Touring bikes only, you need to define two more search criteria. First, in the Material Description field type **Deluxe Touring***. Second, in the Material field (which is the field for the unique material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

Finished Product

Deluxe*

*###

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

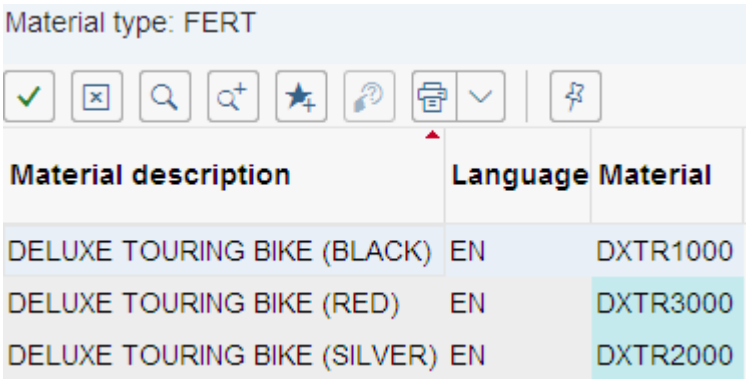


The result of this search should give you a list of:

a) all finished goods,

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

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

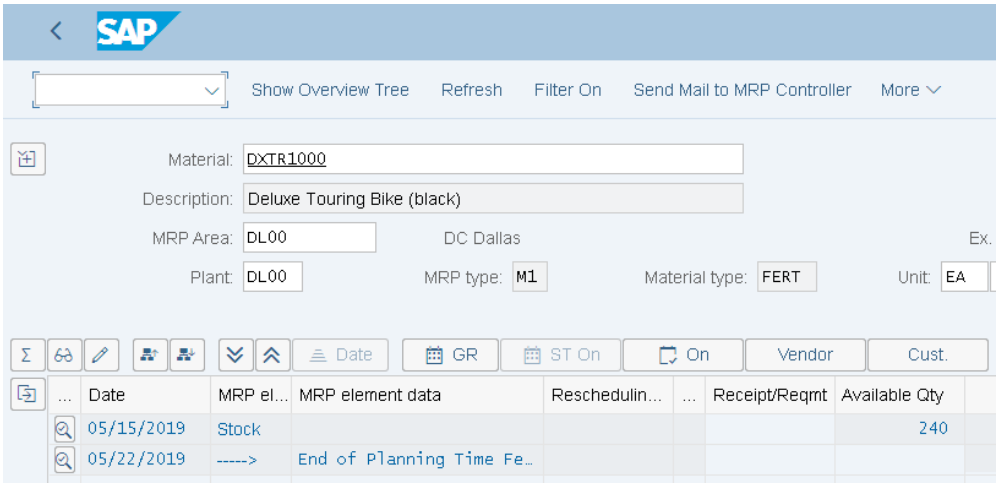


You should get a list of three different Deluxe Touring bikes – black, red and silver (please note that the material numbers in your screen will be different). Double-click on your black Touring bike which will copy its unique material number (**DXTR1###**) into the Material field.

DXTR1###

In addition to the material number, in the Plant field select Global Bike's manufacturing facility in Dallas (**DL00**). Then, press Enter or click on Continue.. A screen similar to the one shown below should be displayed.

DL00



As you can see, Global Bike has currently 240 black Deluxe Touring bikes on stock. You might see a different amount based on the case studies you did before. Repeat the same procedure for the other two deluxe bikes (red and silver).

How many red Deluxe Touring Bikes are available in Dallas?

_____ pieces

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

_____ pieces

Click on Exit to return to the SAP Easy Access Menu.

PP 2: Display Bill of Material

Exercise Use the SAP Easy Access Menu to display a bill of material. **Time** 5 min

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)

Bill of Material (BOM)

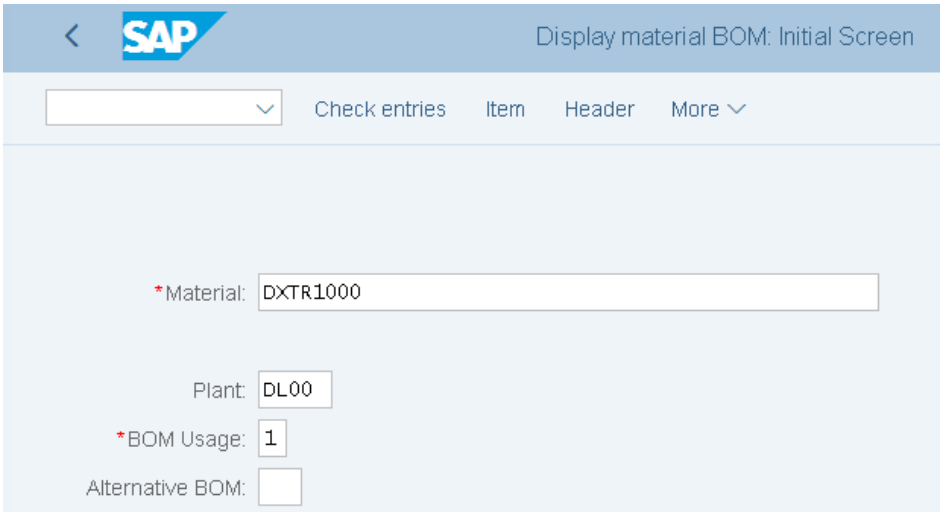
A bill of material (BOM) is a list of the components that are needed to create a given product. The list contains the description, the quantity and unit of measure. The BOM can contain items of different item categories such as stock items, non-stock items, document items, and text items.

Menu path

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

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

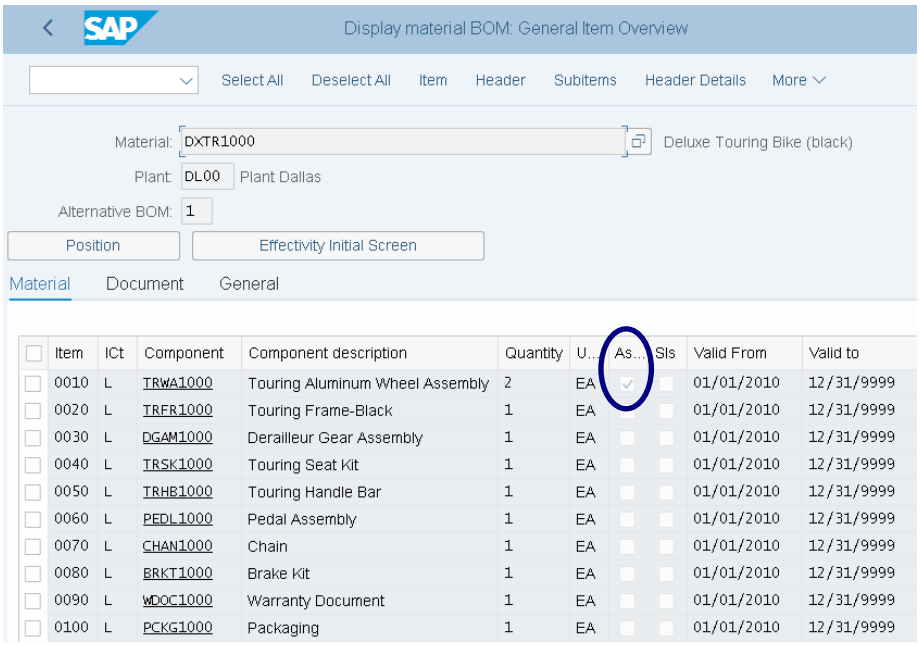
This will produce the following screen.



DXTR1###
DL00

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 (please note that the material numbers in your screen will be different).

F4
1

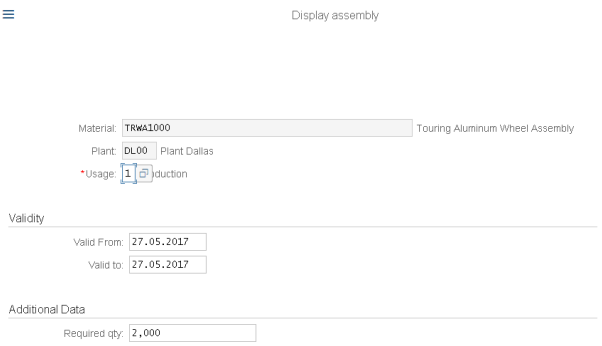


Item	ICt	Component	Component description	Quantity	U...	As...	Sls	Valid From	Valid to
0010	L	TRWA1000	Touring Aluminum Wheel Assembly	2	EA	✓		01/01/2010	12/31/9999
0020	L	TRFR1000	Touring Frame-Black	1	EA			01/01/2010	12/31/9999
0030	L	DGAM1000	Derailleur Gear Assembly	1	EA			01/01/2010	12/31/9999
0040	L	TRSK1000	Touring Seat Kit	1	EA			01/01/2010	12/31/9999
0050	L	TRHB1000	Touring Handle Bar	1	EA			01/01/2010	12/31/9999
0060	L	PEDL1000	Pedal Assembly	1	EA			01/01/2010	12/31/9999
0070	L	CHAN1000	Chain	1	EA			01/01/2010	12/31/9999
0080	L	BRKT1000	Brake Kit	1	EA			01/01/2010	12/31/9999
0090	L	WDOC1000	Warranty Document	1	EA			01/01/2010	12/31/9999
0100	L	PCKG1000	Packaging	1	EA			01/01/2010	12/31/9999

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.

TRWA1###



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 (to do so choose the Menu Path **More ► System ► New GUI Window**).

Click on Exit twice to return to the SAP Easy Access Menu.

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

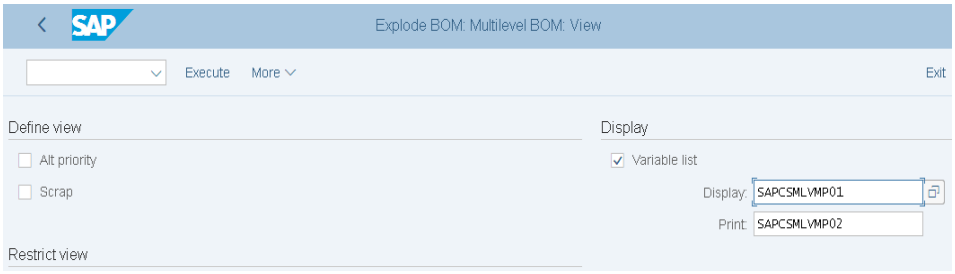
In the following screen, enter (or find) Material **DXTR1###** (replace ### with your number), Plant **DL00**, and BOM Application **PP01** (Production-General). Then, click on Execute to display the BOM structure for your bike valid today. If the system requests a quantity, enter **1**.

DXTR1###
DL00
PP01

1

Explosion level	Item	Obj...	Component number	Object description	Ovfl	Comp. Qty (CUn)	Un	Ict	Ex.
.1	0010		TRWA1000	Touring Aluminum Wheel ...		2	EA	L	
..2	0010		TRTR1000	Touring Tire		2	EA	L	
..2	0020		TRTB1000	Touring Tube		2	EA	L	
..2	0030		TRWH1000	Touring Aluminum Wheel		2	EA	L	
..2	0040		HXNT1000	Hex Nut 5 mm		2	EA	L	
..2	0050		LWSH1000	Lock Washer 5 mm		4	EA	L	
..2	0060		BOLT1000	Socket Head Bolt 5x20mm		2	EA	L	
.1	0020		TRFR1000	Touring Frame-Black		1	EA	L	
.1	0030		DGAM1000	Derailleur Gear Assembly		1	EA	L	
.1	0040		TRSK1000	Touring Seat Kit		1	EA	L	
.1	0050		TRHB1000	Touring Handle Bar		1	EA	L	
.1	0060		PEDL1000	Pedal Assembly		1	EA	L	
.1	0070		CHAN1000	Chain		1	EA	L	
.1	0080		BRKT1000	Brake Kit		1	EA	L	

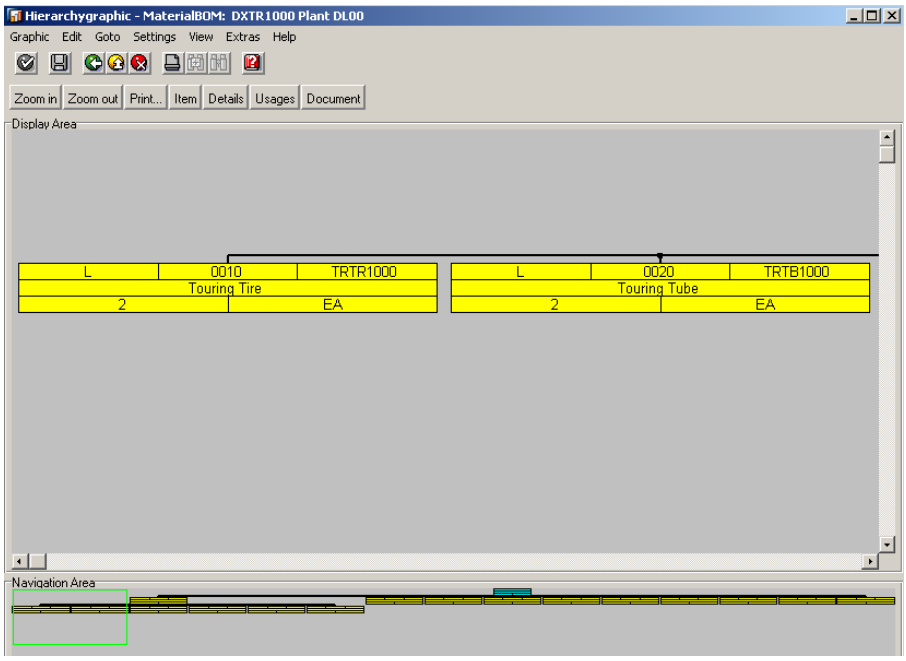
Click on ◄ to go back to the initial screen. There, you click on View. On the following screen, in the Display field group select **Variable list** and click on Execute. Variable list



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

More ► 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 Exit again to return to the SAP Easy Access Menu.

PP 4: Display Routing

Exercise Use the SAP Easy Access Menu to display a routing. **Time** 10 min

Task Review the routing for your black Deluxe Touring bike.

Name (Position) Jun Lee (Production Supervisor)

Routing

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.

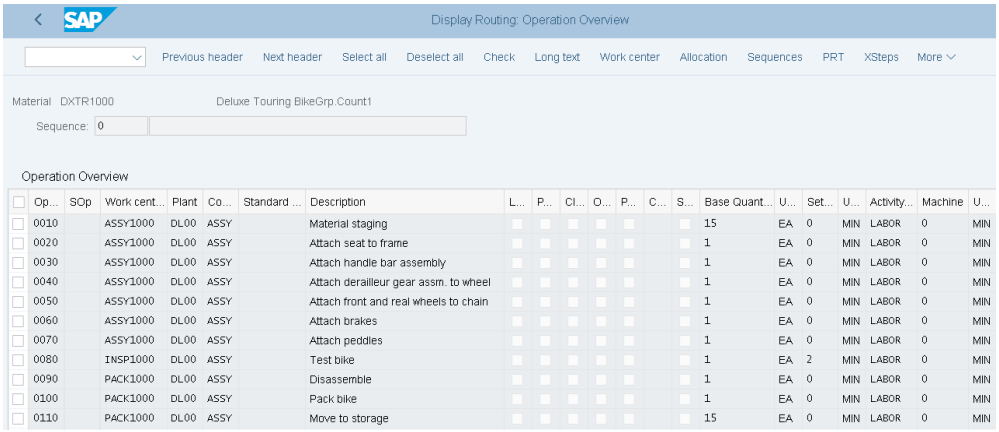
Menu path

To review a routing, follow the menu path:

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

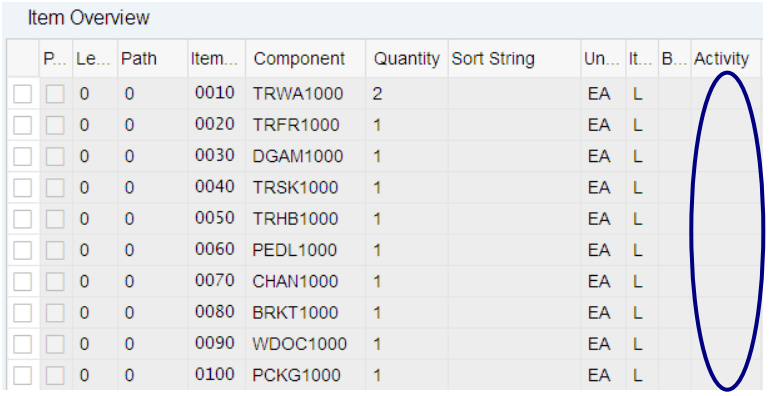
DXTR1###
DL00

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



Op...	SOp	Work cent...	Plant	Co...	Standard ...	Description	L...	P...	Cl...	O...	P...	C...	S...	Base Quant...	U...	Set...	U...	Activity...	Machine	U...
0010		ASSY1000	DL00	ASSY		Material staging								15	EA	0	MIN	LABOR	0	MIN
0020		ASSY1000	DL00	ASSY		Attach seat to frame								1	EA	0	MIN	LABOR	0	MIN
0030		ASSY1000	DL00	ASSY		Attach handle bar assembly								1	EA	0	MIN	LABOR	0	MIN
0040		ASSY1000	DL00	ASSY		Attach derailleur gear assm. to wheel								1	EA	0	MIN	LABOR	0	MIN
0050		ASSY1000	DL00	ASSY		Attach front and real wheels to chain								1	EA	0	MIN	LABOR	0	MIN
0060		ASSY1000	DL00	ASSY		Attach brakes								1	EA	0	MIN	LABOR	0	MIN
0070		ASSY1000	DL00	ASSY		Attach peddles								1	EA	0	MIN	LABOR	0	MIN
0080		INSP1000	DL00	ASSY		Test bike								1	EA	2	MIN	LABOR	0	MIN
0090		PACK1000	DL00	ASSY		Disassemble								1	EA	0	MIN	LABOR	0	MIN
0100		PACK1000	DL00	ASSY		Pack bike								1	EA	0	MIN	LABOR	0	MIN
0110		PACK1000	DL00	ASSY		Move to storage								15	EA	0	MIN	LABOR	0	MIN

Select Allocation to display the list of components. None of them is assigned to any specific operation (note that column Activity is empty).

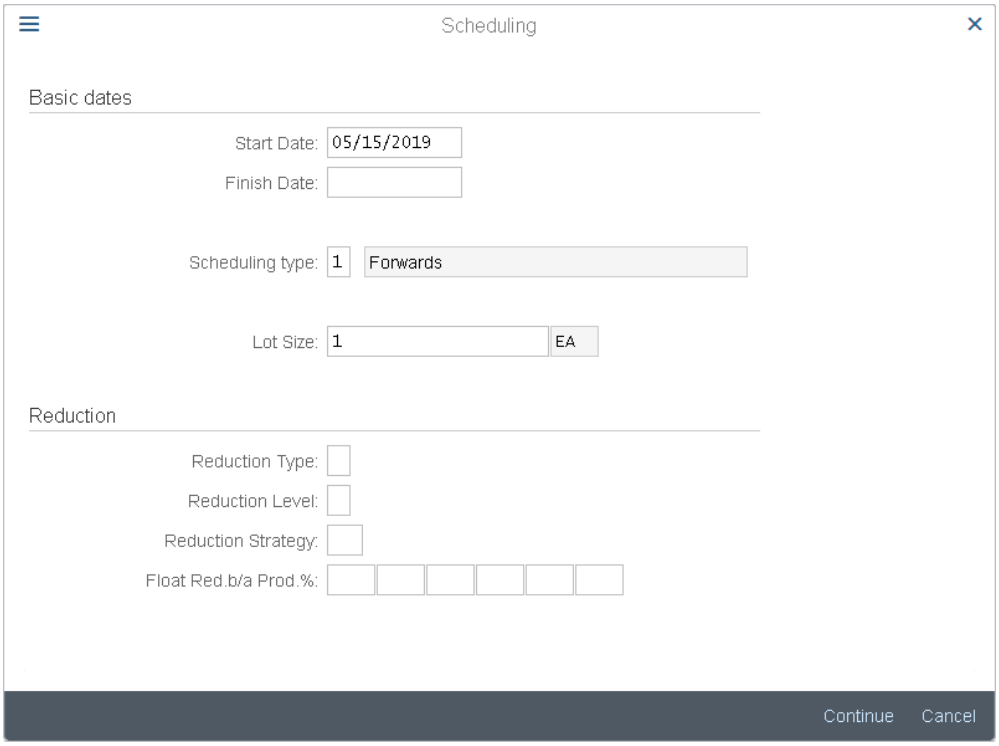


P...	Le...	Path	Item...	Component	Quantity	Sort String	Un...	It...	B...	Activity
0	0		0010	TRWA1000	2		EA	L		
0	0		0020	TRFR1000	1		EA	L		
0	0		0030	DGAM1000	1		EA	L		
0	0		0040	TRSK1000	1		EA	L		
0	0		0050	TRHB1000	1		EA	L		
0	0		0060	PEDL1000	1		EA	L		
0	0		0070	CHAN1000	1		EA	L		
0	0		0080	BRKT1000	1		EA	L		
0	0		0090	WDOC1000	1		EA	L		
0	0		0100	PCKG1000	1		EA	L		

Select Operation to go back to the operation overview. Then, find the following system menu item:

More ► Extras ► Scheduling ► Schedule

This should produce the following screen.



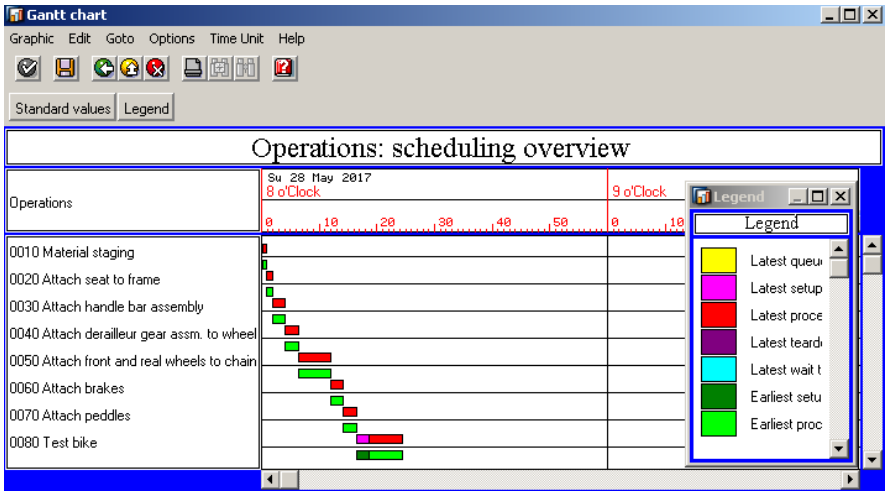
Enter Scheduling type **1** and Lot size **10**. Click on Continue. In the following screen, find or enter overview variant **000000000001** (Operation segments). Confirm your entry with Continue.

1
10
000000000001

In order to view the schedule in a Gantt chart, click on Gantt chart. 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 Exit to return to the SAP Easy Access Menu.

Yes

PP 5: Display Work Center

Exercise Use the SAP Easy Access Menu to display a work center. **Time** 15 min

Task Review a work center in GBI's plant in Dallas.

Name (Position) Jun Lee (Production Supervisor)

Work center

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.

Menu path

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

Logistics ► Production ► Master Data ► Work Centers ► Work Center ► Display

DL00
F4

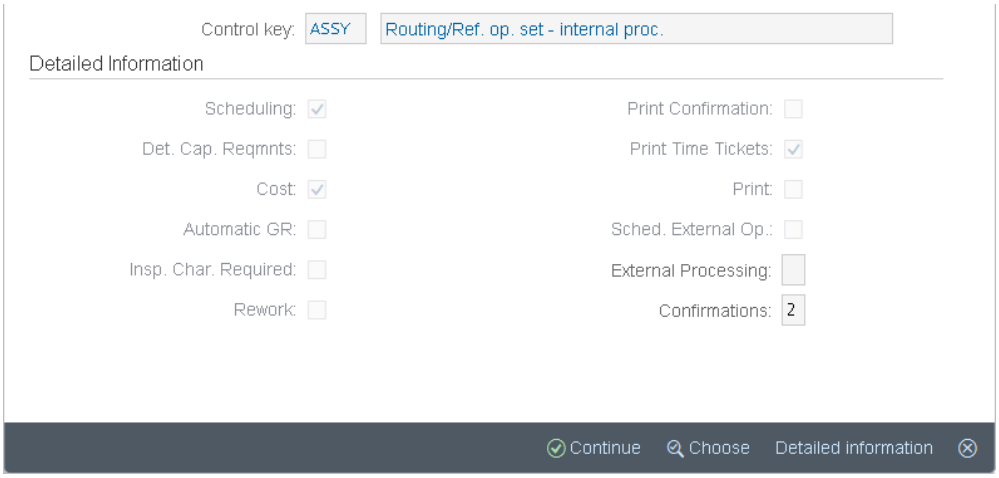
ASSY1000

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 Defaults.

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

ASSY
F4

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 Detailed information which indicates what data is required when ASSY is used.

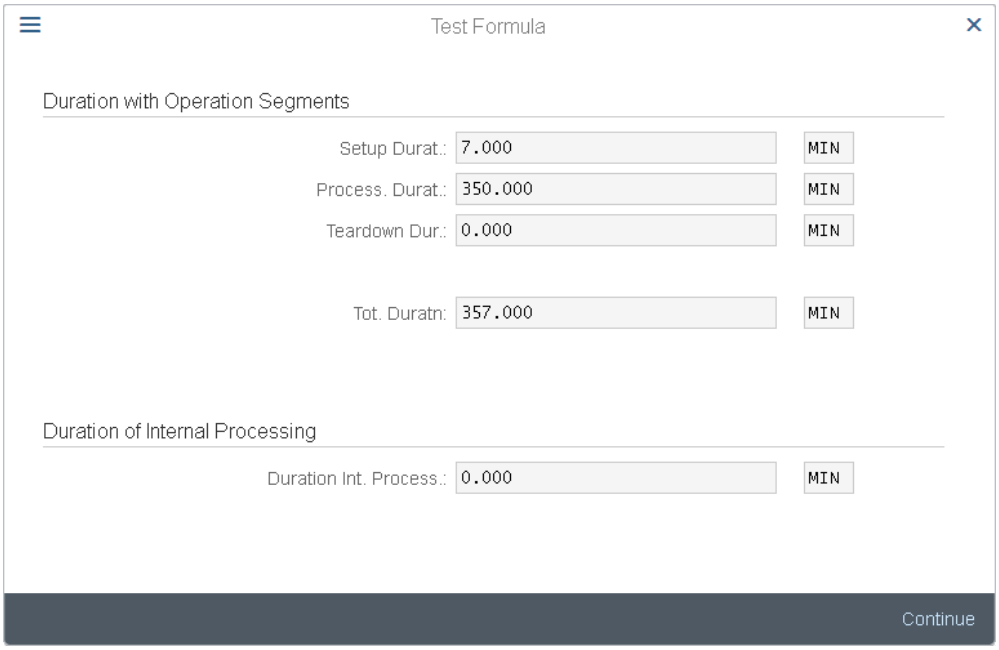


Select Continue.. Click on the Scheduling tab.

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

After selecting Formula (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.

100 EA
1
2
7 MIN
7 MIN



Click on Continue to continue. Did the Processing formula work correctly?

```
Labor
*
Operation quantity
/
Base quantity
/
Operation splits
```

(((7 * 100) / 1) / 2) = 350

Select End Formula Test to go back.

Click on Exit to return to the SAP Easy Access Menu.