

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.

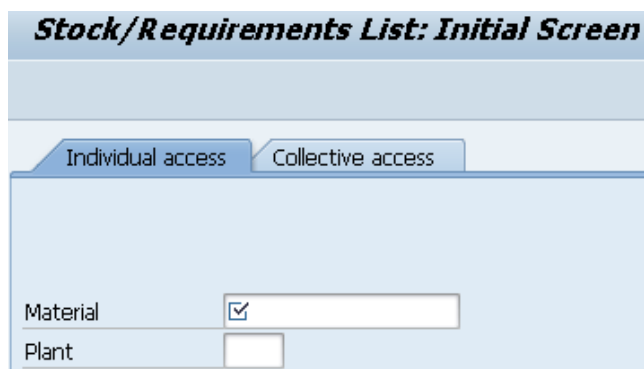
Stock/Requirements List


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.

F4

Material Number (1)

Sales material by description | Material by Material Type | Material by S...


Material type:

Material description:

Language Key:


Material:

Maximum No. of Hits:

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.

Finished Product
Deluxe*
*###

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

Material Number (1)

Sales material by description | Material by Material Type | Material by S...

Material type:

Material description:

Language Key:

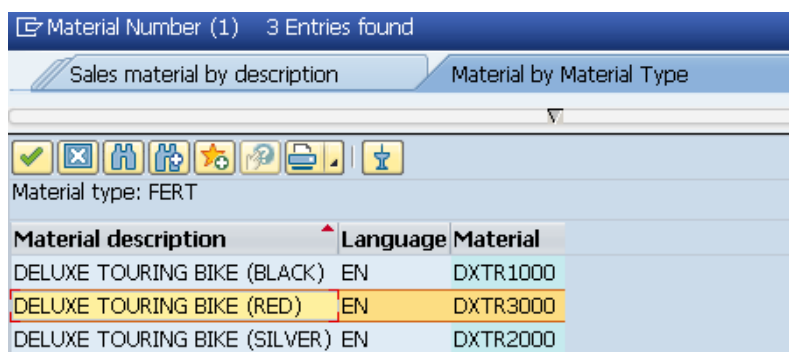
Material:

Maximum No. of Hits:

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

- all finished goods,
- which name (short description) starts with Deluxe,

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



Material Number (1) 3 Entries found


Sales material by description | Material by Material Type

Material type: FERT

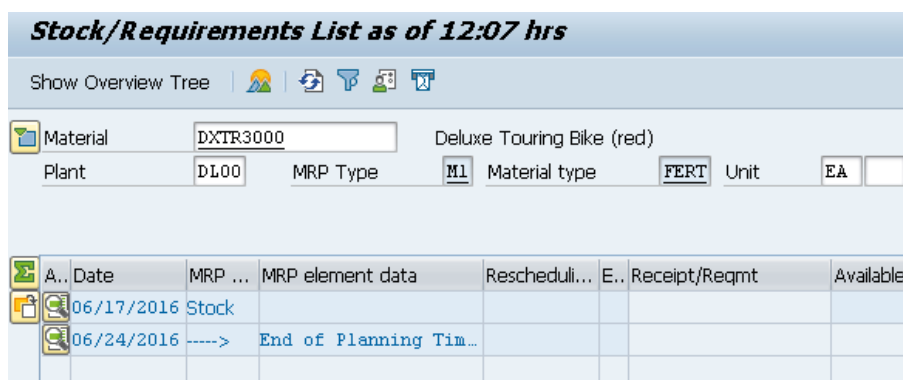
Material description	Language	Material
DELUXE TOURING BIKE (BLACK)	EN	DXTR1000
DELUXE TOURING BIKE (RED)	EN	DXTR3000
DELUXE TOURING BIKE (SILVER)	EN	DXTR2000

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.

DXTR3###

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.



DL00



Stock/Requirements List as of 12:07 hrs

Show Overview Tree

Material: DXTR3000 Deluxe Touring Bike (red)
 Plant: DL00 MRP Type: MI Material type: FERT Unit: EA

A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available
	06/17/2016	Stock					
	06/24/2016	----->	End of Planning Tim...				

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?

_____ pieces

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

_____ pieces

Click on  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

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)

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.

Bill of Material (BOM)

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

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

DXTR1###
DL00

F4
1

Display material BOM: General Item Overview

Material: DXTR1000 Deluxe Touring Bike (black)
 Plant: DL00 Plant Dallas
 Alternative BOM: 1

Item	ICT	Component	Component description	Quantity	Un	A...	Sts	Valid From	Valid to
0010	L	TRWA1000	Touring Aluminum Wheel Assembly	2	EA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0020	L	TRFR1000	Touring Frame-Black	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0030	L	DGAM1000	Derailleur Gear Assembly	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0040	L	TRSK1000	Touring Seat Kit	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0050	L	TRHB1000	Touring Handle Bar	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0060	L	PEDL1000	Pedal Assembly	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0070	L	CHAN1000	Chain	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0080	L	BRKT1000	Brake Kit	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0090	L	WDOC1000	Warranty Document	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	01/01/2010	12/31/9999
0100	L	PCKG1000	Packaging	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	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###

Display assembly


Material: TRWA1000 Touring Aluminum Wheel Assembly
 Plant: DL00 Plant Dallas
 Usage: 1 Production


Validity
 Valid From: 06/17/2016
 Valid to: 06/17/2016

Additional Data
 Required qty: 2.000

Continue Cancel

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.



PP 3: Display Multi-Level Bill of Materials

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

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**.

DXTR1###
DL00
PP01

1

Explosion level	Item	Ob...	Component number	Object description	Ovfl	Comp. Qty (CU)	Un	Ict	Ex.
.1	0010		TRWA1000	Touring Aluminum Wh...		2	EA	L	
..2	0010		TRTR1000	Touring Tire		2	EA	L	
..2	0020		TRTB1000	Touring Tube		2	EA	L	
..2	0030		TRWH1000	Touring Aluminum Wh...		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 5x20...		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	
.1	0090		WDOC1000	Warranty Document		1	EA	L	
.1	0100		PCKG1000	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

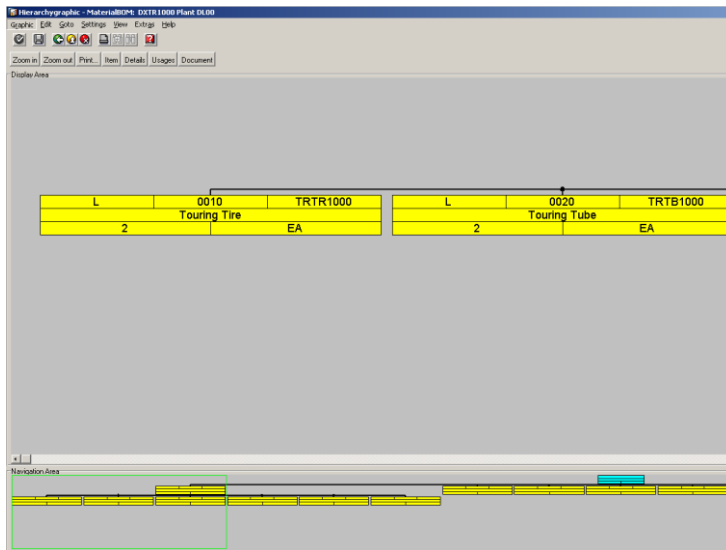
Explode BOM: Multilevel BOM: View

<p>Define view</p> <p><input type="checkbox"/> Alt priority</p> <p><input type="checkbox"/> Scrap</p>	<p>Display</p> <p><input checked="" type="checkbox"/> Variable list</p> <p>Display <input type="text" value="SAPCSMLVMP01"/></p> <p>Print <input type="text" value="SAPCSMLVMP02"/></p>
<p>Restrict view</p>	



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.



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)

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.

Routing

To review a routing, follow the menu path:

Menu path

Logistics ▶ Production ▶ Master Data ▶ Routings ▶ Routings ▶ Standard Routings ▶ Display

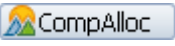
Enter Material **DXTR1###** and Plant **DL00**. Then, click on  to display the following list of operations.

DXTR1###
DL00

Display Routing: Operation Overview

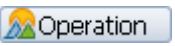

Material: DXTR1000 Deluxe Touring Bike (black) Grp.Count: 1
Sequence: 0

Op...	SOp	Work C...	Plant	Co...	Standar...	Description	L...	P...	Cl...	O...	P...	C...	S...	Base Quantity	U...	Setup	U...	Acti...	Machine	U...	
0010		ASSY1000	DL00	ASSY		Material staging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	EA	0		MIN	LABOR	0	MIN
0020		ASSY1000	DL00	ASSY		Attach seat to frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0030		ASSY1000	DL00	ASSY		Attach handle bar assembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0040		ASSY1000	DL00	ASSY		Attach derailleur gear asm. to wheel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0050		ASSY1000	DL00	ASSY		Attach front and rear wheels to chain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0060		ASSY1000	DL00	ASSY		Attach brakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0070		ASSY1000	DL00	ASSY		Attach peddles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0080		INSP1000	DL00	ASSY		Test bike	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	2		MIN	LABOR	0	MIN
0090		PACK1000	DL00	ASSY		Disassemble	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0100		PACK1000	DL00	ASSY		Pack bike	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	EA	0		MIN	LABOR	0	MIN
0110		PACK1000	DL00	ASSY		Move to storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	EA	0		MIN	LABOR	0	MIN

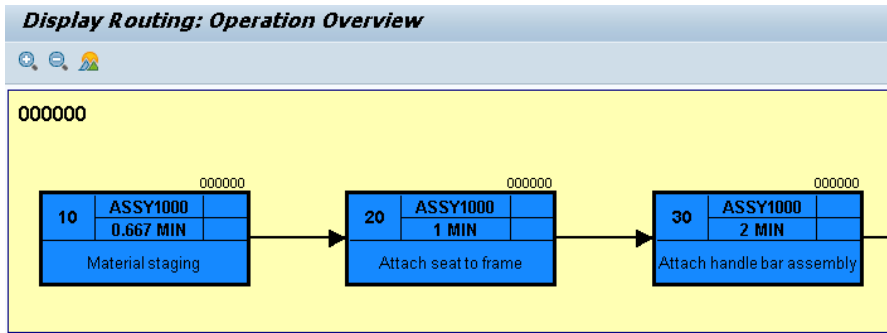
Select  to display the list of components. None of them is assigned to any specific operation (note that column Oper./Act. is empty).

Item Overview

P...	L...	Path	Ite...	Component	Quantity	Sort String	U...	I...	E...	Oper.	Seq.
<input type="checkbox"/>	0	0	0010	TRWA1000	2		EA	L			
<input type="checkbox"/>	0	0	0020	TRFR1000	1		EA	L			
<input type="checkbox"/>	0	0	0030	DGAM1000	1		EA	L			
<input type="checkbox"/>	0	0	0040	TRSK1000	1		EA	L			
<input type="checkbox"/>	0	0	0050	TRHB1000	1		EA	L			
<input type="checkbox"/>	0	0	0060	PEDL1000	1		EA	L			
<input type="checkbox"/>	0	0	0070	CHAN1000	1		EA	L			
<input type="checkbox"/>	0	0	0080	BRKT1000	1		EA	L			
<input type="checkbox"/>	0	0	0090	WDOC1000	1		EA	L			
<input type="checkbox"/>	0	0	0100	PCKG1000	1		EA	L			

Select  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.

Scheduling

Basic dates

Start date: 06/17/2016

Finish date:

Scheduling type: 1 Forwards

Lot size: 10 EA

Reduction

Reduction type:

Reduction Level:

Reduction strategy:

%red. floats b/a prd:

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

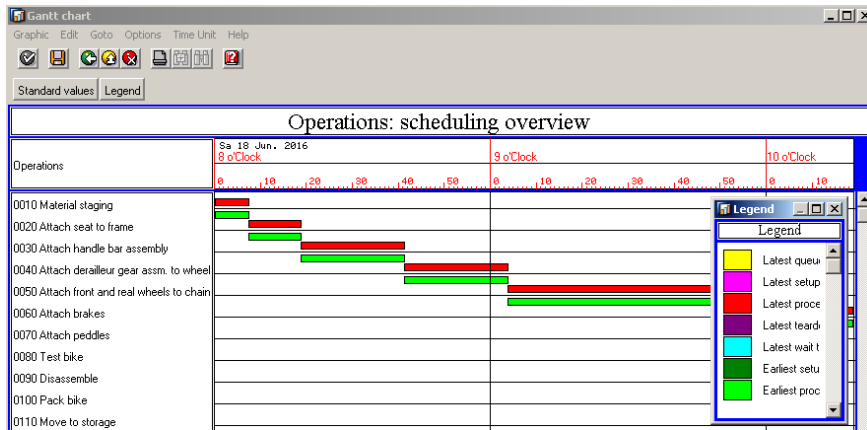
Confirm your entry with .

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 .

1
10
000000000001



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

Yes



PP 5: Display Routing/BOM in Engineering Workbench

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

Time 10 min

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.

Engineering Workbench
(EWB)


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

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 .



FK

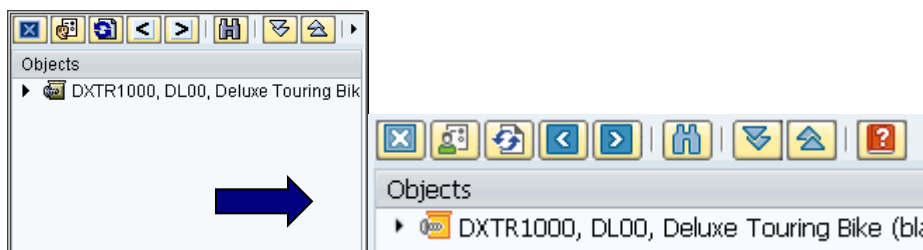
In the EWB: Selection Criteria for BOM Headers screen, enter (or find) Material **DXTR1###** (replace ### with your number) and Plant **DL00**. Then, click on .



DXTR1###
DL00

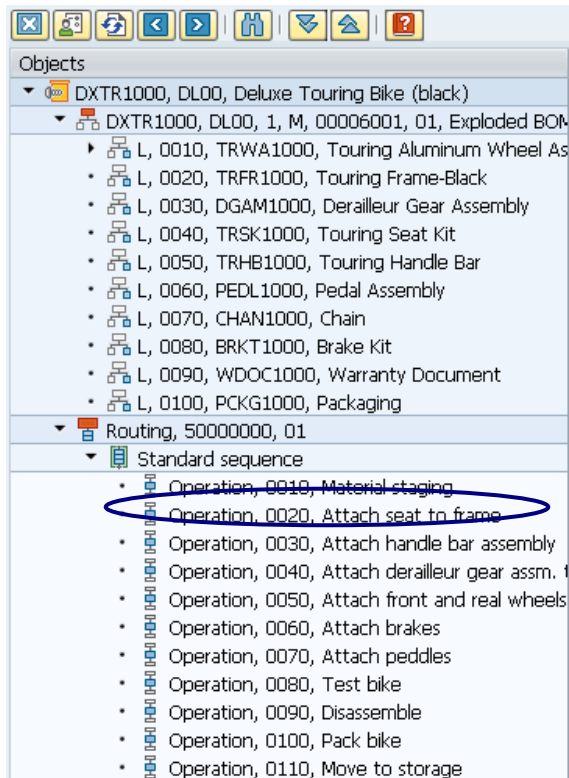
In the EWB: BOM Headers Overview screen, if the  icon is not grayed out, click on it to activate the browser. If the system requests a Change number in a separate screen, leave it blank and click on . If the system requests an Application, enter **PP01** and click on .



PP01

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  comprises the entire BOM for your Deluxe Touring Bike, the subtree marked with  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.

0020

Click on  and on Yes to return to the SAP Easy Access Menu.

Yes



PP 6: 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)


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.

Work center

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

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 .

DL00
F4

ASSY1000

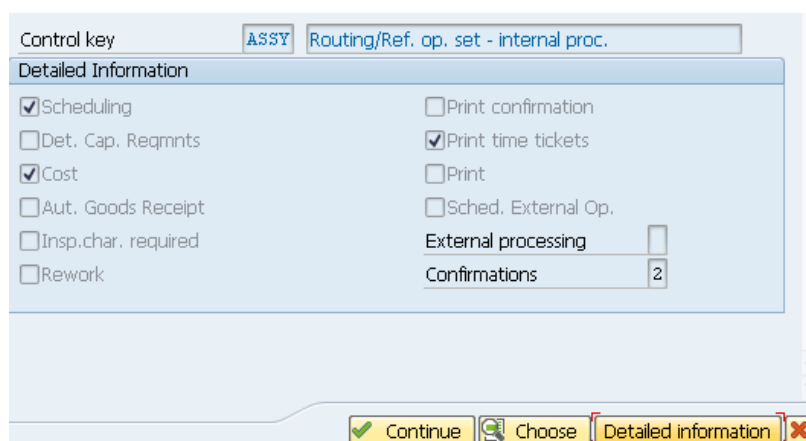
On the Basic Data tab, find out who is the person responsible.

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
F4

Detailed information




which indicates what data is required when ASSY is used.



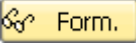

Control key: ASSY Routing/Ref. op. set - internal proc.



Detailed Information

<input checked="" type="checkbox"/> Scheduling	<input type="checkbox"/> Print confirmation
<input type="checkbox"/> Det. Cap. Reqmnts	<input checked="" type="checkbox"/> Print time tickets
<input checked="" type="checkbox"/> Cost	<input type="checkbox"/> Print
<input type="checkbox"/> Aut. Goods Receipt	<input type="checkbox"/> Sched. External Op.
<input type="checkbox"/> Insp.char. required	External processing: <input type="text" value="1"/>
<input type="checkbox"/> Rework	Confirmations: <input type="text" value="2"/>

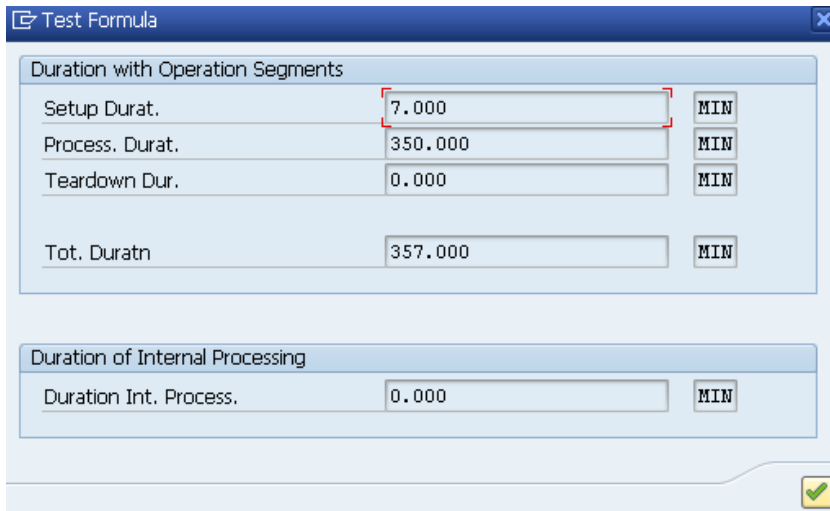
Buttons:  Continue  Choose **Detailed information** 

Select . Click on the Scheduling tab.

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

After selecting  (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



Duration with Operation Segments		
Setup Durat.	7.000	MIN
Process. Durat.	350.000	MIN
Teardown Dur.	0.000	MIN
Tot. Duratn	357.000	MIN


Duration of Internal Processing		
Duration Int. Process.	0.000	MIN

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

Labor	*
Operation quantity	/
Base quantity	/
Operation splits	

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

Select  to go back.

Click on  to return to the SAP Easy Access Menu.

