

Production Planning and Execution (PP) Case Study

This case study explains an integrated production planning and execution process in detail and thus fosters a thorough understanding of each process step and underlying SAP functionality.

Product

S/4HANA 1709 Global Bike

Fiori 2.0

Level

Undergraduate Graduate Beginner

Focus

Production Planning and Execution

Authors

Bret Wagner Stefan Weidner

Version

3.2

Last Update

May 2018

MOTIVATION

The data entry requirements in the production planning exercises (PP 1 through PP 6) were minimized because much of the data already existed in the SAP system. This stored data, known as master data, simplifies the processing of business transactions. Examples for this were material master data, bills of materials, and routings.

In this case study, we will create consumption values for a finished product to plan and process a complete manufacturing cycle.

PREREQUISITES

Before you use this case study, you should be familiar with navigation in the SAP system.

In order to successfully work through this case study, it is not necessary to have finished the PP exercises (PP 1 through PP 6). However, it is recommended.

NOTES

This case study uses the Global Bike (GBI) data set, which has exclusively been created for SAP UA global curricula.



Process Overview

Learning Objective Understand and perform a manufacturing process cycle.

Time 140 min

Scenario In order to experience a complete manufacturing process you will take on different roles within the GBI company, e.g. production supervisor, shop floor worker and plant manager. Overall, you will be working in the Materials Management (MM) and the Production Planning and Execution (PP) departments.

Employees involved Jun Lee (Production Supervisor)

Hiro Abe (Plant Manager Dallas) Lars Iseler (Production Order Worker) Susanne Castro (Receiving Clerk) Sanjay Datar (Warehouse Employee) Michael Brauer (Shop Floor Worker 4) Jamie Shamblin (Cost Accountant)

Before you can start forecasting demand for your touring bike product group, changes in the material master record of the bikes need to be maintained.

Afterwards you will create a 12-month sales and operations plan (SOP) for your product group, receive the production relevant goods from the warehouse storage location and issue them to the production order.

To conclude the process, the production is confirmed as complete, the finished goods are received into the warehouse and costs assigned to the production order are analyzed.

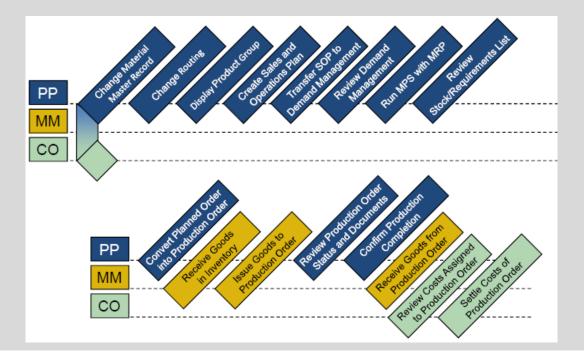


Table of Contents

Process Overview	2
Step 1: Change Material Master Record	4
Step 2: Change Routing	10
Step 3: Display Product Group	14
Step 4: Create Sales and Operations Plan	17
Step 5: Transfer SOP to Demand Management	22
Step 6: Review Demand Management	25
Step 7: Run MPS with MRP	27
Step 8: Review Stock/Requirements List	30
Step 9: Convert Planned Order into Production Order	33
Step 10: Receive Goods in Inventory	36
Step 11: Issue Goods to Production Order	39
Step 12: Review Production Order Status	41
Step 13: Confirm Production Completion	43
Step 14: Receive Goods from Production Order	45
Step 15: Review Costs Assigned to Production Order	47
Step 16: Settle Costs of Production Order	49
Learning Snacks	53
PP Challenge	55



Step 1: Change Material Master Record

Task Prepare a material master record for Demand Planning.

Time 20 min

Short Description In order to plan GBI's deluxe touring bikes (black, silver and red) prepare their material master records by changing the MRP 3 and Forecast view.

Name (Position) Jun Lee (Production Supervisor)

To change a material's view, use the App Change Material.

Fiori App





In the Material field, find and select your red Deluxe Touring bike DXTR3### first.

DXTR3###

If you do not remember its material number, position your cursor in the Material field and click on the search icon or press **F4**. Make sure you are on the Material by Material Type tab. Select Material Type Finished **Product** (FERT) and enter *### in the Material field. Remember to replace ### by your three-digit number given by your instructor, e.g. *005 if your number is 005. Then, press Enter and select the red Deluxe Touring bike with a double click.

F4

Finished Product

When your material number (**DXTR3**###) is entered in the Material field, click on Continue or press Enter.

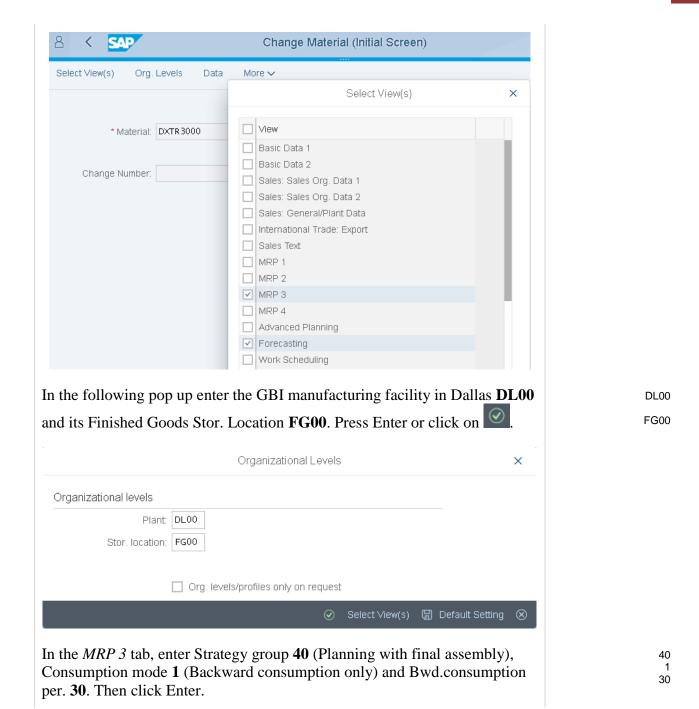
DXTR3###

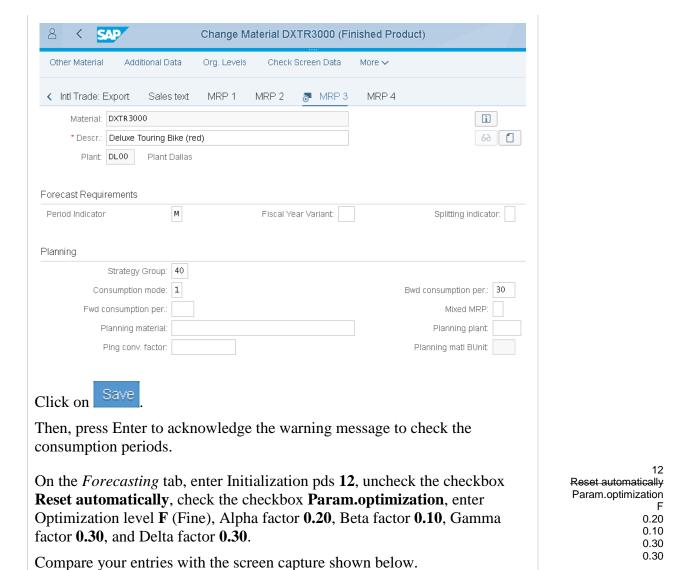
On the following screen, select MRP 3 and Forecasting.

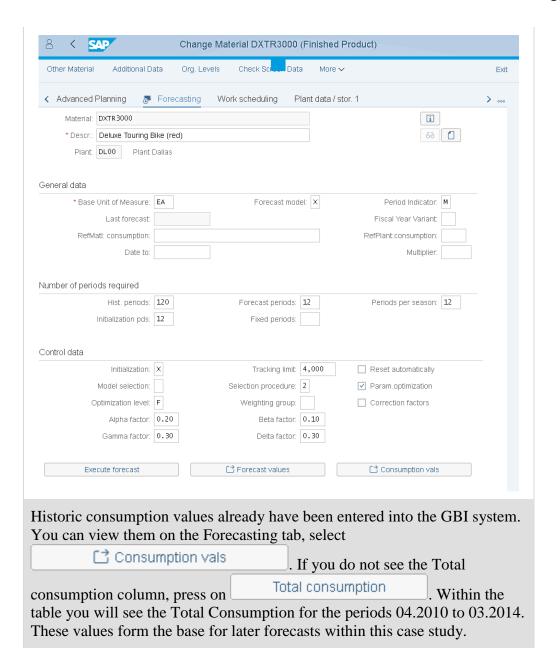
MRP 3 Forecast

Then, press Enter or click on









	Material:	DXTR3000						
	* Descr.:	Deluxe Touring Bike (red)						
	Plant:	DL00 Plant Dallas						
	L							
	Base Ui	nit of Measure: EA	Period India					
C	onsumption va	lues						
	Period	Total consumption	Corrected value					
	05.2014	0						
	04.2014	0						
	03.2014	100	100					
	02.2014	102	102					
	01.2014	109	109					
	12.2013	93	93 83 85 92					
	11.2013	83						
	10.2013	85						
	09.2013	92						
	08.2013	85	85					
	07.2013	78	78					
	06.2013	75	75					
	05.2013	85	85					
	04.2013	80	80					
	Unplnd co	onsumption						
		n a productive system thes goods moved out of the w	se values would have been varehouse.					
Click	on Main Data to	return to the overview.						
Click o	on Save to sav	ve your entries for the red	bike.					
Γhe sy	stem informs ye	ou, that the material DXT	R3### changed.					
J	•	_						
		Material DXTR3000	changed					

Repeat the same procedure for the silver and the black deluxe touring bike material master. Start with the silver bike (DXTR2###), then modify the black bike (DXTR1###).

DXTR2### DXTR1###

Click on the home icon



to return to the Fiori Launchpad overview.



Step 2: Change Routing

Task Change a routing for a finished good.

Time 15 min

Short Description Change the routing for your red Deluxe Touring bike.

Name (Position) Jun Lee (Production Supervisor)

After the operational steps are laid out, the components must be allocated to the individual operations. This is a progressive process where each operation builds off the materials that entered production in the previous operations.

Component allocation

To change a routing, use the app *Change Routing*.

Fiori App



Enter the material number for your red Deluxe Touring bike (**DXTR3###**). In the Plant field, enter GBI's Dallas plant number (**DL00**). Please ensure

that the Group field is empty. Then, press Enter or click on

Continue

DXTR3### DL00

Choose Allocation

8	<	SA	P			Change	Routing: Operation Overview		
Pr	Previous header Next header Header Select all More 🗸								
Mate	Material DXTR3000 Deluxe Touring BikeGrp.Count1 Sequence: 0								
O	peratio	on Over	view						
	Ор	SOp	Work ce	Plant	* C	Standar	Description		
	0010		ASSY1000	DL00	ASSY		Material staging		
	0020		ASSY1000	DL00	ASSY		Attach seat to frame		
	0030		ASSY1000	DL00	ASSY		Attach handle bar assembly		
	0040		ASSY1000	DL00	ASSY		Attach derailleur gear assm. to wheel		
	0050		ASSY1000	DL00	ASSY		Attach front and real wheels to chain		
	0060		ASSY1000	DL00	ASSY		Attach brakes		
	0070		ASSY1000	DL00	ASSY		Attach peddles		
	0800		INSP1000	DL00	ASSY		Test bike		
	0090		PACK1000	DL00	ASSY		Disassemble		
	0100		PACK1000	DL00	ASSY		Pack bike		
	0110		PACK1000	DL00	ASSY		Move to storage		

Select the red touring frame (TRFR3###) and the touring seat kit (TRSK1###) and then choose

New Assignment

Item Overview							
_ P	Le	Path	Ite	Component	Quantity		
	0	0	0010	TRWA1000	2		
✓	0	0	0020	TRFR3000	1		
	0	0	0030	DGAM1000	1		
✓	0	0	0040	TRSK1000	1		
	0	0	0050	TRHB1000	1		
	0	0	0060	PEDL1000	1		
	0	0	0070	CHAN1000	1		
	0	0	0080	BRKT1000	1		
	0	0	0090	WDOC1000	1		
	0	0	0100	PCKG1000	1		

In the following popup, in the Activity. field enter operation 0020 and press Enter. Back on the Material Component Overview screen, you see that now both components have been assigned to operation 0020.

TRFR3### TRSK1###

0020



Repeat the same process for the other components and assign them to operations as shown below.

Component	Operation
TRHB1### (touring handle bar)	0030
TRWA1### (touring aluminum wheel assembly)	0040
DGAM1### (derailleur gear assembly)	0040
CHAN1### (chain)	0050
BRKT1### (brake kit)	0060
PEDL1### (pedal assembly)	0070
WDOC1### (warranty document)	0100
PCKG1### (packaging)	0100

Ite	Item Overview										
	Р	Le	Path	Ite	Component	Quantity	Sort String	U	lt	В	Activity
		0	0	0010	TRWA1000	2		EA	L		0040
		0	0	0020	TRFR3000	1		EA	L		0020
		0	0	0030	DGAM1000	1		EA	L		0040
		0	0	0040	TRSK1000	1		EA	L		0020
		0	0	0050	TRHB1000	1		EA	L		0030
		0	0	0060	PEDL1000	1		EA	L		0070
		0	0	0070	CHAN1000	1		EA	L		0050
		0	0	0800	BRKT1000	1		EA	L		0060
		0	0	0090	WDOC1000	1		EA	L		0100
		0	0	0100	PCKG1000	1		EA	L		0100

Save your entries with Save

Routing was saved with group 50000004 and material DXTR3000.

TRHB1### TRWA1### DGAM1### CHAN1### BRKT1### PEDL1### WDOC1###

PCKG1###

Click on the home icon	命	to return to the Fiori Launchpad overview.	



Step 3: Display Product Group

Task Display a product group.

Time 5 min

Short Description Display the product group (product family) for all your Deluxe Touring bikes.

Name (Position) Jun Lee (Production Supervisor)

A product group (product family) supports high-level planning. This way, it is not necessary to delve into the minutia of creating planning forecasts for every material in the company.

Product group

To display the deluxe touring bike product group, use the app *Display Product Group*.

Fiori App

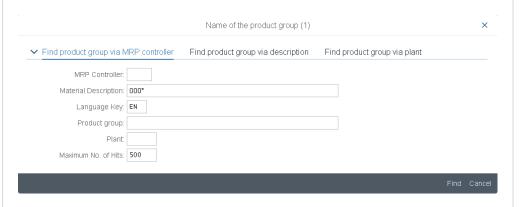


In the Display Product Group: Initial Screen, in the Product group field find and select your group for deluxe touring bikes. In order to do so, press the

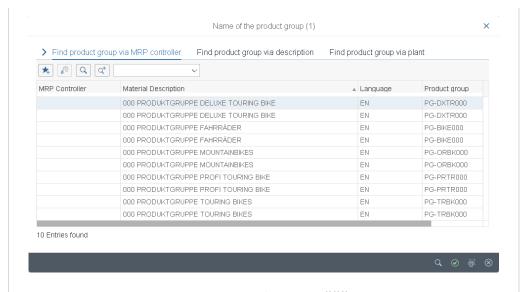
search icon (or pressed F4), enter ###* in the Material description field. Remember to replace ### with your three-digit number, e.g. enter 009* if your number is 009.

###*

Then, press Enter or click on Find to display the search results

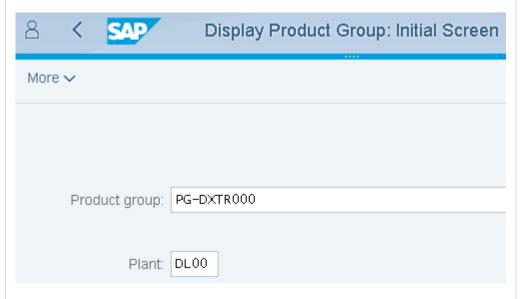


Compare with the screen shown below. Double-click on the line for deluxe touring bicycles to select the group.

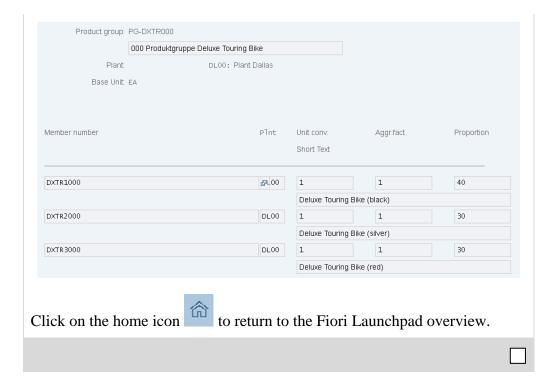


Now that the correct product group (**PG-DXTR**###) is filled in, make sure that Plant **DL00** is entered. Then, press Enter to display the product group details.

PG-DXTR### DL00



On this screen you can see that this product group defines proportions for three different bikes: the black, silver and red deluxe touring bike. For the black bike a share of 40% will be considered and 30% for the silver and the red bikes each.





Step 4: Create Sales and Operations Plan

Task Create a sales and operations plan for a product group.

Time 20 min

Short Description Create a 12-month sales and operations plan (SOP) for your product group.

Name (Position) Jun Lee (Production Supervisor)

A sales and operations plan (SOP) is a planning tool used to consolidate data for forecasting future sales and production levels as well as the methods needed to meet those requirements. In this task, our SOP will be based on historical consumption values taken from a fixed period. This is in contrast to forecasting within a real-life system which would base the prediction on previous periods and their respective consumption.

Sales and operations plan

To create an SOP, use the app Create Sales and Operations Plan.

Fiori App

Create Sales and Operations Plan

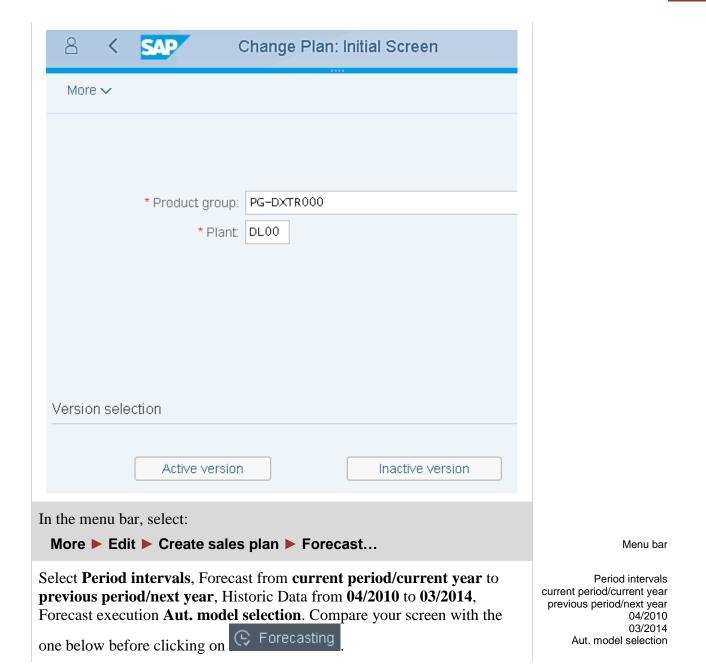


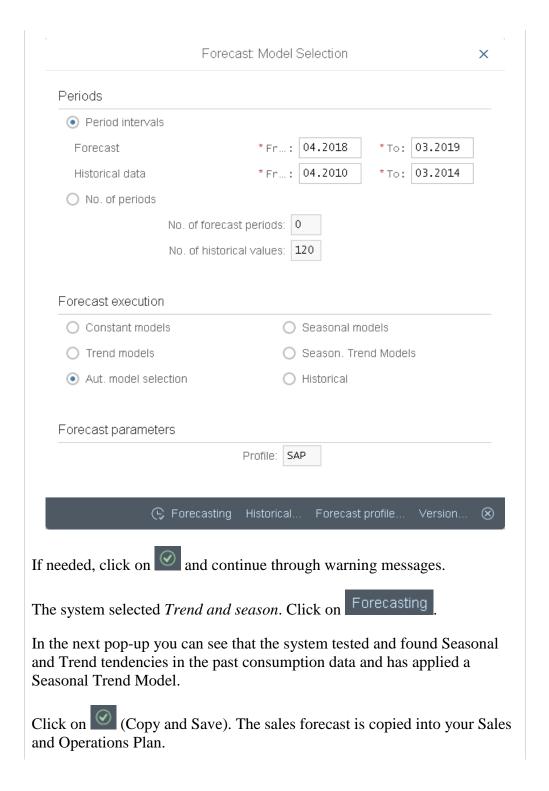
Make sure that Product group **PG-DXTR**### and Plant **DL00** are entered.

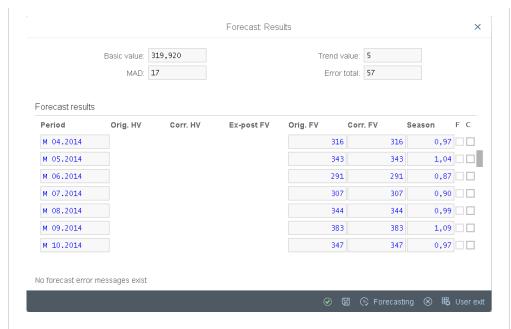
Then, select Active version

Record the version number:_____

PG-DXTR### DL00







As Target day's supply enter 5 for each forecasted period.



In a production plan, you plan the quantities you need to produce in order to meet your sales plan. The system then calculates stock levels and days' supply for each period on the basis of the sales and production quantities and any target data. There are several different planning strategies available, which differ in the production values and the stock levels proposed.

As the SOP is a high-level planning, discrete production values are not necessary. The SAP system calculates discrete numbers once the SOP is transferred to the Demand Management.

In the menu bar, select:

Edit ► Create product plan ► Synchronous to sales

Note the change in the Production and in the Stock level lines. The production plan is created to match the sales forecast.

In the system menu, select

Edit ► Create productn plan ► Target day's supply

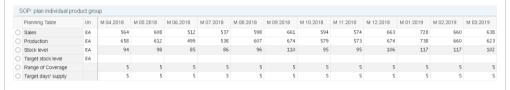
5

Menu bar

Menu bar

Note the impact on the production plan and stock levels. Production levels are generated to match the sales plus produce enough to put into stock to meet the target days of supply specifications.

Review the Planning Table (your numbers may be different).



Save with Save

Click on the home icon



to return to the Fiori Launchpad overview.



Step 5: Transfer SOP to Demand Management

Task Transfer SOP to Demand Management.

Time 10 min

Short Description Transfer the Sales and Operations Plan to Demand Management.

Name (Position) Jun Lee (Production Supervisor)

Demand Management is the tool used to disaggregate planning data from high-level plans down to the detailed planning level. For this task, planning for the Deluxe Touring Product Group will be broken down into the individual components that belong to this group.

Demand Management

To transfer the SOP to Demand Management, use the app *Transfer SOP to Demand Management – Transfer the Sales and Operations Plan to Demand Management.*

Fiori App

Transfer SOP to Demand...

Transfer the Sales a...



Enter Product group **PG-DXTR**###, Plant **DL00**, and the version saved in the previous task (**A00**).

PG-DXTR### DL00

Select **Prod.plan for mat. or PG members as proportion of PG** and **Active**. Then, deselect the **Invisible transfer** indicator to present the disaggregation results on another screen allowing the planner to modify the results before saving them manually to Demand Management.

Prod.plan for mat. or PG members as prop. of PG Active Invisible transfer

8 < SAP Transfer Planning Data to Demand Management	
Transfer now More V	
* Product group: PG-DXTR000	
* Plant: DL00	
Version: A00	
Transfer strategy and period	
O Sales plan for material or PG members	
O Sales plan for mat. or PG members as proportion of PG	
O Production plan for material or PG members	
Prod.plan for mat. or PG members as proportion of PG	
From: 23.05.2018 To:	
Independent requirement specifications Requirements type:	
Version:	
✓ Active	
Select Transfer now and examine the Planned Independent Requirements generated for DXTR1 ###.	DXTR1###
Table Items Schedule Lines K K S S M	
Then, click on Save to save.	
Examine the Planned Independent Requirements generated for DXTR2 ###	DXTR2###
and save them with Save.	
Table Items Schedule Lines	
Finally, examine the requirements for DXTR3### and save them with Save	DXTR3###
Table terms Schedule Lines K	

Note DXTR1### makes up 40%, DXTR2### makes up 30% and DXTR3### another 30% of the production plan created in your Sales and Operations Plan. How is this derived?					
	_				
Click on the home icon to return to the Fiori Launchpad overview.					



Step 6: Review Demand Management

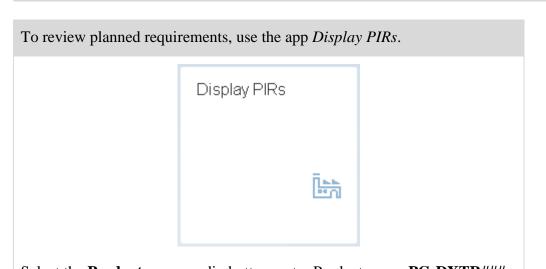
Task Review the requirements for a product group.

Time 10 min

Fiori App

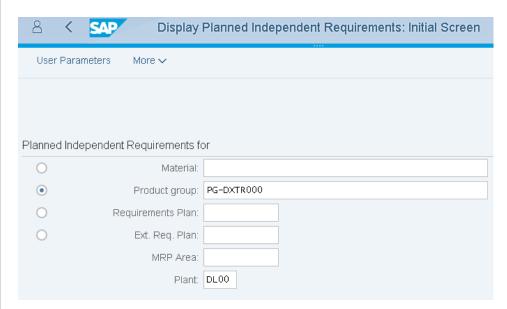
Short Description Review the requirements for the product group to ensure that there are production requirements for the individual production items.

Name (Position) Hiro Abe (Plant Manager Dallas)



Product group PG-DXTR###

Select the **Product group** radio button, enter Product group **PG-DXTR###**, Plant **DL00**, and select or click Enter.



On the *Table* tab, review the Planned Independent Requirements for the Deluxe Touring bike product group by material.

Product group: PG-DXTR000																
000 Produktgruppe Deluxe Touring Bike																
Table Items Schedule Lines																
K («)	< >	>>	>													
Material	MRP	V	А	BU	Req M 04.2018	M 05.2018	M 06.2018	M 07.2018	M 08.2018	M 09.2018	M 10.2018	M 11.2018	M 12.2018	M 01.2019	M 02.2019	M 03.2019
DXTR1000	₫ 00	AG		EA	263	245	200	215	243	270	2 3 2	229	270	295	264	249
DXTR2000	DL00	AG		EA	197	184	150	161	182	202	174	172	202	221	198	187
DXTR3000	DL00	AG		EA	197	184	150	161	182	202	174	172	202	221	198	187

On the Sched. lines tab, review the requirement dates, planned quantities, values, and total planned quantities. Table Items Schedule Lines Material: DXTR1000 ㅁ Reqmts type: VSF Plant: DL00 Version/active: 2.975 EΑ Plan Qty: Peri ReqmtDate Planned qty Value / USD Spl. S 04.2018 263 368.200,00 05.2018 343.000,00 245 06.2018 200 280.000,00 07.2018 301.000,00 215 340.200,00 08.2018 243 09.2018 270 378.000,00 10.2018 324.800,00 232 11.2018 229 320.600,00 12.2018 270 378.000,00 01.2019 295 413.000,00 02.2019 369.600,00 264 348.600,00 03.2019 249 Select Next item to move to the next material. Click on the home icon to return to the Fiori Launchpad overview.



Step 7: Run MPS with MRP

Task Run Master Production Scheduling (MPS).

Time 10 min

Short Description Run Master Production Scheduling (MPS) to generate a series of planned orders that satisfy the requirements from SOP and demand management. Concurrently with MPS, the MRP materials will be processed leading to the generation of planned orders for dependent requirements that have been created by the BOM explosion process.

Name (Position) Jun Lee (Production Supervisor)

To run Master Production Scheduling, use the apps *Schedule MRP Run – Run MPS with MRP*.

Fiori App

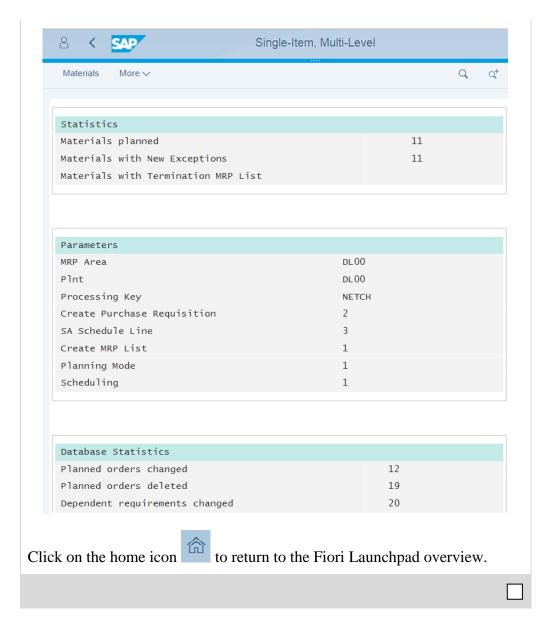


Enter your material **DXTR3###**, Plant **DL00**, Processing key **NETCH**, select **2** (Purchase requisition in opening period), **3** (Schedule lines), **1** (MRP list), **1** (Adapt planning data (normal mode)), and **1** (Determination of Basic Dates for Planned). Then, select **Display material list**.

DXTR3###, DL00 NETCH 2 3 1 1 1 1 Display material list

Press Enter.

A SAP	Singl	e-Item, Multi-Level
More ✓		
*	Material: DXTR3000	
M	RP Area:	
	Plant: DL00	
Occupant Planning		
Scope of Planning	Product group	
	_ 5 .	
MRP Control Parameters		
* Proces	sing Key: NETCH	Net Change in Total Horizon
* Create Purch	ase Req.: 2	Purchase requisitions in opening period
* SA Deliv. Scho	ed. Lines: 3	Schedule lines
* Create I	MRP List: 1	MRP list
* Planni	ng mode: 1	Adapt planning data (normal mode)
* 9.0	heduling: 1	Determination of Basic Dates for Planned
30	nedding.	Determination of basic bates for Flamed
Process Control Paramete	rs	
	Also Plan Uncl	hanged Components
	Display Result	s Prior to Saving
	✓ Display materi	al list
		opear asking you to check input bypass the warning message.
	_	
start the planning	run eliek on Cor	and review the planning deta
n the List Display.		and to the man planning dear





Step 8: Review Stock/Requirements List

Task Review the Stock/Requirements List.

Time 10 min

Short Description Review the Stock/Requirements List for your deluxe touring bike.

Name (Position) Lars Iseler (Production Order Worker)

The Stock/Requirements List is a list which dynamically changes whenever a transaction occurs using the given material. Display and review the Stock/Requirements List for all materials of the red deluxe touring bike on hand and the demand that exists against these products. The report shows that there is no stock and therefore nothing is available for use at this time.

Stock/Requirements List

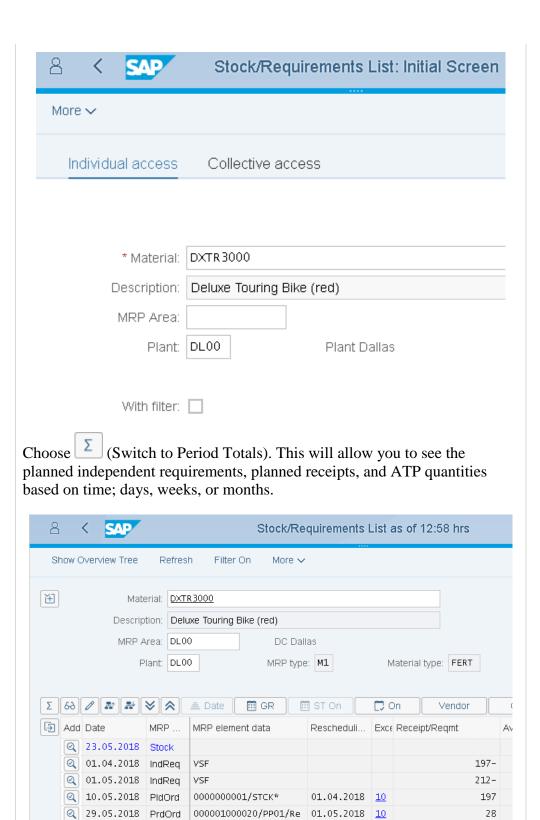
To review the Stock/Requirements List, use the SAP Fiori App *Monitor Stock / Requirements List*.

Fiori App



On the Individual access tab, enter Material **DXTR3**### and Plant **DL00** and click on Continue.

DXTR3### DL00



to go back to the individual lines.

End of Planning Tim

0000000003/STCK

0000000004/STCK

VSF

30.05.2018 ---->

01.07.2018 PldOrd

Q 01.06.2018 PldOrd

@ 01.06.2018 IndReq

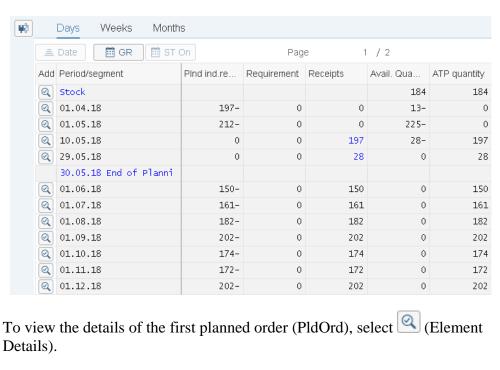
© SAP SE Page 31

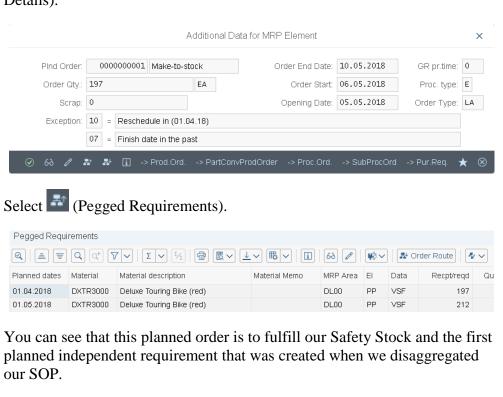
28

150

150-

161





Click on the home icon to return to the Fiori Launchpad overview.



Step 9: Convert Planned Order into Production Order

Task Convert a planned order into a production order.

Time 10 min

Short Description Convert a planned order generated in the MPS/MRP run to a production order. The stock requirements list displays the suggested planned orders from the MPS run.

Name (Position) Lars Iseler (Production Order Worker)

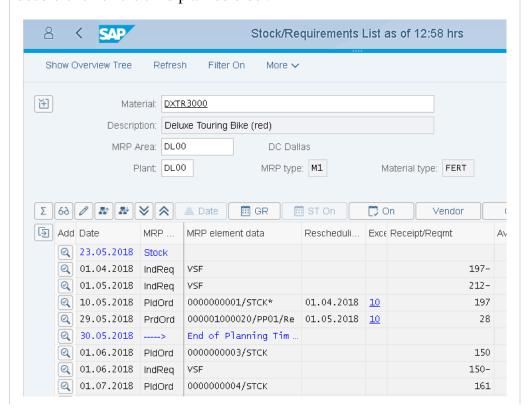
To convert planned orders into production orders, use the SAP Fiori App *Monitor Stock / Requirements List*.

Fiori App

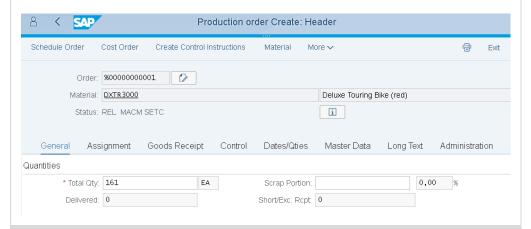


Enter Material **DXTR3**###, Plant **DL00**, and click on double-click on the third planned order.

DXTR3### DL00



In the Additional Data screen, click on order to production order).



Note At this point, please note down the total quantity in your production order. You will need it later when confirming your order.

Total	quantity
Total	quantity

Determine the status of your order by clicking on _____. What does this mean? _____.

Note When you converted the planned order to a production order scheduling takes place, an availability check was automatically carried out and a reservation was placed on the materials specified within the bill of materials. The order was also automatically released when the production order was created.

Save your production order with Save

Note When you save the production order the system will automatically calculate the planned costs for the production order and the production order is given a number.



Make sure you record your production order number.

Select Refresh to refresh the Stock/Requirements List. In the MRP Element column the planned order **PldOrd** that you selected should now have changed into a production order **PrdOrd**.

Q 0	1.07.2018	PrdOrd	000001000024/PP01/Re	161
Q 0	1.07.2018	IndReq	VSF	161-
Q 0	1.08.2018	PldOrd	0000000005/STCK	182

Production order number

Click on the home icon to return to the Fiori Launchpad overview.



Step 10: Receive Goods in Inventory

Task Receive goods in the Dallas plant.

Time 10 min

Short Description Receive enough goods in the Dallas storage locations to start the production process.

Name (Position) Susanne Castro (Receiving Clerk)

Usually, at this point the purchasing department in Dallas would take over and procure enough raw materials from vendors to fill the inventory so that the production process can be initiated. In this case study, we are bypassing this procurement process (this process is explained in the MM unit in detail). Because the inventory for all DXTR3### components is empty, we will assume that we find 500 pieces each in the storage location.

Goods receipt

To receive goods in the inventory, use the app *Post Goods Movement*.

Fiori App



Make sure that *Goods Recipt* and *Other* is selected in the drop-down menu.



Enter Movement Type **561** (Receipt per initial entry of stock balances into unr.-use), **today** as Document and Posting Date. Then, press Enter. If necessary, confirm the information pop-up.

561 today

In the Goods Receipt Other screen, enter the following data. Each one of these ten materials are components that you later on need in your production order. Note that all materials are stored in the raw materials storage location in Dallas (DL00) except the touring wheel assembly (first component in the list) which is a semi-finished good. Maybe you need to close the lower

DL00

section by clicking on to be able to enter the materials.

Material	Quantity	SLoc
TRWA1### (Touring Aluminum Wheel Assembly)	500	SF00
TRFR3### (Touring Frame-Red)	500	RM00
DGAM1### (Derailleur Gear Assembly)	500	RM00
TRSK1### (Touring Seat Kit)	500	RM00
TRHB1### (Touring Handle Bar)	500	RM00
PEDL1### (Pedal Assembly)	500	RM00
CHAN1### (Chain)	500	RM00
BRKT1### (Brake Kit)	500	RM00
WDOC1### (Warranty Document)	500	RM00
PCKG1### (Packaging)	500	RM00

TRWA1###

TRFR3###

DGAM1###

TRSK1###

TRHB1###

PEDL1### CHAN1###

BRKT1###

WDOC1###

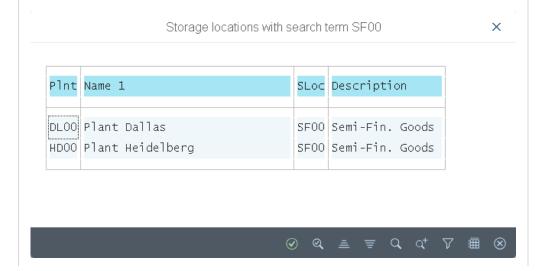
PCKG1###

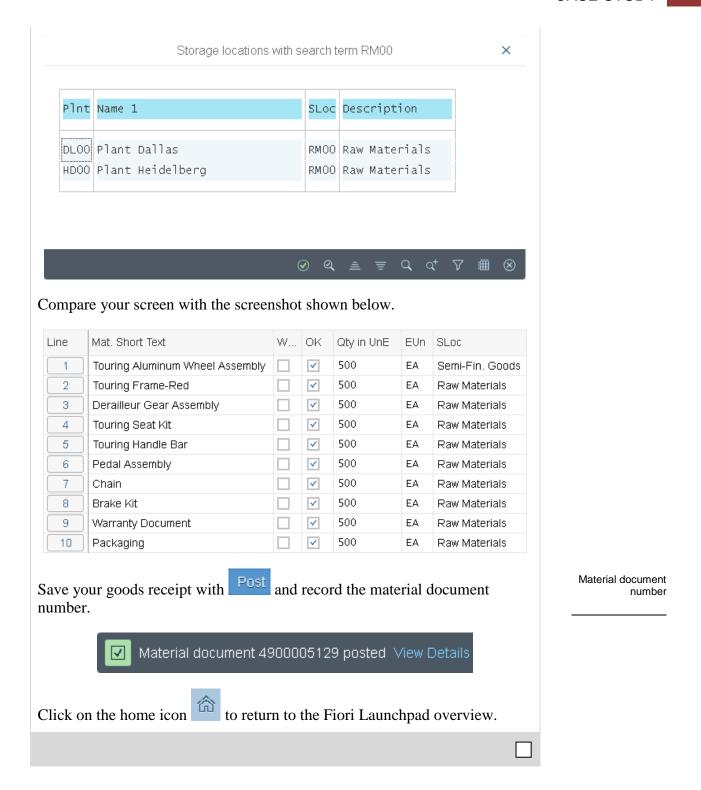
Press Enter.

If any of the following two pop ups appear, mark in both cases the plant

DL00 and confirm it with

DL00







Step 11: Issue Goods to Production Order

Task Issue goods to a production order.

Time 10 min

Short Description Now that all necessary components are on stock issue them to your production order in precise quantity.

Name (Position) Sanjay Datar (Warehouse Employee)

The goods issue process is fully defined in the production order, BOM, and routing. The quantities and the materials are reserved for this specific production order, they will be withdrawn with reference to the order number, and will be used to assign actual costs to the production order for managerial accounting purposes.

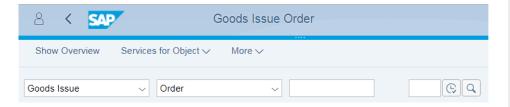
Goods issue

To issue goods to a production order, use the app *Post Goods Movement*.

Fiori App



Make sure that *Goods Issue* and *Order* is selected.



Enter Movement Type **261** (Consumption for order from warehouse), **today** as Document Date and Posting Date.

today today 261

Enter your **production order number** from two tasks back. Then choose Enter.

Production order number

If you have not written down your production order number you can find it in the system. In order to do so, in the Order field press **F4** or click on the search icon . In the *Order Info System – Input Help for Order Number*

F4

screen, enter your material DXTR3### in the Material field and click on DXTR3### Execute Double-click on the result row to adopt your production order number into the initial screen. Once you have found and entered your production order number, click Enter to continue. An itemized list will appear. It lists all the materials and their respective quantities that need to be issued to your order. You need to tell the system what Storage Location the materials should be withdrawn from. For the SF00 Touring Aluminum Wheel Assembly (TRWA1###), enter SF00 (Semifinished goods) and for all other materials **RM00** (Raw materials) in the RM00 SLoc fields. Before pressing Enter compare your screen with the one shown below. Notice that your quantity could be different. Line Mat. Short Text W... OK Qty in UnE EUn SLoc Touring Aluminum Wheel Assembly 322 EΑ ெ SF00 2 161 命 Touring Frame-Red EΑ RM00 161 3 Derailleur Gear Assembly EΑ 命 RM00 4 Touring Seat Kit 161 EΑ ல RM00 161 5 Touring Handle Bar EΑ 命 RM00 6 Pedal Assembly 161 EΑ 命 RM00 7 Chain 161 EΑ **命** RM00 Brake Kit 161 EΑ 8 RM00 9 Warranty Document 161 ଲ EΑ RM00 10 Packaging 161 EΑ RM00 Furthermore, flag each item with OK OK Post Click on and record the material document number. Material document number Material document 4900005130 posted. View Details to return to the Fiori Launchpad overview. Click on the home icon



Step 12: Review Production Order Status

Task Review the production order status.

Time 10 min

Short Description Review the current production order with respect to the status of the order.

Name (Position) Michael Brauer (Shop Floor Worker 4)

To display the production order, use the app *Display Production Order*.

Fiori App



Enter the number of your production order.

your production order number into the initial screen.

Production order number

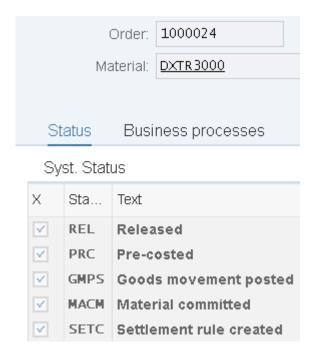
F4

in the system. In order to do so, in the Order field press **F4** or click on the search icon . In the *Order Number (1)* screen choose the tab *Production Orders by Material and Routing*, enter your material **DXTR3**### in the Material field and click on Enter. Double-click on the result row to adopt

If you have not written down your production order number you can find it

DXTR3###

When your production order number is entered, click on that the order status has changed and review it by clicking on again.



You did a goods issue to the production order in the last task. Now, you want to review the cost assigned to the order, the material document, and the corresponding accounting document.

In order to do so, click on to go back to the header screen.



Here you can see the costs that were assigned to the production order from our goods issue.

Click on the home icon to return to

to return to the Fiori Launchpad overview.

© SAP SE Page 42

Menu bar



Step 13: Confirm Production Completion

Task Confirm production order completion.

Time 10 min

Short Description Confirm completion for your production order.

Name (Position) Michael Brauer (Shop Floor Worker 4)

When the assembly has been completed for the current production order, we need to confirm that certain procedures and activities have been completed and record the quantity of the end product that has been manufactured.

Production completion

To confirm production completion, use the app *Enter Production order Confirmation*.

Fiori App

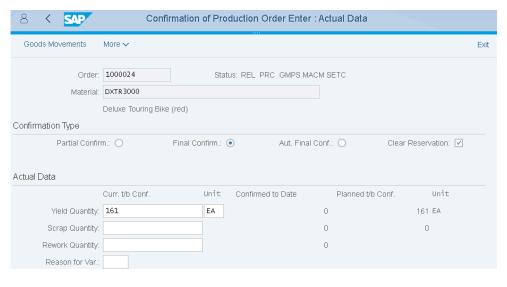


Enter your **production order** number and click on Continue or Enter.

Production order number

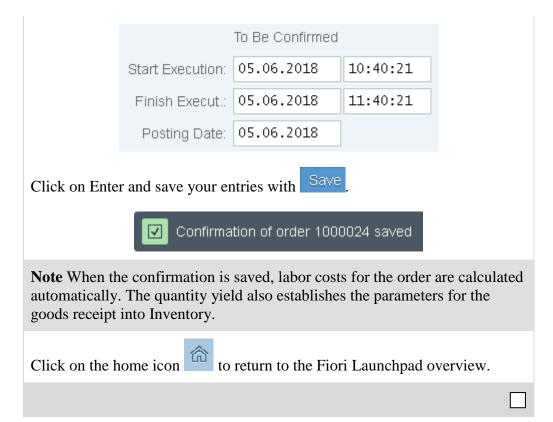
Select **Final Confirm.** and **Clear Reservation**. In the Yield Quantity. field, enter the **amount** of bikes you were supposed to produce for this order, if the field is not already filled. Remember that your amount might be different from the screen below.

Final Confirm. Clear Reservation Amount



Then, change the Start Execution to 1 hour earlier than the default time.

1 hour earlier





Step 14: Receive Goods from Production Order

Task Post a goods receipt from production order.

Time 15 min

Short Description Post a goods receipt from your production order.

Name (Position) Susanne Castro (Receiving Clerk)

Receive the completed products into finished goods inventory. Check the quantity proposed against the quantity specified in the production order and the quantity specified during confirmation. If there are any discrepancies, the system will decide if an error or warning message should be generated depending upon the deviation identified.

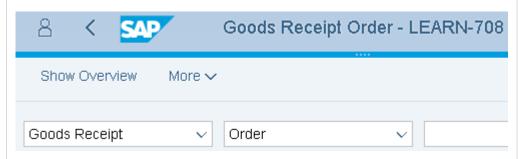
Goods receipt

To post a goods receipt, use the app Post Goods Movement.

Fiori App



Select Goods Receipt and Order in the drop-down menu.



Enter Movement Type your **production order number** and **101** (Goods receipt for order to warehouse) and. Choose Enter.

Enter as SLoc **FG00** (Finished Products) and make sure, that the plant *DL00* is entered.

Select **OK** for your item. Compare your screen with the screenshot below.

101 Production order number

FG00

OK

Page 46

In the overview screen, review the item to ensure that all the data is correct. Movement Type → 101 (goods receipt into Inventory) Storage Location → FG00 (Inventory) Quantity → should equal the amount that you confirmed in the previous task Goods Receipt Order General දුදි 05.06.2018 Document Date: Delivery Note: Posting Date: | 05.06.2018 Doc.Header Text: Individual Slip Mat. Short Text Line W... OK Qty in ... EUn SLoc Deluxe Touring Bike... 161 EΑ Finished Goods to post the goods receipt. When you save this material document the actual value of the material produced was entered into the production order. Material document 5000000059 posted View Details Material document Record the material document number. number

to return to the Fiori Launchpad overview.

Click on the home icon

© SAP SE



Step 15: Review Costs Assigned to Production Order

Task Review costs assigned to your production order.

Time 5 min

Short Description Display and review the costs that have been assigned to your production order.

Name (Position) Jamie Shamblin (Cost Accountant)

To display costs assigned, use the app Display Production Order.

Fiori App



Enter your **production order number** and click on



Production order number

In the menu bar select:

More ► Goto ► Costs ► Analysis

Menu bar

Order Order Type Plant Material	1000024 DXTR3000 PP01 Standard production order DL00 Plant Dallas DXTR3000 Deluxe Touring Bike (red)									
Planned Qua Actual Quant										
Target Cost Version 0										
Cumulative E Legal Valuatio Company Co										
Cost Element	Cost Element (Text)	Origin	E	Total Target Costs	E	Total Actual Costs	E	Target/actual var.	T/I var(%)	Currenc
720300	Aufwendungen Halbfertigerzeugnisse	DL00/TRWA1000		0,00		35.420,00		35.420,00		USD
741600	Ausgleich Produktionsmengen	DL00/DXTR3000		0,00		225.400,00-		225.400,00-		USD
				0,00	٠	189.980,00-		189.980,00-		USD
800000	Arbeit	NAPR1000/LABOR		0,00		4.026,75		4.026,75		USD
Production				0,00		4.026,75		4.026,75		USD
720000	Aufwendungen Rohstoffe	DL00/TRFR3000		0,00		32.200,00		32.200,00		USD
720000	Aufwendungen Rohstoffe	DL00/DGAM1000		0,00		12.075,00		12.075,00		USD
720000	Aufwendungen Rohstoffe	DL00/TRSK1000		0,00		8.050,00		8.050,00		USD
720000	Aufwendungen Rohstoffe	DL00/TRHB1000		0,00		4.025,00		4.025,00		USD
720000	Aufwendungen Rohstoffe	DL00/PEDL1000		0,00		7.245,00		7.245,00		USD
720000	Aufwendungen Rohstoffe	DL00/CHAN1000		0,00		1.610,00		1.610,00		USD
720000	Aufwendungen Rohstoffe	DL00/BRKT1000		0,00		11.270,00		11.270,00		USD
720000	Aufwendungen Rohstoffe	DL00/WDOC1000		0,00		161,00		161,00		USD
720000	Aufwendungen Rohstoffe	DL00/PCKG1000		0,00		563,50		563,50		USD
Raw Material	s			0,00	٠	77.199,50		77.199,50		USD
				0,00		 108.753,75- 		108.753,75-		USD

Now that the finished products have been received in the Inventory, the Manufacturing Output Settlement Variance has been added. How is this figure calculated by the system?					
	-				
	-				
Click on the home icon to return to the Fiori Launchpad overview.					



Step 16: Settle Costs of Production Order

Task Settle costs of your production order.

Time 20 min

Short Description Settle the costs of your production order. The costs are temporarily captured in the production order and they need to be assigned to an appropriate cost object. Compare the actual costs to the planned costs to identify any deviations or potential problems in this regard.

Name (Position) Jamie Shamblin (Cost Accountant)

To settle costs of a production order, use the app *Actual Settlement*.

Fiori App



If you have to input the Controlling Area, enter NA00, and click on Continue



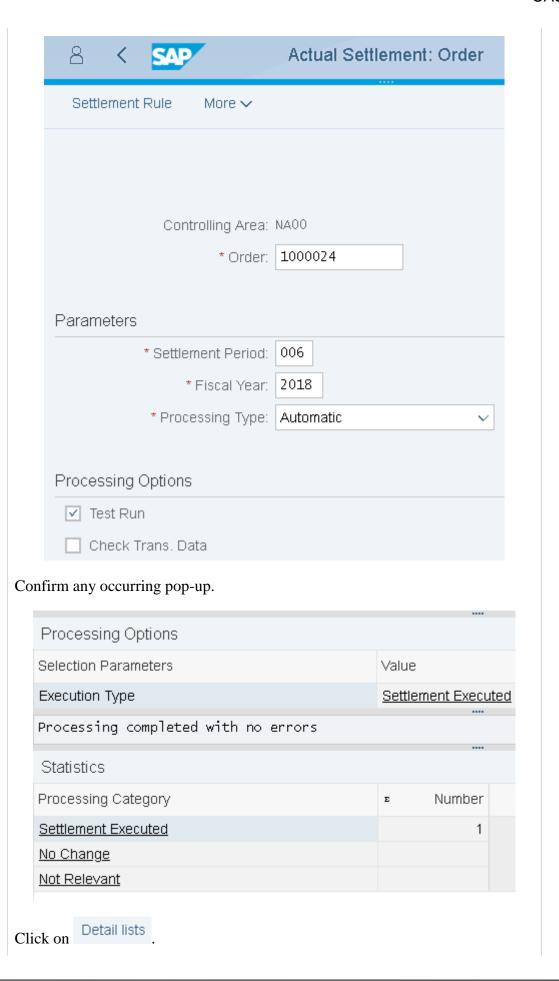
NA00

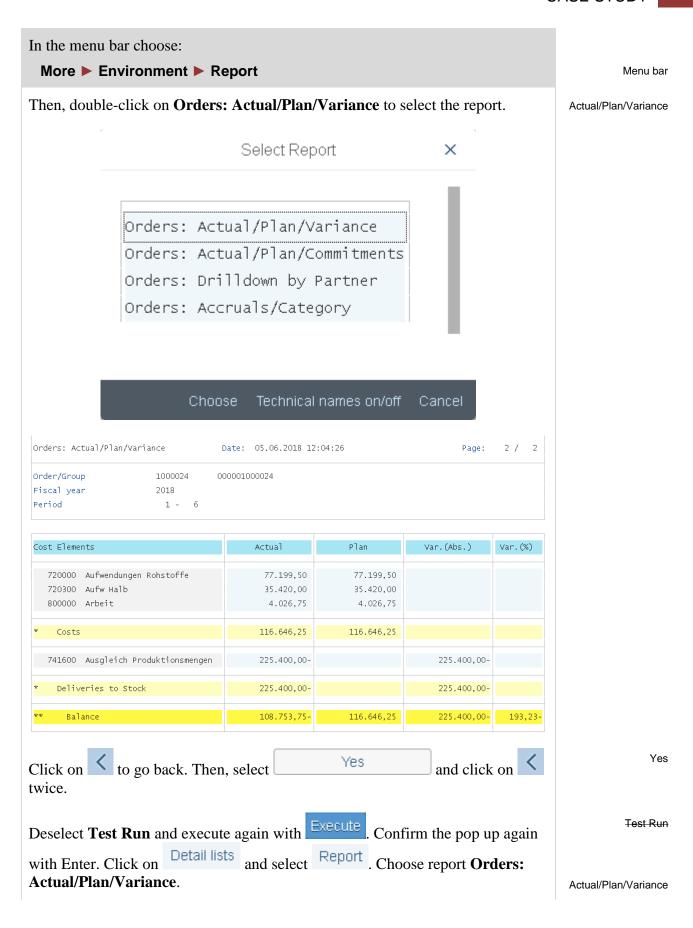
Enter your production order number, the current month as Settlement period (e.g. 007 for July), the **current month** as Posting period, and the **current year** as Fiscal year. Make sure that **Test Run** is selected.

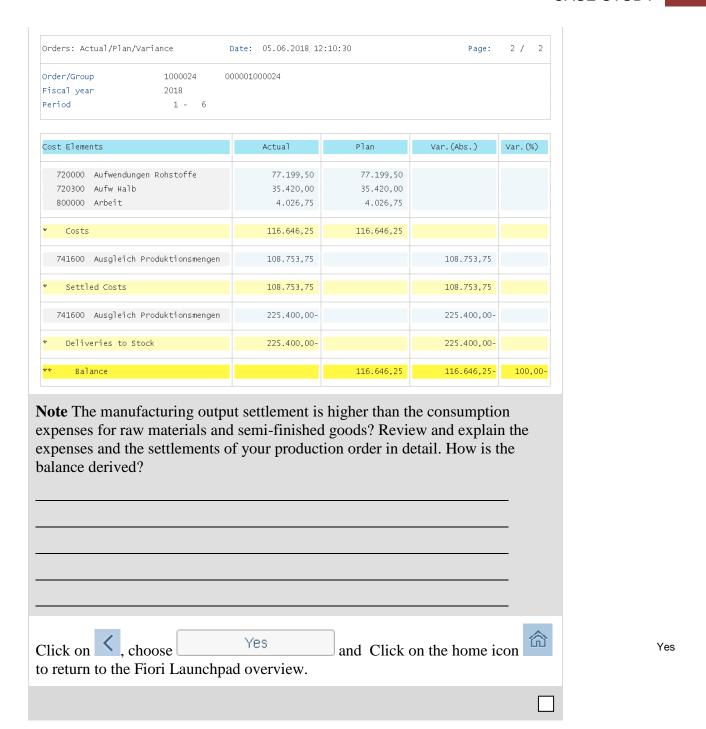
Then, click on



Production order number current month current month current year Test Run



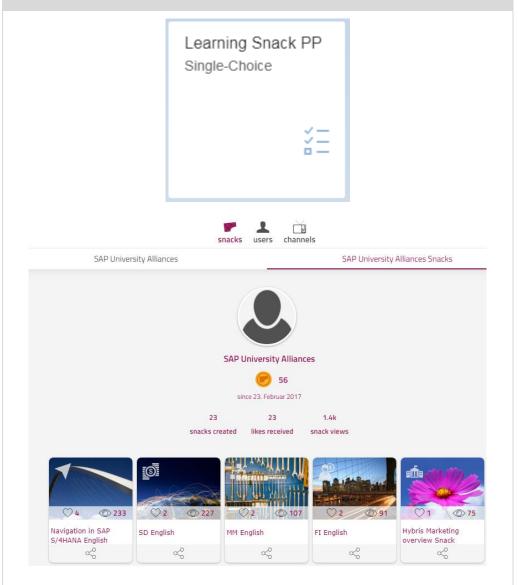




Learning Snacks

In order to test and consolidate your knowledge use the app *Learning Snack PP*.

Fiori App



You see all the snacks for the individual case studies. Select the Snack *PP English* and answer all eleven questions.

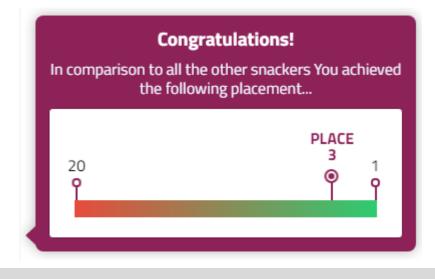
Hint:

If you do not see any Apps, you need to change the language on the page Learning Snacks. Therefore click on the current language right next to *change language* and choose **English**.



Learning Snack

When you have answered all the questions you will receive a success message and your placement.



PP Challenge

Learning Objective Understand and perform an integrated manufacturing process.

Time 60 min

Motivation After you have successfully worked through the *Production Planning and Execution* case study you should be able to solve the following challenge on your own.

Scenario In this challenge you should create sales and operations plan (SOP) for the product group (product family) Mountainbikes. Take into consideration that the materials of the product group have to be assigned to the strategy group. Therefore, enter manually the following sales figures:

Period	Sales (volume)
Current month + 2	150
Current month + 3	175
Current month + 4	200
Current month + 5	85
Current month + 6	90
Current month + 7	115

In addition, you must post the correct goods for Material ORMN1### in the storage location in order to be able to produce and settle costs afterwards.

Task Information Since this task is based on the *Production Planning and Execution* case study you can use it as guidance. However, it is recommended that you solve it without any help in order to test your acquired knowledge.