

Production Planning and Control (PP)



OTTO BIKES
makes IT easy

Created by



LEVEL

Bachelor
Master
Beginners

DURATION

approx. 165 minutes

LAST CHANGE

May 2023

VERSION

Otto Bikes v1.1

FOCUS

After you only display data such as BOMs and routings in the production planning exercise, this case study deals with processing an integrated process from production planning through execution to settlement.

APPLICATION AND MOTIVATION

You will adjust existing material master records and create the necessary consumption values for a finished product to plan and execute a production run.

PREREQUISITES

To execute this PP case study successfully, it is not necessary to have processed the PP exercises. However, it is recommended.



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PROCESS INFORMATION

Learning Objective

Understand and execute an integrated production process.

Scenario

To process a complete production process, you will assume various roles within Otto Bikes, e.g. Production Foreman and Plant Manager. You will work primarily in the Materials Management (MM) and Production Planning (PP) departments.

Employees Involved:

- Manufacturing Manager
- Plant Manager
- Production Worker 2
- Receiving Clerk
- Warehouse Clerk
- Production Worker 4
- Controller

Step 1: Change Product Master Data

Task

Prepare the product master data for demand planning by adding planning-relevant data to diamond city wheel records.

Name (Job)

Manufacturing Manager

To do this, you use:

Area *Production Planning and Execution*

Role *Production Manager*

App *Manage Product Master Data*

Produktstammdaten verwalten



In the search template, enter ***###** (replace ### with your three-digit number) in the *Product* field and ***Cityrad*** in the *Product Description* field.

The screenshot shows the SAP search interface for 'Produktstammdaten verwalten'. The search criteria are:

- Suchen: (empty)
- Bearbeitungsstatus: Alle
- Produkt: *000 x
- Produktbeschreibung: *Cityrad x
- GTIN: (empty)
- Produktgruppe: (empty)
- Produkttyp: (empty)

 A 'Start' button is visible at the bottom right of the search area.

Press **Start**. Your different City Bikes are displayed.

Produkte (7)						
Bild	Beschreibung/ID	Gruppe / Typ	GTIN	Produkttyp	Zuletzt geändert	
	E-Otto Basic Cityrad CEBK1000	FERT (E-Bikes) (E-BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:08:34 Marcel Himbürg	>
	E-Otto Advanced Cityrad CEBK2000	FERT (E-Bikes) (E-BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:08:47 Marcel Himbürg	>
	E-Otto Performance Cityrad CEBK3000	FERT (E-Bikes) (E-BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:08:59 Marcel Himbürg	>
	Otto Basic Cityrad Diamant CTBK1000	FERT (Fahrräder) (BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:04:00 Marcel Himbürg	>
	Otto Basic Cityrad Wave CTBK2000	FERT (Fahrräder) (BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:04:15 Marcel Himbürg	>
	Otto Endurance Cityrad Diamant CTBK3000	FERT (Fahrräder) (BIKES) Fertigerzeugnis (FERT)		Produkt	27.03.2023, 13:04:27 Marcel Himbürg	>

Select the row of the *E-Otto Basic Cityrad* (CEBK1###) to open the details of the product.

Choose **Bearbeiten** to switch to edit mode.

Using the pull-down menu on the right, choose the *Plants* area.

The window automatically scrolls to the correct location. You see a list of all plants for which the product has been defined.

Werke

Werk	Dispomerkmale	Disponent	Verfügbarkeitsprüfung	Zum Löschen vorgemerkt
<input type="radio"/> DEHH	M1	000	02	<input type="checkbox"/>
<input type="radio"/> DEMD	M1	000	02	<input type="checkbox"/>
<input type="radio"/> DEST	M1	000	02	<input type="checkbox"/>
<input type="radio"/> NLGR	M1	000	02	<input type="checkbox"/>
<input type="radio"/> NLRD	M1	000	02	<input type="checkbox"/>
<input type="radio"/> USKC	M1	000	02	<input type="checkbox"/>
<input type="radio"/> USNY	M1	000	02	<input type="checkbox"/>
<input type="radio"/> USSF	M1	000	02	<input type="checkbox"/>

Press **>** at the end of the row with the DEMD to open the plant-specific product master data.

SAP Werk

Otto Basic Cityrad Diamant / Plant Magdeburg

DEMD

Produktart: Fertigerzeugnis (FERT) Basismengeneinheit: Stuck (ST) Referenzprodukt: Geschäftsjahr der aktuellen Periode: 2023
 Produkttyp: Produkt GTIN: Aktuelle Periode: 3
 Produktgruppe: FERT (Fahrräder) (BIKES) GTIN-Typ:

Allgemeine Informationen Konfiguration Außenhandel Einkauf Dispositionsdaten Erweiterte Planung Erweiterte Ersatzteilplanung Prognose

Allgemeine Daten

Werk: Plant Magdeburg (DEMD) Chargenpflichtig: Nein Qualitätsmanagement-Steuerschlüssel:

Werksspezifischer Produktstatus: Seriennummernprofil:

Gültigkeitsbeginn für Status: dd.MM.yyyy Negative Bestände im Werk zulässig: Relv. f. Verbrauchssteuer:

Profitcenter: Bestandsfindungsgruppe: Zum Löschen vorgemerkt:

Ausgabemengeneinheit: Ladegruppe: Gabelstapler

Choose the *MRP Data* area. The window automatically scrolls to the correct location. Enter *strategy group 40 (Planning with final assembly)*.


Dispositionsdaten

Dispomerkmal: *	ABC-Kennzeichen:	Meldebestand:
MPS, Fixierungsart -1- (M1)		0,000 ST
Disponent:	Dispogruppe:	Planungszyklus:
000		
Verfügbarkeitsprüfung:	Strategiegruppe:	Fixierungshorizont:
02	Vorplanung mit Endmontage (40)	7 TAG

Then choose *Forecast* → *Required Periods* and enter **12** in the *Periods for Initialization* field.

Benötigte Perioden

Vergangenheitsperioden:	Perioden pro Saisonzyklus:	Fixierte Perioden:
120 MON	12 MON	0 MON
Prognoseperioden:	Perioden für Initialisierung:	
12 MON	12 MON	

Scroll down to the next subarea *Control Data*. In the *Optimization Level* field, click the value help icon  and select the optimization level **F (Fine – High Optimization Level)**. Back in the *Control Data* area, also activate the **parameter optimization**.

You then set the smoothing factors. Enter **0.20** as the *alpha factor*, **0.10** as the *beta factor*, **0.30** as the *gamma factor*, and **0.30** as the *delta factor*.

Steuerungsdaten

Initialisierungskennzeichen:	Gewichtungsgruppe:	Betafaktor:
Initialisierung durch das System (X)		0,10
Modellauswahlkennzeichen:	Prognosemodell automatisch zurücksetzen:	Gammafaktor:
	<input type="checkbox"/>	0,30
Optimierungsebene:	Parameteroptimierung:	Deltafaktor:
Fein (hoher Optimierungsgrad) (F)	<input checked="" type="checkbox"/>	0,30
Signalgrenze:	Korrekturfaktoren:	
4,000	<input type="checkbox"/>	
Modellauswahlverfahren:	Alphafaktor:	
Analytisches Modellauswahlverfahren (2)	0,20	



The smoothing factors are used by the SAP system for exponential smoothing depending on the model.


- Alpha factor = smoothing of the basic value
- Beta Factor = Smoothing of Trend Value



**Interessiert?
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of the seasonal index
absolute deviation (MAD)
data for plant DEMD. Then click
Cityrad Diamond.
for the product

Choose  to return to the *Manage Product Master*

Repeat the same procedure for the *E-Otto Advanced Cityrad* and the *E-Otto Performance Cityrad* (CEBK3###).

<input type="checkbox"/>	 E-Otto Advanced Cityrad CEBK2000	FERT (E-Bikes) (E-BIKES) Fertigerzeugnis (FERT)	Produkt	>
<input type="checkbox"/>	 E-Otto Performance Cityrad CEBK3000	FERT (E-Bikes) (E-BIKES) Fertigerzeugnis (FERT)	Produkt	>

Finally, click on  to return to the SAP Fiori launch

