**Chapter 06-01: Production**

**Master Data**

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| **MOTIVATION**  In this exercise, you will do the following for Production Master Data:   1. Create Materials 2. View Inventory Balance 3. View Material Inventory 4. Display Requirements List 5. Create Bills of Materials 6. Create Product Routings 7. Create Initial Inventory Balances |

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| **PRODUCT**  SAP S/4 HANA 2020 |
|  |
| **REVISED**  12/09/2021 |
|  |
| **FOCUS**  Production  Master Data |
|  |
| **AUTHORS**  Simha R. Magal  Jeff Word |
| **VERSION**  1.6 MCC  **TESTED**  Date: 12/09/2021  System: MGL |

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| **PREREQUISITES**   1. You should be familiar with navigation in SAP HANA 2. Completed Exercises Chs. 02-01 through 05-02 |



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* 1. Create Materials

In this section, you will be creating your own version of all the below raw materials, semi-finished goods, and finished goods necessary for the production process within the material master. The following table consists of five columns: the original material description, the original material number, your material number, the material type, and your storage location where it is.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Number** | **Your Number** | **Type** | **Your S.L.** |
| **Raw Materials** | | | | |
| Brake Kit | BRKT1000 | BRKT1029 BRKT10## | Raw | RM29 RM## |
| Chain | CHAN1000 | CHAN1029 CHAN10## | Raw | RM29 RM## |
| Derailleur Gear Assembly | DGAM1000 | DGAM1029 DGAM10## | Raw | RM29 RM## |
| Hex Nut 5 mm | HXNT1000 | HXNT1029 HXNT10## | Raw | RM29 RM## |
| Lock Washer 5 mm | LWSH1000 | LWSH1029 LWSH10## | Raw | RM29 RM## |
| Packaging | PCKG1000 | PCKG1029 PCKG10## | Raw | RM29 RM## |
| Pedal Assembly | PEDL1000 | PEDL1029 PEDL10## | Raw | RM29 RM## |
| Socket Head Bolt 5x20mm | BOLT1000 | BOLT1029 BOLT10## | Raw | RM29 RM## |
| Touring Aluminum Wheel | TRWH1000 | TRWH1029 TRWH10## | Raw | RM29 RM## |
| Touring Frame-Red | TRFR3000 | TRFR3029 TRFR30## | Raw | RM29 RM## |
| Touring Handle Bar | TRHB1000 | TRHB1029 TRHB10## | Raw | RM29 RM## |
| Touring Seat Kit | TRSK1000 | TRSK1029 TRSK10## | Raw | RM29 RM## |
| Touring Tire | TRTR1000 | TRTR1029 TRTR10## | Raw | RM29 RM## |
| Touring Tube | TRTB1000 | TRTB1029 TRTB10## | Raw | RM29 RM## |
| Warranty Document | WDOC1000 | WDOC1029 WDOC10## | Raw | RM29 RM## |
| **Semi-Finished Materials** | | | | |
| Touring Aluminum Wheel Assembly | TRWA1000 | TRWA1029 TRWA10## | Semi. | SF29 SF## |
| **Finished Materials** | | | | |
| Deluxe Touring Bike (red) | DXTR3000 | DXTR3029 DXTR30## | Fin. | FG29 FG## |

Raw Materials

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Materials Management à Material Master à Material à Create (General) à Immediately

1. What is the Transaction Code to create a general material immediately?  
    MM01 !
2. What is the Transaction Code to change a material immediately?  
    MM02 !
3. What is the Transaction Code to display a current material?  
    MM03 !
   * 1. In the *“Create Material (Initial Screen)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Brake Kit* |
| Industry Sector | Specifies the branch of industry to which the material is assigned | *Mechanical Engineering* |
| Material Type | Assigns the material to a group of materials | *Raw Materials* |
| Copy from…Material | Data you want the system to copy as default values | *Original Brake Kit* |

* + 1. Click Continue.
    2. In the *“Select View(s)”* pop-up, click Deselect All.
    3. Highlight the *“Basic Data 1”* row.
    4. Highlight the *“Purchasing”* row.
    5. Highlight the *“MRP 1”* row.
    6. Highlight the *“General Plant Data / Storage 1”* row.
    7. Highlight the *“Accounting 1”* row.
    8. Highlight the *“Costing 1”* row.
    9. Click Save as Default Values .
    10. Click Org. Levels .
    11. In the *“Organizational Levels”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Stor. Location | Location where materials are stored | *Your Raw Materials* |
| Copy from Plant | Plant of reference | *Original Dallas Plant* |
| Copy from Stor. Location | Storage location of reference | *Original Raw Materials* |

* + 1. Click Save As Default Values  and then click continue(Enter) 
* You will receive a message that says, “The material already exists and will extend”.
  + 1. In the *“Create Material BRKT10## (Raw materials)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material Description | Describes the material in more detail | ## Brake Kit |
| Purchasing Group | A buyer or group of buyers | *Your GBI Buyer* |

* + 1. Press Enter, until the *“Last data screen reached”* pop-up opens, click Yes 
* You will receive a message that says “Material BRKT10## created”.
  + 1. Refer to the beginning of this section and create the rest of your RAW materials.

Semi-Finished Goods

* + 1. In the *“Create Material (Initial Screen)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | TRWA10## |
| Industry Sector | Branch of industry to which the material is assigned. | *Mechanical Engineering* |
| Material Type | Assigns the material to a group of materials | *Semi-finished Product* |
| Copy from…Material | Material whose data you want the system to copy as default values | *Original Touring Aluminum Wheel Assembly* |

* + 1. Click Continue C:\Users\ukulkarni2\Downloads\Process Excercise 1.2\Snippets\Continue.PNG.
    2. In the *“Select View(s)”* pop-up, click Deselect All .
    3. Highlight *“Basic Data 1”*
    4. Highlight *“Purchasing”*
    5. Highlight *“MRP 1”*
    6. Highlight *“Work Scheduling”*
    7. Highlight *“General Plant Data/Storage 1”*
    8. Highlight *“Accounting 1”*
    9. Highlight *“Costing 1”*
    10. Click Save As Default Values .
    11. Click Org. Levels .
    12. In the *“Organizational Levels”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Stor. Location | Location at which materials are stored | *Your Semi-Fin. Goods* |
| Copy from Plant | Plant of reference | *Original Dallas Plant* |
| Copy from Stor. Location | Storage location of reference material | *Original Semi-Fin. Goods* |

* + 1. Click Save As Default Values  and then click continue(Enter) .
* You will receive a message that says, “The materials already exists and will be extended”.
  + 1. In the *“Create Material TRWA10## (Semi-Finished Product)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material Description | Describes the material in more detail | ## Touring Aluminum Wheel Assembly |
| MRP Type | Determines whether and how the material is planned. | *MRP* |
| Purchasing Group | A buyer or group of buyers | *Your GBI Buyer* |

* + 1. Press Enter, until the *“Last data screen reached”* pop-up opens, click on the  icon.
* You will receive a message that says “Material TRWA10## created”.

Finished Goods

* + 1. In the *“Create Material (Initial Screen)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | DXTR30## |
| Industry Sector | Specifies the branch of industry to which the material is assigned. | *Mechanical Engineering* |
| Material Type | Assigns the material to a group of materials | *Finished Product* |
| Copy from…Material | Material whose data you want the system to copy as default values | *Original Deluxe Touring Bike (red)* |

* + 1. Click Continue .
    2. In the *“Select View(s)”* pop-up, click Deselect All .
    3. Highlight *“Basic Data 1”*
    4. Highlight *“MRP 1”*
    5. Highlight *“Work Scheduling”*
    6. Highlight *“General Plant Data/Storage 1”*
    7. Highlight *“Accounting 1”*
    8. Highlight *“Costing 1”*
    9. Click Save As Default Values .
    10. In the *“Select View(s)”* pop-up, click Org. Levels .
    11. In the *“Organizational Levels”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Stor. Location | Location at which materials are stored | *Your Finished Goods* |
| Copy from Plant | Plant of reference | *Original Dallas Plant* |
| Copy from Stor. Location | Storage location of reference material | *Original Finished Goods* |

* + 1. Click Save As Default Values  and then click continue(Enter) .
* You will receive a message that says, “The material already exists and will be extended”.
  + 1. In the *“Create Material DXTR30## (Finished Product)”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material Description | Describes the material in more detail. | ## Deluxe Touring Bike (red) |
| MRP Type | Determines whether and how the material is planned | *MRP* |

* + 1. Press Enter, until the *“Last data screen reached”* pop-up opens, click .
* You will receive a message that says “Material DXTR30## created”.
  1. View Inventory Balance

In this section, you look at the inventory balance of a raw material located within Dallas.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Materials Management à Physical Inventory à Environment à Stock Overview

1. What is the Transaction Code to display a material’s inventory level?  
    MMBE !
   * 1. In the *“Stock Overview: Company Code/Plant/Storage Location/Batch.”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Touring Frame-Red* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Storage Location | Location at which the material is stored | *Your Raw Materials* |

**Click Execute** **.**

1. How many Touring Frames-Red are in unrestricted use?  
    0 !
2. How many Touring Frames-Red are in reserved stock?  
    0 !
3. How many Touring Frames-Red are in on-order stock?  
    0 !
   1. View Material Inventory

In this section, you view your material inventory of all your materials maintained in Dallas.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Materials Management à Inventory Management à Environment à Stock à Warehouse Stock

1. What is the Transaction Code to display a material’s inventory level?  
    MB52 !
   * 1. In the *“Display Warehouse Stock of Material”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | \*0## |
| Plant | Key uniquely identifying a plant | DL## |
| Storage Location | Location at which the material is stored | \*## |

1. What is the code for Your Raw Material Storage Location?  
    RM29 !
2. What is the code for Your Semi-Finished Goods Storage Location?  
    SF29 !
3. What is the code for Your Finished Goods Storage Location?  
    FG29 !
   * 1. Click Execute .
4. What is the total United States dollar value of Raw Materials in your inventory?  
    0 !
5. How many of Your Gear Assemblies are there in inventory?  
    0 !
6. What is the material code for Your Warranty Document?  
    WDOC1029 !
   1. Display Requirements List

In this section, you look at the stock/requirements list for the touring aluminum wheel assembly.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Materials Management à Inventory Management à Environment à Stock à Stock/Requirements List

1. What is the Transaction Code to display a stock/requirements list?  
    MD04 !
   * 1. In the *“Stock/Requirements List: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Touring Aluminum Wheel Assembly* |
| MRP Area | Number of the [MRP area](sapevent:DOCU_LINK\DS:GLOS.mrp%20area) for which material requirements planning should be carried out separately. | *Your Dallas Plant* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |

* + 1. Click Continue .

1. What is the material type of the Touring Wheel Assembly?  
    HALB !
2. What is the code for the Trading Goods material type?  
    HAWA !

* “Trading Goods”, NOT “Trading Goods (Planned)”

1. What is the code for the Raw Materials material type?  
    ROH !
2. What is the code for the Finished Product material type?  
    FERT !
   1. Create Bills of Materials

In this section, you create a BOM for your wheel assembly and then create a BOM for your bike.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Production à Master Data à Bills of Material à Bill of Material à Material BOM à Create

1. What is the Transaction Code to create a bill of materials?  
    CS01 !
2. What is the Transaction Code to display a bill of materials?  
    CS03 !
3. What is the Transaction Code to change a bill of materials?  
    CS02 !

Semi-Finished Goods

* + 1. In the *“Create material BOM: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Touring Aluminum Wheel Assembly* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| BOM Usage | Defines an area where a BOM can be used | *Production* |

* + 1. Click Copy .
    2. In the *“Copy From…”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Original Touring Aluminum Wheel Assembly* |
| Plant | Key uniquely identifying a plant | *Original Dallas Plant* |

* + 1. Click Continue (Enter) .
    2. In the *“Create material BOM: Copy From”* screen, click Select All .
    3. Click Copy .
    4. In the *“Create material BOM: Item: General Data”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| 0010 | The first component | *Your Touring Tire* |
| 0020 | The second component | *Your Touring Tube* |
| 0030 | The third component | *Your Touring Aluminum Wheel* |
| 0040 | The fourth component | *Your Hex Nut 5 mm* |
| 0050 | The fifth component | *Your Lock Washer 5 mm* |
| 0060 | The sixth component | *Your Socket Head Bolt 5x20mm* |

* + 1. Press Enter.

1. How many components make up the Touring Wheel Assembly?  
    6 !
2. What is the material code for Your Touring Tube?  
    TRTB1029
3. What is the item category for all the components?  
    L Stock Item !
4. How many lock washers are needed in a Touring Wheel Assembly?  
    2 !
5. What is the item number for The Hex Nut?  
    40 !
   * 1. Click Save .

* You will receive a message that says “Creating BOM for material”.

Finished Good

* + 1. In the *“Create material BOM: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Deluxe Touring Bike (red)* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Usage | Defines an area where a BOM can be used | *Production* |

* + 1. Click Copy .
    2. In the *“Copy From…”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Original Deluxe Touring Bike (red)* |
| Plant | Key uniquely identifying a plant | *Original Dallas Plant* |

* + 1. Click Continue (Enter) .
    2. In the *“Create material BOM: Copy From”* screen, click Select All .
    3. Click Copy .

**In the** *“Create material BOM: Item: General Data”* **screen, enter the following information:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| 0010 | The first component | *Your Touring Aluminum Wheel Assembly* |
| 0020 | The second component | *Your Touring Frame-Red* |
| 0030 | The third component | *Your Derailleur Gear Assembly* |
| 0040 | The fourth component | *Your Touring Seat Kit* |
| 0050 | The fifth component | *Your Touring Handle Bar* |
| 0060 | The sixth component | *Your Pedal Assembly* |
| 0070 | The seventh component | *Your Chain* |
| 0080 | The eighth component | *Your Brake Kit* |
| 0090 | The ninth component | *Your Warranty Document* |
| 0100 | The tenth component | *Your Packaging* |

* Change the component (Data Value) using their unique identifier ##.
  + 1. Press Enter.
    2. Click Save .
* You will receive a message that says “Creating BOM for material”.
  1. Create Product Routings

In this section, you copy the product routings for your wheel assembly and your touring bike.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Production à Master Data à Routings à Routings à Standard Routings à Create

1. What is the Transaction Code to create routings?  
    CA01 !
2. What is the Transaction Code to change routings?  
    CA02 !
3. What is the Transaction Code to display routings?  
    CA03 !

Semi-Finished Good

* + 1. In the *“Create Routing: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Touring Aluminum Wheel Assembly* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Group | Key identifying a group. | CLEAR OUT (Make sure nothing is in this field) |

* Ensure the Group Field is Cleared Out
  + 1. Click Copy From .
    2. In the *“Select Type”* pop-up, select Routing.
    3. Click Continue (Enter) .
    4. In the *“Create Using Copy Function: Select Object to be Copied”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Original Touring Aluminum Wheel Assembly* |
| Plant | Key uniquely identifying a plant | *Original Dallas Plant* |

* + 1. Click Continue (Enter) .
    2. In the *“Create Routing: Header Data Check”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Description | Routing description | ## Touring Aluminum Wheel Assembly |
| Overall Status | Indicates the processing status of a task list | Released (general) |

* + 1. Press Enter.
    2. In the *“Create Routing: Operation – Check”* screen, Press Enter to dismiss the *“Enter Standard Value Setup”* warning message
    3. Press Enter to dismiss the *“Activity type LABOR is not set up for cost center NA## NAPR10## in the current year”* warning message
    4. Press Enter to dismiss the “*Activity type LABOR is not set up for cost center NA## NAPR10## in the current year”* warning message
    5. Continue to Press Enter though the warning messages until you reach the *“Create Routing: Operation Overview”* screen.
    6. In the *“Create Routing: Operation Overview”* screen click Save .
* You will receive a message that says, “Routing was saved with group”.

Finished Good

* + 1. In the *“Create Routing: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Your Deluxe Touring Bike (red)* |
| Plant | Key uniquely identifying a plant | *Your Dallas Plant* |
| Group | Key identifying a group. | CLEAR OUT (Make sure nothing is in this field) |

* Ensure that the Group Field is cleared out.
  + 1. Click Copy From .
    2. In the *“Select Type”* pop-up, select Routing.
    3. Click Continue (Enter).
    4. In the *“Create Using Copy Function: Select Object to be Copied”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Key uniquely identifying the material | *Original Deluxe Touring Bike (red)* |
| Plant | Key uniquely identifying a plant | *Original Dallas Plant* |

* + 1. Click Continue (Enter) .
    2. In the *“Create Routing: Header Data Check”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Overall Status | Indicates the processing status of a task list | Released (general) |

* + 1. Press Enter.
    2. In the *“Create Routing: Operation – Check”* screen, Press Enter to dismiss the *“Enter Standard Value Setup”* warning message
* You will receive this message every time you press enter for every material in the BOM.
  + 1. Press Enter to dismiss the *“Activity type LABOR is not set up for cost center NA## NAPR10## in the current year”* warning message
    2. Press Enter to dismiss the *“Activity type LABOR is not set up for cost center NA## NAPR10## in the current year”* warning message
    3. Continue to Press Enter though the warning messages until you reach the *“Create Routing: Operation Overview”* screen.
    4. In the *“Create Routing: Operation Overview”* screen, click Save .
* You will receive a message that says, “Routing was saved with group”.

1. What is the importance of routings?  
    Routing defines the tasks to be done at work center during production. It also plays important role in calculation of production cost, machine time and labor time !
   1. Create Production Versions

In this section, you will create Production Versions for your Touring Wheel Assembly (TRWA10##) and your Deluxe Touring Bike (red) (DXTR30##). Manufacturing BOM determination is only possible with the creation of Production Version master data. You will need to reference your material’s routing to find the group and group counter values.

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Production à Master Data à Routings à Routings à Standard Routings à Display

* + 1. In the *“Display Routing: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Material | Key identifying your material | *Your Touring Wheel Assembly* |
| Plant | Key uniquely identifying a plant. | *Your Dallas Plant* |
| Group | Groups together several task lists. | *CLEARED OUT* |

* + 1. Click Continue .
    2. In the *“Display Routing: Operation Overview”* screen, select Header Data .

1. What is your Touring Wheel Assembly group?   
    50000157 !
2. What is your Touring Wheel Assembly group counter?   
    1 !
   * 1. In the *“Display Routing: Header Details”* screen, click back  two times.
     2. In the *“Display Routing: Initial Screen”* enter the following information:

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Material | Key identifying your material | *Your Deluxe Touring Bike (red)* |
| Plant | Key uniquely identifying a plant. | *Your Dallas Plant* |
| Group | Groups together several task lists | *CLEARED OUT* |

* + 1. Click Continue .
    2. In the *“Display Routing: Operation Overview”* screen, select Header Data .

1. What is your Deluxe Touring Bike (red) group?  
    50000158 !
2. What is your Deluxe Touring Bike (red) group counter?   
    1 !
   * 1. In the “SAP Easy Access” screen, follow the navigation path below:

Navigation

SAP Easy Access Menu à Logistics à Production à Master Data à Production Versions

1. What is the transaction code to create a production version?   
    C223 !
   * 1. In the *“Production Version: Mass Processing”* screen, enter the following information:

Ensure that the group field is cleared out.

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Plant | Key uniquely identifying a plant. | *Your Plant Dallas* |
| Material | Key identifying your material | *Your Touring Wheel Assembly* |

* + 1. Click Continue .
    2. In the *“Production Version: Mass Processing”* screen, in the *“Production Versions”* section of the screen enter the following information:

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Material | Key identifying your material | *Your Touring Wheel Assembly* |
| Production Version | Key identifying your production version | 01 |
| Production Version Text | Text describing your Production Version | Touring Wheel Assembly PV |
| BOM Usage | Key defining the area (such as engineering/design or production) where a BOM can be used | 1 |
| Group | Key for task list group found in material routing | *Your Touring Wheel Assembly routing group* |
| Group Counter | Helps uniquely identify the task list for the production version of a material | *Your Touring Wheel Assembly Group Counter* |
| Type | Key which classifies task lists according to their functionality | Routing |

* + 1. Click Continue 
    2. You will receive a warning message *““Valid-from date is set to current date and valid-to is set to maximum”* Click Continue .
    3. Click Continue  through the warning message *“Check default alternative BOM”*
    4. Click Save .
* You will not receive a confirmation message; however, you will now be able to perform the production process for your Touring Wheel Assembly.
  + 1. In the *“Production Version: Mass Processing”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Plant | Key uniquely identifying a plant. | *Your Plant Dallas* |
| Material | Key identifying your material | *Your Deluxe Touring Bike (red)* |
| MRP Controller | MRP Controller responsible for material planning for the material. | *Your DL Controller* |

* + 1. Click Continue .
    2. In the *“Production Version: Mass Processing”* screen in the *“Production Version”* section of the screen enter the following information:

|  |  |  |
| --- | --- | --- |
| Attribute | Description | Data Value |
| Material | Key identifying your material | *Your Deluxe Touring Bike (red)* |
| Production Version | Key identifying your production version | 01 |
| Production Version Short Text | Text describing your Production Version | Deluxe Touring Bike (red) PV |
| BOM Usage | Key defining the area (such as engineering/design or production) where a BOM can be used | 1 |
| Group | Key for task list group found in material routing | *Your Deluxe Touring Bike (red) routing group* |
| Group Counter | Helps uniquely identify the task list for the production version of a material | *Your Deluxe Touring Bike Red group counter* |
| Type | Key which classifies task lists according to their functionality | Routing |

Click Continue 

* + 1. You will receive a warning message *“valid from date is set to current date and valid to date will be set to maximum”* click Continue .
    2. Click Continue  through the warning message *“Check default alternative BOM”*.
    3. Click Save .
* You will not receive a confirmation message; however, you will now be able to perform the production process for your Deluxe Touring Bike (red).
  1. Create Initial Inventory Balance

Normally, the material planning process would create purchase requisitions for the necessary raw materials. You would then execute the procurement process and obtain these materials. For this exercise (and simplicity reasons), we will take a shortcut and create “inventory from heaven”.

Use the table below to calculate how many of the different materials are needed to make ten bikes. The first three columns include the material description, material number, and the quantity needed for one bike. Complete the remaining columns as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Description** | **Number** | **Quantity for 1 Bike** | **Qty. Needed for 10 Bikes** |
| 1 | Brake Kit | BRKT10## | 1 | 10 |
| 2 | Chain | CHAN10## | 1 | 10 |
| 3 | Derailleur Gear Assembly | DGAM10## | 1 | 10 |
| 4 | Hex Nut 5 mm | HXNT10## | 2 | 20 |
| 5 | Lock Washer 5 mm | LWSH10## | 4 | 40 |
| 6 | Packaging | PCKG10## | 1 | 10 |
| 7 | Pedal Assembly | PEDL10## | 1 | 10 |
| 8 | Socket Head Bolt 5x20mm | BOLT10## | 2 | 20 |
| 9 | Touring Aluminum Wheel | TRWH10## | 2 | 20 |
| 10 | Touring Frame-Red | TRFR30## | 1 | 10 |
| 11 | Touring Handlebar | TRHB10## | 1 | 10 |
| 12 | Touring Seat Kit | TRSK10## | 1 | 10 |
| 13 | Touring Tire | TRTR10## | 2 | 20 |
| 14 | Touring Tube | TRTB10## | 2 | 20 |
| 15 | Warranty Document | WDOC10## | 1 | 10 |

* + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Menu à Logistics à Materials Management à Inventory Management à Goods Movement à Goods Movement

1. What is the T-code to create “inventory from heaven”?  
    MIGO !
   * 1. In the *“Goods Receipt Purchase Order”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Trans/Event | Drop-down menu | Goods Receipt |
| Reference Document | Indicates the document you want to reference when you enter the transaction | Other |
| Receipt w/o PO (Movement Type ) | Specifies a key for the type of goods movement | 561 |

* + 1. Press Enter.
    2. In the *“Tip”* pop-up, click Continue (Enter) .
    3. In the *“Goods Receipt Other”* screen, enter the following information:

Ensure that detail data section is collapsed before entering data in “General” section.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mat. Short Text** | **Quantity in UnE** | **E** | **SLoc** | **Plnt** |
| BOLT10## | 20 | EA | *Raw Materials* | *Your Plant Dallas* |
| BRKT10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| CHAN10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| DGAM10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| HXNT10## | 20 | EA | *Raw Materials* | *Your Plant Dallas* |
| LWSH10## | 40 | EA | *Raw Materials* | *Your Plant Dallas* |
| PCKG10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| PEDL10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRFR30## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRHB10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRSK10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRTB10## | 20 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRTR10## | 20 | EA | *Raw Materials* | *Your Plant Dallas* |
| TRWH10## | 20 | EA | *Raw Materials* | *Your Plant Dallas* |
| WDOC10## | 10 | EA | *Raw Materials* | *Your Plant Dallas* |

* + 1. Press Enter.
    2. Click Post .
* You will receive a message that says, “Material document 49………… posted”.
  + 1. Refer to a previous step for instructions on how to view your material inventory. Make sure you have the correct amount of inventory for each item.

1. How many of Your Touring Frames-Red are in inventory after the movement?  
    10 !
2. What is the total United States dollar value of Touring Frames-Red in inventory?  
    2000 !

1. Exercise Deliverables

**Name:** Srikanth Reddy Narra

**Course and Section:** OMIS 643-1

**Identifier:** 29

**Client:** 313

1. What is the Transaction Code to create a general material immediately?  
   !
2. What is the Transaction Code to change a material immediately?  
   !
3. What is the Transaction Code to display a current material?  
   MM03!
4. What is the Transaction Code to display a material’s inventory level?  
   MMBE!
5. How many Touring Frames-Red are in unrestricted use?  
   0!
6. How many Touring Frames-Red are in reserved stock?  
   0!
7. How many Touring Frames-Red are in on-order stock?  
   0!
8. What is the Transaction Code to display a material’s inventory level?  
   MB52!
9. What is the code for Your Raw Material Storage Location?  
   RM29!
10. What is the code for Your Semi-Finished Goods Storage Location?  
    SF29!
11. What is the code for Your Finished Goods Storage Location?  
    FG29!
12. What is the total United States dollar value of Raw Materials in your inventory?  
    0!
13. How many of Your Gear Assemblies are there in inventory?  
    0!
14. What is the material code for Your Warranty Document?  
    WDOC1029!
15. What is the Transaction Code to display a stock/requirements list?  
    MD04!
16. What is the material type of the Touring Wheel Assembly?  
    HALB!
17. What is the code for the Trading Goods material type?  
    HAWA!
18. What is the code for the Raw materials material type?  
    ROH!
19. What is the code for the Finished Product material type?  
    FERT!
20. What is the Transaction Code to create a bill of materials?  
    CS01!
21. What is the Transaction Code to display a bill of materials?  
    CS03!
22. What is the Transaction Code to change a bill of materials?  
    CS02!
23. How many components make up the Touring Wheel Assembly?  
    6!
24. What is the material code for Your Touring Tube?  
    TRTB1029!
25. What is the item category for all the components?  
    L Stock Item!
26. How many Lock Washers are needed in a Touring Wheel Assembly?  
    2!
27. What is the item number for the Hex Nut?  
    40!
28. What is the Transaction Code to create routings?  
    CA01!
29. What is the Transaction Code to change routings?  
    CA02!
30. What is the Transaction Code to display routings?  
    CA03!
31. What is the importance of routings?  
    Routing defines the tasks to be done at work center during production. It also plays important role in calculation of production cost, machine time and labor time !
32. What is your Touring Wheel Assembly group?

50000157!

1. What is your Touring Wheel Assembly group counter?

1!

1. What is your Deluxe Touring Bike (red) group?

50000158!

1. What is your Deluxe Touring Bike (red) group counter?

1!

1. What is the transaction code to create a production version?

C223!

1. What is the Transaction Code to create inventory from heaven?  
   MIGO !
2. How many of Your Touring Frames-Red are in inventory after the movement?  
   10!
3. What is the total United States dollar value of Touring Frames-Red in inventory?  
   2000!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Number** | **Your Number** | **Type** | **Your S.L.** |
| Brake Kit | BRKT1000 | BRKT1029BRKT10## | Raw | RM29RM## |
| Chain | CHAN1000 | CHAN1029CHAN10## | Raw | RM29RM## |
| Derailleur Gear Assembly | DGAM1000 | MM03DGAM10## | Raw | RM29RM## |
| Hex Nut 5 mm | HXNT1000 | MMBEHXNT10## | Raw | RM29RM## |
| Lock Washer 5 mm | LWSH1000 | 0LWSH10## | Raw | RM29RM## |
| Packaging | PCKG1000 | PCKG1029PCKG10## | Raw | RM29RM## |
| Pedal Assembly | PEDL1000 | PEDL1029PEDL10## | Raw | RM29RM## |
| Socket Head Bolt 5x20mm | BOLT1000 | BOLT1029BOLT10## | Raw | RM29RM## |
| Touring Aluminum Wheel | TRWH1000 | TRWH1029TRWH10## | Raw | RM29RM## |
| Touring Frame-Red | TRFR3000 | TRFR3029TRFR30## | Raw | RM29RM## |
| Touring Handle Bar | TRHB1000 | TRHB1029TRHB10## | Raw | RM29RM## |
| Touring Seat Kit | TRSK1000 | TRSK1029TRSK10## | Raw | RM29RM## |
| Touring Tire | TRTR1000 | TRTR1029TRTR10## | Raw | RM29RM## |
| Touring Tube | TRTB1000 | TRTB1029TRTB10## | Raw | RM29RM## |
| Warranty Document | WDOC1000 | WDOC1029WDOC10## | Raw | RM29RM## |
| Touring Aluminum Wheel Assembly | TRWA1000 | TRWA1029TRWA10## | Semi. | SF29SF## |
| Deluxe Touring Bike (red) | DXTR3000 | DXTR3029DXTR30## | Fin. | FG29FG## |