**Chapter 06-02: Production**

**Process Execution**

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| **MOTIVATION**  In this exercise, you will do the following for Procurement Process:   1. Create Planned Order 2. Convert Planned Order 3. Issue Materials to Production 4. Confirm Production 5. Receive Goods into Inventory 6. Review Production Order Costs 7. Create Finished Goods |

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| **PRODUCT**  SAP S/4HANA 2020 |
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| **REVISED**  12/08/2021 |
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| **FOCUS**  Procurement  Process |
|  |
| **AUTHORS**  Simha R. Magal  Jeff Word |
| **VERSION**  1.6 MCC  **TESTED**  Date: 12/08/2021  System: MGL |

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| **ACKNOWLEDGEMENT**  These are the GBI exercises developed by Simha R. Magal and Jeff Word.  These exercises include concepts discussed in the book, *Integrated Business Processes with ERP Systems* (Epistemy Press, 2012). |

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| **PREREQUISITES**   1. You should be familiar with navigation in SAP HANA 2. Completed Exercises Chs. 02-01 through 06-01 |



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1. Table of Contents

Table of Contents

[Section 1.1: Create Planned Order 3](#_Toc31620076)

[Section 1.2: Convert Planned Order 5](#_Toc31620077)

[Section 1.3: Issue Materials to Production 7](#_Toc31620078)

[Section 1.4: Confirm Production 9](#_Toc31620079)

[Section 1.5: Receive Goods into Inventory 11](#_Toc31620080)

[Section 1.6: Review Production Order Costs 13](#_Toc31620081)

[Section 1.7: Create Finished Goods 14](#_Toc31620082)

* 1. Create Planned Order

Normally, the material planning process would determine the need to produce bicycles. However, for this exercise, you have manually determined that you need ten bikes. To manufacture the bikes, you need wheel assemblies. Therefore, you must produce them.

In this exercise, you go through the steps twice: once for the wheel assemblies and once for the bikes. The instructions below include the data for the wheel assemblies. When you repeat these steps for the bikes, be sure to modify this data as needed throughout the exercise.

* Entire exercise must be completed for wheel assemblies first, followed by the exercise repeated for bikes.
  + 1. In the *“SAP Easy Access”* screen, follow the navigation path below:

Navigation

SAP Easy Access Menu 🡪 Logistics 🡪 Materials Management 🡪 Material Requirements Planning (MRP) 🡪 MRP 🡪 Planned Order 🡪 Create

1. What is the Transaction Code to create a Planned Order?  
    MD11 🖉
   * 1. In the *“Create Planned Order: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Planned Order Profile | Determines different types for processing planned orders | *Stock Order* |

* + 1. Click Continue .
    2. In the *“Create Planned Order: Stock order”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Material | Material for which the planned order is valid | *Your Touring Aluminum Wheel Assembly* |
| MRP Area | Plant where forecast is carried out | *Your Dallas Plant* |
| Order quantity | Quantity to be produced | *Necessary Quantity for Order* |
| End | Expected completion date | *One Week from Today* |
| Producing plant | Plant the quantity is produced at | *Your Dallas Plant* |
| Stor. Location | Location at which material is stored | *Your Semi-Finished Goods* |
| Production Version | Determines the routing and BOM to be used | *Your Touring Wheel Assembly PV* |

* See previous exercise for the necessary quantity.
  + 1. Click Save .
* You will receive a message that says, “Planned order will be created”.

1. What is the Planned Order document number?  
    126 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review inventory balance. Review the inventory balance of your wheel assembly. While the balance in your inventory may be obvious, it is always good to check for grading purposes.
2. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review material inventory. Review the inventory of your wheel assembly. While the amount in your inventory may be obvious, it is always good to check for grading purposes.
3. What is the total dollar value of Touring Wheel Assemblies in inventory?  
    0 🖉
   1. Convert Planned Order

In this section, you convert the planned order into a production order. That is, you authorize production of the wheel assemblies. The system recognizes this in the stock/requirements list.

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

Navigation

SAP Easy Access Menu 🡪 Logistics 🡪 Production 🡪 MRP 🡪 Evaluations 🡪 Stock/Requirements List

1. What is the Transaction Code to display a stock/requirements list?  
    MD04 🖉

* Be sure that your material and plant are defaulted within their respective fields.
  + 1. In the *“Stock/Requirements List: Initial Screen”* screen, enter the following information:

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

* + 1. Click Continue .
    2. In the *“Stock/Requirements List”* screen, double-click on PldOrd.
    3. In the *“Additional Data for MRP Element”* pop-up, click .
* You will receive a message that says, “Release carried out”.
  + 1. In the *“Production order Create: Header”* screen, click Save .
* You will receive a message that says, “Order number saved”.

1. What is the Production Order document number?  
    1000046 🖉
   * 1. In the *“Stock Requirement List”* screen, refresh the data by clicking refresh .

* Notice how the order has changed from a planned order to a production order.

1. What is the MRP type?  
    PD 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review inventory balance. Review the inventory balance of your wheel assembly. While the balance in your inventory may be obvious, it is always good to check for grading purposes.
2. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
3. How many Touring Wheel Assemblies are in reserved stock?  
    0 🖉
4. How many Touring Wheel Assemblies are in on-order stock?  
    0 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review material inventory. Review the inventory of your wheel assembly. While the amount in your inventory may be obvious, it is always good to check for grading purposes.
5. What is the total dollar value of Touring Wheel Assemblies in inventory?  
    0 🖉
   1. Issue Materials to Production

In this section, you will release (issue) the materials needed to produce the wheel assemblies.

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

Navigation

SAP Menu 🡪 Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Goods Movements 🡪 Goods Issue / Goods Receipt

1. What is the T-code to issue materials to production?  
    MIGO 🖉
   * 1. In the *“Goods Receipt Other”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Trans/Event | Drop-down menu | Goods Issue |
| Reference Document | Indicates the document you want to reference when you enter the transaction | Order |
| Order Number | Number assigned to order document | *Production Order Document Number* |
| GI for order (Movement Type) | Specifies a key for the type of goods movement | 261 |

* + 1. Press Enter.
    2. In the *“Goods Issue Order 1………”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Mat. Short Text** | **OK** | **SLoc** |
| ## Touring Tire | Selected | *Your Raw Materials* |
| ## Touring Tube | Selected | *Your Raw Materials* |
| ## Touring Aluminum Wheel | Selected | *Your Raw Materials* |
| ## Hex Nut 5 mm | Selected | *Your Raw Materials* |
| ## Lock Wash 5 mm | Selected | *Your Raw Materials* |
| ## Socket Head Bolt 5x20mm | Selected | *Your Raw Materials* |

* + 1. Click Post .

1. What is the Goods Issue document number?  
    4900000720 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review inventory balance. Review the inventory balance of your wheel assembly. While the balance in your inventory may be obvious, it is always good to check for grading purposes.
2. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
3. How many Touring Wheel Assemblies are in reserved stock?  
    0 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review material inventory. Review the inventory of your wheel assembly. While the amount in your inventory may be obvious, it is always good to check for grading purposes.
4. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
    0 🖉
   1. Confirm Production

After the materials have been released into the production order (previous step), the actual production takes place. When the production has been completed, it is necessary to inform the system of this fact. In this step, you will confirm the production of the wheel assemblies.

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

Navigation

SAP Easy Access Menu 🡪 Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Confirmation 🡪 Enter 🡪 For Order

1. What is the Transaction Code to confirm production?  
    CO15 🖉
   * 1. In the *“Enter Production Order Confirmation: Initial Screen”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Order | Identifies an order within a client | *Your Production Order Number* |

* TRWA10## order number should be entered first
  + 1. Click Continue .
    2. In the *“Confirmation of Production Order Enter: Actual Data”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Yield Quantity | Yield you want to confirm | *Quantity Entered in Planned Order* |

* + 1. Click Save .
* You will receive a message that says, “Confirmation of order saved”.
  + 1. Refer to a previous section in a previous exercise for instructions on how to review inventory balance. Review the inventory balance of your wheel assembly. While the balance in your inventory may be obvious, it is always good to check for grading purposes.

1. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
2. How many Touring Wheel Assemblies are in reserved stock?  
    0 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review material inventory. Review the inventory of your wheel assembly. While the amount in your inventory may be obvious, it is always good to check for grading purposes.
3. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
    0 🖉
   1. Receive Goods into Inventory

In this section, you receive the goods produced that are currently on the shop floor into inventory.

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

Navigation

SAP Menu 🡪 Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Goods Movement 🡪 Goods Issue/Goods Receipt

1. What is the T-code to create a goods receipt?  
    MIGO 🖉
   * 1. In the *“Goods Receipt for Order: Initial Screen”* 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 | Order |
| Document Number | Document number assigned to the document you would like to reference | *Production Order Number* |
| Movement Type | Specifies a key for the type of goods movement | 101 |

* + 1. Press Enter.
    2. In the *“Goods Receipt for Order: New Items 0001”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| OK | Indicates that the item is to be regarded as closed. | Selected |
| SLoc | Location at which the material is stored | *Semi-finished Goods* |

* + 1. Click Post .
* You will receive a message that says, “Document posted”.

1. What is the Goods Receipt document number?  
    5000000134 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review inventory balance. Review the inventory balance of your wheel assembly. While the balance in your inventory may be obvious, it is always good to check for grading purposes.
2. How many Touring Wheel Assemblies are in unrestricted stock?  
    20 🖉
3. How many Touring Wheel Assemblies are in reserved stock?  
    0 🖉
   * 1. Refer to a previous step in a previous exercise for instructions on how to review material inventory. Review the inventory of your wheel assembly. While the amount in your inventory may be obvious, it is always good to check for grading purposes.
4. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
    2200 🖉
   1. Review Production Order Costs

In this section, you review the production costs associated with the production you completed.

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

Navigation

SAP Easy Access Menu 🡪 Accounting 🡪 Controlling 🡪 Product Cost Controlling 🡪 Cost Object Controlling 🡪 Product Cost by Order 🡪 Information System 🡪 Reports for Product Cost by Order 🡪 Detailed Reports 🡪 For Orders

1. What is the Transaction Code to view production order costs?  
    KKBC\_ORD 🖉
   * 1. In the *“Set Controlling Area”* pop-up, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Controlling Area | Unique key identifying a controlling area. | *Your GBI North America* |

* + 1. Click Continue (Enter) .
    2. In the *“Analyze Order: Target/Actual – Comparison”* screen, enter the following information:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Description** | **Data Value** |
| Order | Uniquely identifies an order | *Your Production Order Document Number* |

* + 1. Click Execute .
* You will receive a message that says, “Variance variant not allowed”.

1. What are the total actual costs for Manufacturing output settlement for your touring wheel assembly?  
    2200 🖉
2. What is the cost element number for the manufacturing output settlement?  
    741600 🖉
   1. Create Finished Goods

In this section, you will repeat sections 1 through 5 to produce Your Deluxe Touring Bike (Red) by using the Raw Materials and the Touring Aluminum Wheel Assembly you just created. Remember we created Twenty Wheel Assemblies.

Remember to be careful to select the correct information for storage locations.

* + The components needed to produce the bike are in Raw Materials and Semi-Finished goods.
  + The wheel assembly that you just produced is in Semi-Finished goods.
  + When you complete the production of the bike, you will receive them into finished goods storage.
    1. Create Planned Order

1. What is the Planned Order document number?  
    127 🖉
   * 1. Convert Planned Order
2. What is the Production Order document number?  
    1000047 🖉
   * 1. Issue Materials to Production
3. What is the Goods Issue document number?  
    4900000721 🖉
   * 1. Confirm Production
     2. Receive Goods into Inventory
4. What is the Goods Receipt document number?  
    5000000136 🖉

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 Planned Order?  
    MD11 🖉
2. What is the Planned Order document number?  
    126 🖉
3. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
4. What is the total dollar value of Touring Wheel Assemblies in inventory?  
    0 🖉
5. What is the Transaction Code to display a stock/requirements list?  
    MD04 🖉
6. What is the Production Order document number?  
    1000046 🖉
7. What is the MRP type?  
    PD 🖉
8. How many Touring Wheel Assemblies are in unrestricted stock?  
    0 🖉
9. How many Touring Wheel Assemblies are in reserved stock?  
    0 🖉
10. How many Touring Wheel Assemblies are in on-order stock?  
     0 🖉
11. What is the dollar value of the Touring Wheel Assemblies?  
     0 🖉
12. What is the Transaction Code to issue materials to the production order?  
     MIGO 🖉
13. What is the Goods Issue document number?  
     4900000720 🖉
14. How many Touring Wheel Assemblies are in unrestricted stock?  
     0 🖉
15. How many Touring Wheel Assemblies are in reserved stock?  
     0 🖉
16. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
     0 🖉
17. What is the Transaction Code to confirm production?  
     CO15 🖉
18. How many Touring Wheel Assemblies are in unrestricted stock?  
     0 🖉
19. How many Touring Wheel Assemblies are in reserved stock?  
     0 🖉
20. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
     0 🖉
21. What is the Transaction Code to receive goods into inventory?  
     MIGO 🖉
22. What is the Goods Receipt document number?  
     5000000134 🖉
23. How many Touring Wheel Assemblies are in unrestricted stock?  
     20 🖉
24. How many Touring Wheel Assemblies are in reserved stock?  
     0 🖉
25. What is the total dollar value of the Touring Wheel Assemblies in inventory?  
     1100 🖉
26. What is the Transaction Code to view production order costs?  
     KKBC\_ORD 🖉
27. What are the total actual costs for your Manufacturing Output settlement for your touring wheel assembly?  
     2200 🖉
28. What is the cost element number for the manufacturing output settlement?  
     741600 🖉
29. What is the Planned Order document number?  
     127 🖉
30. What is the Production Order document number?  
     1000047 🖉
31. What is the Goods Issue document number?  
     4900000721 🖉
32. What is the Goods Receipt document number?  
     5000000136 🖉