Chapter 06: Production

Exercise 06-02: Production Process

Multiple Company Code

Version 4.15

Revised 01/14/2016

Introduction

General Notes and Information

It is strongly recommended that you read through the entire exercise prior to starting. Not all instructions can be provided in a linear manner in the exercise itself. READ CAREFULLY!

The following symbols are used to indicate important information as described below.

* An arrow highlights an important instruction that must not be overlooked.

🖉 A pencil prompts you to write down an important piece of information.

Each student or group will be assigned a unique two-digit identifier. This identifier is used in all exercises. Whenever you see ##, replace it with your identifier. For example, Joe may have an identifier of 05. Every time Joe sees the ## symbol, he will replace it with “05”.

**Differences in Font**:Throughout this exercise you will see tables with different fonts used in the Data Entry column(s). The normal Times New Roman indicates you enter exactly what is typed out except for the ## Symbol where you would put in your identifier. The italicized *Times New Roman* font indicates the data is looked up, found, or otherwise not to be entered literally as written.

* Always work with your data.
* Provide both the code and its description in your answers. The questions are designed for you to locate the code but also understand the meaning

Business Process Overview

GBI uses the production process to manufacture goods the company needs to fill orders (such as purchase order from customers) or increase inventory after an order (maybe safety stock).

In this exercise, you go through the process to produce ten bikes and place them into inventory.

Exercise Prerequisites

Chapter 06-01 Version MCC 4.10

Exercise Workflow

Exercise Deliverables

Deliverables are consolidated into one worksheet at the end of the exercise. It is only necessary to turn in that worksheet and that worksheet alone along with data in the system if required.

For this exercise you will need the following deliverables:

In the System:

* Semifinished Product Planned Order Created
* Semifinished Product Planned Order Converted into Production Order
* Semifinished Product Materials Issued to Production Order
* Semifinished Product Production Order Confirmed
* Semifinished Product Received into Inventory
* Finished Product Planned Order Created
* Finished Product Planned Order Converted into Production Order
* Finished Product Materials Issued to Production Order
* Finished Product Production Order Confirmed
* Finished Product Received into Inventory

On Paper:

* Answer(s) to Question(s)
* Document Number(s)
* You may be assigned additional deliverables. Make certain to check with your instructor.

Step 1: Create Planned Order

Normally, the material planning process would determine the need to produce bicycles. However, for the purpose of 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.

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

Navigation

Logistics 🡪 Materials Management 🡪 Material Requirements Planning (MRP) 🡪 MRP 🡪 Planned Order 🡪 Create

1. What is the transaction code to create a planned order?MD11 🖉
2. You are in the “Create Planned Order: Initial Screen” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Planned Order Profile | Stock Order |

1. Click on  (ENTER).
2. You are in the “Create Planned Order: Stock order” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Material | Your Touring Aluminum Wheel Assembly |
| Planning plant | Your Dallas Plant |
| Order quantity | Necessary Quantity for Order |
| End | One Week from Today |
| Producing plant | Your Dallas Plant |
| Stor. Location | SF## |

* See previous exercise for the necessary quantity.

1. Click on  (SAVE).

You will receive a message that says “Planned order will be created”.

1. What is the resulting document number? 47 🖉

* 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.

1. How many wheel assemblies are in unrestricted stock? 0.000 🖉

* 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.

1. What is the total dollar value of wheel assemblies in inventory? 0.00 🖉

Exercise Deliverables

In the System:

* Semifinished Product Planned Order Created

On Paper:

* Answer(s) to Question(s)
* Document Number(s)

Step 2: Convert Planned Order

In this step, 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

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. You are in the “Stock/Requirements List: Initial Screen” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Material | Your Touring Aluminum Wheel Assembly |
| Plant | Your Dallas Plant |

1. Click on  (ENTER).
2. In the “Stock/Requirements List” screen, double-click on PldOrd.
3. In the “Additional Data for MRP Element” pop-up, click on the  icon. You will receive a message that says “Release carried out”.
4. In the “Production order Create: Header” screen, click on the  icon.

You will receive a message that says “Order number saved”.

1. What is the resulting document number? 1000062 🖉

* You are back in the previous screen. Refresh the data by clicking on the  icon. Notice how the order has officially changed from a planned order to a production order.

1. What is the MRP type? PD 🖉

* 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.

1. How many wheel assemblies are in unrestricted stock? 0.000 🖉
2. How many wheel assemblies are in reserved stock? 0.000 🖉
3. How many wheel assemblies are in on-order stock? 0.000 🖉

* 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.

1. What is the total dollar value of wheel assemblies in inventory? 0.00 🖉

Exercise Deliverables:

In the System:

* Semifinished Product Planned Order Converted into Production Order

On Paper:

* Answer(s) to Question(s)
* Document Number(s)

Step 3: Issue Materials to Production

In this step 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

Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Goods Movements 🡪 Goods Issue

1. What is the transaction code to issue materials to the production order? MB1A 🖉
2. You are in the “Enter Goods Issue: Initial Screen” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Movement Type | Consumption for order from warehouse |
| Plant | Your Dallas Plant |
| Storage Location | Your Raw Materials |

1. Click on  (TO ORDER…).
2. In the “Reference: Order” pop-up, enter the following information:

|  |  |
| --- | --- |
| Order | SLoc |
| Your Production Order Number | Your Raw Materials |

1. Click on  (CONTINUE (ENTER)).

* In the next screen, make sure that all your storage locations are correct for all materials.

1. In the “Enter Goods Issue: Selection Screen” screen, click on the  icon. You will receive a message that says “Document posted”.
2. What is the resulting document number? 4900000353 🖉

* 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.

1. How many wheel assemblies are in unrestricted stock? 0.000 🖉
2. How many wheel assemblies are in reserved stock? 0.000 🖉

* 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.

1. What is the total dollar value of wheel assemblies in inventory? 0.00 🖉

Exercise Deliverables:

In the System:

* Semifinished Product Materials Issued to Production Order

On Paper:

* Answer(s) to Question(s)
* Document Number(s)

Step 4: 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

Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Confirmation 🡪 Enter 🡪 For Order

1. What is the transaction code to confirm production? CO15 🖉
2. You are in the “Enter Production Order Confirmation: Initial Screen” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Order | Your Production Order Number |

1. Click on  (ENTER).
2. You are in the “Confirmation of Production Order Enter: Actual Data” screen. Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Yield to conf. | Quantity Entered in Planned Order |

1. Click on  (SAVE).

You will receive a message that says “Confirmation of order saved”.

* At this point, the material is on the production floor and must be received into inventory.
* 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.

1. How many wheel assemblies are in unrestricted stock? 0.000 🖉
2. How many wheel assemblies are in reserved stock? 0.000 🖉

* 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.

1. What is the total dollar value of wheel assemblies in inventory? 0.00 🖉

Exercise Deliverables:

In the System:

* Semifinished Product Production Order Confirmed

On Paper:

* Answer(s) to Question(s)

Step 5: Receive Goods into Inventory

In this step, you receive (record) the goods produced into inventory.

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

Navigation

Logistics 🡪 Production 🡪 Shop Floor Control 🡪 Goods Movements 🡪 Goods Receipt

1. What is the transaction code to receive goods into inventory? MB31 🖉
2. You are in the “Goods Receipt for Order: Initial Screen” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Movement Type | Goods receipt for order into warehouse |
| Order | Your Production Order Number |
| Plant | Your Dallas Plant |
| Stor. Location | Your Semi-Fin Goods |

1. Click on  (ADOPT + DETAILS).
2. You are in the “Goods Receipt for Order: New Items 0001” screen.

Enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Deliv. Compl. | Selected |

1. Click on  (SAVE).

You will receive a message that says “Document posted”.

1. What is the resulting document number? 5000000082 🖉

* 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.

1. How many wheel assemblies are in unrestricted stock? 20.000 🖉
2. How many wheel assemblies are in reserved stock? 0.000 🖉

* 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.

1. What is the total dollar value of wheel assemblies in inventory? 2,200.00 🖉

Exercise Deliverables:

In the System:

* Semifinished Product Received into Inventory

On Paper:

* Answer(s) to Question(s)
* Document Number(s)

Step 6: Review Production Order Costs

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

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

Navigation

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 🖉
2. In the “Set Controlling Area” pop-up, enter the following information:

|  |  |
| --- | --- |
| Field Name | Data Entry |
| Controlling Area | Your GBI |

1. Click on  (CONTINUE (ENTER)).

* Ensure that your order number is in the corresponding field.

1. In the “Analyze Order: Target/Actual – Comparison” screen, click on the Execute icon. You will receive a message that says “Variance variant not allowed”.
2. What are the total actual costs for raw materials? 2,206.00 🖉
3. What are the target/actual variances for raw materials? 2,206.00 🖉
4. What is the cost element number for the manufacturing output settlement? 741600 🖉

Exercise Deliverables:

In the System:

* None

On Paper:

* Answer(s) to Question(s)

Step 7: Create Finished Goods

In this step, you will produce the bikes by using the raw materials and the wheel assembly in which you have created in the previous steps. Remember we created twenty wheel assemblies.

* You will be repeating Step 1 through Step 5 for the bike instead.
* Remember that for the following steps to be careful to select the correct information for storage locations. The components needed to produce the bike are located in raw materials. The wheel assembly that you just produced is located in semifinished goods and is also needed to produce the bike. When you complete the production of the bike, you will receive them into the finished goods storage location using the goods receipt transaction.

1. Create Planned Order
2. What is the resulting document number? 61 🖉
3. Convert Planned Order
4. What is the resulting document number? 1000070 🖉
5. Issue Materials to Production
6. What is the resulting document number? 4900000372 🖉
7. Confirm Production
8. Receive Goods into Inventory
9. What is the resulting document number? 5000000083 🖉

Exercise Deliverables:

In the System:

* Finished Product Planned Order Created
* Finished Product Planned Order Converted into Production Order
* Finished Product Materials Issued to Production Order
* Finished Product Production Order Confirmed
* Finished Product Received into Inventory

On Paper:

* Document Number(s)

Attachment 1: Exercise Worksheet

**Name:** THUY HONG HA

**Course and Section:** PRODUCTION-02

**Identifier:** 054

**Client:** 701

* Provide both the code and its description in your answers. The questions are designed for you to locate the code but also understand the meaning

1. What is the transaction code to create a planned order? 🖉
2. What is the resulting document number? 🖉
3. How many wheel assemblies are in unrestricted stock? 🖉
4. What is the total dollar value of wheel assemblies in inventory? 🖉
5. What is the transaction code to display a stock/requirements list? 🖉
6. What is the resulting document number? 🖉
7. What is the MRP type? 🖉
8. How many wheel assemblies are in unrestricted stock? 🖉
9. How many wheel assemblies are in reserved stock? 🖉
10. How many wheel assemblies are in on-order stock? 🖉
11. What is the dollar value of wheel assemblies? 🖉
12. What is the transaction code to issue materials to the production order? 🖉
13. What is the resulting document number? 🖉
14. How many wheel assemblies are in unrestricted stock? 🖉
15. How many wheel assemblies are in reserved stock? 🖉
16. What is the dollar value of wheel assemblies? 🖉
17. What is the transaction code to confirm production? 🖉
18. How many wheel assemblies are in unrestricted stock? 🖉
19. How many wheel assemblies are in reserved stock? 🖉
20. What is the dollar value of wheel assemblies? 🖉
21. What is the transaction code to receive goods into inventory? 🖉
22. What is the resulting document number? 🖉
23. How many wheel assemblies are in unrestricted stock? 🖉
24. How many wheel assemblies are in reserved stock? 🖉
25. What is the dollar value of wheel assemblies? 🖉
26. What is the transaction code to view production order costs? 🖉
27. What are the total actual costs for raw materials? 🖉
28. What are the target/actual variances for raw materials? 🖉
29. What is the cost element number for the manufacturing output settlement? 🖉
30. What is the resulting document number? 🖉
31. What is the resulting document number? 🖉
32. What is the resulting document number? 🖉
33. What is the resulting document number? 🖉