This sample chapter describes shop floor control (SFC)-related activities such as SFC number generation and assignment, SFC merge, split, hold, and release, and quantity adjustment. It also covers SFC scrap/delete and unscrap/undelete functionality and standard reporting activities for evaluating and tracking SFCs.
This chapter explains SFC generation and the use of SFCs in SAP ME. It also addresses SFC-related activities in the shop floor, such as SFC number assignment, SFC merge, split, hold, release, quantity adjustment, scrap/delete, and unscrap/undelete. SFC reporting activities are also described here.

6 Shop Floor Control Management

In the last chapter, you learned about shop orders in SAP ME and their use in the shop floor execution process. When a shop order is released, one or more quantities of the shop order material is produced by the manufacturing execution process. To track the materials being assembled and produced, specific quantities of the material, as defined by the material’s lot size, are tracked individually throughout the execution/assembly process.

In SAP ME, SFC stands for shop floor control and is the key element for shop floor execution. Each unit of manufactured or processed product in SAP ME is identified by an SFC that contains a unique number generated for each SFC. On the shop floor, each operation’s execution is performed on an SFC, and a product can be tracked at any time on the shop floor through its SFC number. Multiple reports are available in SAP ME for tracking products from different viewpoints.

6.1 Overview of SFCs and Generating SFCs on Order Release

In SAP ME, an SFC number is a unique number that refers to a batch of a material for which work is in progress. An SFC contains the single or multiple quantity of the material, and SFC quantity depends on the lot size of material produced (specified in the Material Maintenance activity). When an operator executes an operation on the shop floor, he or she needs to select one or more SFCs to start and complete the operation. After starting and completing the SFC at an operation
based on the routing flow, the SFC will move to next operation and will be in the INQUEUE state in next operation. In the following sections, we will discuss generating SFCs through shop order releases, creating and releasing SFCs, creating trackable SFCs, return material authorization SFC receipts, SFC groups, and SFC statuses.

6.1.1 Generating SFCs through Shop Order Releases

In regular practice, an SFC is generated by the release of a shop order (through the Shop Order Release activity), and the number of SFCs generated depends on the lot size configuration (available in the Material Maintenance activity) of the material. For example, in a plant, one shop order contains fifty units of a material MAT56 used in a shop order for production. A lot size of ten is configured in material MAT56. If the shop order is released, the system will generate five SFCs from that shop order, and each SFC will contain a quantity of ten, as shown in Figure 6.1.

![Figure 6.1 SFC Generation from Shop Order Release](image)

SFCs can contain a quantity of one or more, depending on the lot size. For example, in a car assembly process, each car can be identified as an SFC with a quantity of one. Each SFC number can be used as a vehicle identification number (VIN) for the individual car or a serial number of the material when the SFC quantity is defined by the lot size as one. An SFC that contains a quantity greater than one is a non-serialized SFC and represents the lot size of the material.

In the next sections, you will learn how SFC numbers are generated in SAP ME. SAP ME provides an activity called Next Number Maintenance (explained in Chapter 2), which is used to configure the number generation pattern for SFC. In this activity, you can define the pattern for SFC numbers. When a shop order is released, SAP ME checks the last generated number from the WIP database, and based on the last number it generates the next unique number for an SFC. SFCs can also be generated when a shop order is downloaded from SAP ERP to SAP ME through SAPMEINT. However, enhancement in SAPMEINT is required in that scenario, to execute the SFC creation service available in SAP ME.

6.1.2 Create and Release SFCs

In addition to being generated while releasing a shop order, SFCs can also be created through the Create and Release SFC activity in SAP ME. Through this activity, the shop order creation and SFC release for a material can be performed together. You need to enter a material number for which the SFC will be generated and the corresponding quantity of the SFC. You can also enter Shop Order number, LCC (labor charge code), and the Work Center to be used. You cannot use same shop order number for repeated SFC releases. Select Add to New Process Lot to group the SFC numbers to a process lot. The material for the SFC must have a routing assigned in the Material Maintenance activity before the SFCs can be released. Released SFCs are placed in the queue at the first routing operation, as assigned in the material. By clicking on Create, you can create and release SFCs that will be displayed in a new screen with the SFC number and other details (Figure 6.2). This activity also creates the shop order (based on next number configuration for shop order) which is local to SAP ME and the shop order is not linked with SAP ERP.

**Note**

The CUSTOMER ORDER field is used to specify the customer order (sales order) optionally, if linked with the shop order specified.
### 6.1.3 Create Trackable SFCs

If you want to create an SFC number for a material that will be tracked for quality checking in your system, use the Create Trackable SFC activity. For example, say you want to check the quality of a manufactured or purchased material through a separate routing; a trackable SFC will help you to do that. When an SFC is released, the system places it in the queue of the specified routing. Make sure that material type is set to either Purchased or Purchased/Manufactured and that the Trackable Component checkbox is selected in the Build configuration tab of the Material Maintenance activity. In the BOM Maintenance activity, retrieve the header material (the actual product) and select the component for which quality check will be done. On the component details page, for Assembly Data Type, select SFC. In the assembly operation of shop floor execution, the operator must provide a trackable SFC number for assembly data. The SHOP ORDER field value depends on the rule settings in the Create Trackable SFC activity. For the CREATE TRACKABLE SFC (activity id: PR300) activity in Activity Maintenance, set the REQUIRE_SHOP_ORDER rule to either TRUE or FALSE. For FALSE, you don’t need to specify a shop order number for creating a trackable SFC.

In the Create Trackable SFC activity, enter the SFC number, quantity, and material. After specifying all field values (including values for LCC and Work Center if required), click on CREATE to generate the trackable SFC. If MARK SFC AS DONE is checked, then the SFC will have the Done status after creation (see Table 6.1 for SFC statuses). SAP ME will not allow you to select MARK SFC AS DONE for special or NC routings; the option is only applicable for production routings. Figure 6.4 shows how to create a trackable SFC using production routing, and the MARK SFC AS DONE checkbox is unchecked. After creating the trackable SFC, it will be placed in queue at the first operation of the specified routing.

---

#### Figure 6.2 Create and Release SFCs

**Create And Release SFC**

- **Material**
- **Qty.**
- **Component**
- **LCC**
- **Work Center**

**Released For Shop Order 100000783**

**Figure 6.3 Selecting Component Assembly Data Type**

In the Create Trackable SFC activity, enter the SFC number, quantity, and material. After specifying all field values (including values for LCC and Work Center if required), click on CREATE to generate the trackable SFC. If MARK SFC AS DONE is checked, then the SFC will have the Done status after creation (see Table 6.1 for SFC statuses). SAP ME will not allow you to select MARK SFC AS DONE for special or NC routings; the option is only applicable for production routings. Figure 6.4 shows how to create a trackable SFC using production routing, and the MARK SFC AS DONE checkbox is unchecked. After creating the trackable SFC, it will be placed in queue at the first operation of the specified routing.

---

#### Figure 6.3 Selecting Component Assembly Data Type

**Component Details**

- **Component:** CR0001
- **Assembly:** 11
- **Device:** 11
- **Assembly Operation:** 50500261.9.0-3002
- **Component Type:** Normal
- **Mark SFC As Done:**

**Figure 6.4 Creating Trackable SFC**
An operator needs to execute all operations of routing for the trackable SFC, and then the status of the SFC will change to Done. When you execute the actual routing for a finished material using a production operator dashboard, in the assembly operation you need to select the component (the same material used for trackable SFC creation) and specify the trackable SFC number to add it. You may need to create the trackable SFC for a purchased component which is assembled into a finished product with other components. Figure 6.5 shows the trackable SFC assignment in the assembly process. Trackable SFCs with Done status will only be available for SFC selection in the assembly operation.

Figure 6.5 Assigning Trackable SFCs in Assembly Operations

### 6.1.4 Return Material Authorization SFC Receipt

RMA SFCs are used when a product is returned to the shop floor for any defect repair, after it has been shipped to the customer. For example, if an assembled car is returned for repair of any defect (from the customer or from the dealer company itself), it needs to go through a separate routing process.

Before working with RMA SFC receipt, you need to have an RMA shop order in SAP ME. In the Shop Order Maintenance activity you can find the RMA number associated with the shop order. Now, start working in the RMA SFC Receipt activity in SAP ME.

In the RMA SFC Receipt activity, you can select or specify the RMA number associated with RMA shop order and retrieve it. An associated shop order number will be populated automatically in the Shop Order field and in the SFC field.

Create a new SFC (first configure the RMA SFC number in the Next Number Maintenance activity) by clicking on Create, or use the same SFC that was used to create the product (for example, for a damaged car, use the same SFC number used as the car VIN). Also enter the quantity, comment, and return date in the QTY, COMMENTS, and RETURN DATE fields, and provide the customer part number. Then, click on the Add button. The SFC will be added in the SFCs RECEIVED list, as shown in Figure 6.6. Click on Done.

Figure 6.6 Working with RMA SFC Receipt

Now, the SFC will be in queue at the first operation of the routing used in the RMA shop order. The SFC will be inspected through all the operations of the routing.

### 6.1.5 SFC Group

In SAP ME, an SFC group is the collection of SFCs which is used for a sampling plan (explained in Chapter 8) for quality inspection. For inspection purposes, system selects the SFC from the SFC group. When you maintain a sample plan in SAP ME, you also need to provide the SFC Group Size, a mandatory field in the Sample Plan Maintenance activity.
ple Plan Maintenance activity. By providing the SFC group size, you indicate how many SFCs will be selected to create this group. For example, if the SFC group size is four and each SFC contains a quantity of one, then SAP ME needs a minimum of four SFCs to perform sampling. If the SFC quantity is two, then SAP ME needs a minimum of two SFCs to perform sampling. When an operator triggers sampling activity from the POD, SAP ME generates an SFC group number automatically, and that group number includes the SFCs that are used for sampling. Whenever an operator selects an SFC and triggers sampling activity, the selected SFC status changes to Complete Pending. Sample SFCs from the SFC group are used in sample routing assigned in the Sample Plan Maintenance activity. Figure 6.7 shows the SFC Group created in the sampling process from shop floor execution through the Production Operator Dashboard.

![Figure 6.7 SFC Group Creation in Sampling](image)

### 6.1.6 SFC Status

In shop floor production processes, an SFC moves from one operation to another (based on routing steps design) until production is finished using that SFC. During the execution process, the SFC can have multiple statuses in different operations. Table 6.1 provides the details of SFC status codes (used by SAP ME to store the SFC status in WIP or ODS databases), status description, and details of each status.

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Status Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>401</td>
<td>New</td>
<td>SFC is generated from shop order release and not yet used in any operation.</td>
</tr>
<tr>
<td>402</td>
<td>InQueue</td>
<td>SFC is in queue at any operation and SFC can be used for starting the operation.</td>
</tr>
</tbody>
</table>

![Table 6.1 SFC Status](image)

### 6.2 Performing SFC Activities

In this section you will learn the list of activities which can be performed on SFC during the shop floor manufacturing process. Depending on your situation you may need to merge multiple SFCs into a single SFC or split one SFC into multiple SFCs using the SFC Merge or SFC Split activities. You will also learn the purpose of the SFC Place Hold, SFC Release Hold, SFC Quantity Adjustment, SFC Scrap/Delete, SFC Unscrap/Undelete, and Change Production activities.

#### 6.2.1 SFC Merge

Through the SFC Merge activity, you can merge multiple SFC numbers into a single SFC number: a **parent SFC number**. The parent SFC contains the sum of all child SFCs’ quantities. SAP ME allows you to merge SFC numbers across routings,
operations, or shop orders, but keep in mind that SFC numbers should have the IN_QUEUE status to perform the merge activity. Before merging, if you perform data collection for child SFCs, the parent SFC will contain all the collected data of child SFCs after the merge. The quantity restriction configured in the material maintenance is also enforced to the merged SFC.

**Note**

To perform SFC merge across routings, operations, or shop orders, set the activity rule for SFC Merge (PR580) in Activity Maintenance for MERGE_ACROSS_ROUTERS, MERGE_ACROSS_OPERATIONS and MERGE_ACROSS_SHOPORDERS to TRUE.

Figure 6.8 shows three child SFCs (SFC 1, SFC 2, and SFC 3) residing in three different operations being merged into a single parent SFC (SFC 4) in a new operation. The quantity of the parent SFC equals the sum of the quantity of all three child SFCs.

![Figure 6.8 Merging Child SFCs into Parent SFC](image)

### 6.2.2 SFC Split

A single SFC can be split into multiple new SFCs using the SFC SPLIT activity in SAP ME. You can split the quantity of a SFC number into multiple SFC numbers. SFC split can be performed manually through the SFC Split activity, in which you need to specify QUANTITY TO SPLIT and NEW SFC NUMBER.

**Note**

An SFC with ACTIVE status in an operation can be split if the activity (activity ID: PR570) rule for ALLOW_ACTIVE_SFC_SPLIT is set to TRUE. If AUTOMATIC_ID GENERATION activity rule is set to TRUE, the system automatically generates new SFC numbers in Next Number Maintenance for the SFC Release pattern.

It is also possible to split SFCs automatically during the shop floor execution process. Non-serialized SFCs can be automatically split from the POD when Relaxed Flow Routing is used for the shop floor execution process. A shop floor user can complete a partial quantity of a non-serialized SFC at any step on the Relaxed Routing Flow. To perform the partial quantity completion at any operation, a shop floor user needs to enter the quantity in the QUANTITY field of the POD (see Chapter 10 for more information about the POD). In a relaxed flow routing, when a shop floor user logs an NC code against the partial quantity of an SFC and disposition the entered quantity to another routing, SAP ME automatically splits the quantity into a new SFC number. To achieve this functionality, maintain the AUTO_SPLIT option as ALWAYS or ASK in the activity rules of the NC_DATA_ ENTRY activity through Activity Maintenance. Shop floor users can continue execution of the original SFC through production routing. When the split SFC (executed through disposition routing) comes back to the production routing, SAP ME can merge the split quantity with the original SFC (executed through production routing) on the production routing, and the split SFC becomes invalid. To achieve the auto-merge functionality, set the AUTO_MERGE option to ALWAYS or ASK in the activity rules of SFC COMPLETE (Activity Id: PR510) activity using the Activity Maintenance page.

### 6.2.3 SFC Place Hold

In shop floor execution, you may need to put an SFC on hold due to an issue. For example, in a car assembly process, say you find a defect on a car during the visual inspection operation. You want to put it on hold immediately and send it for repair. In SAP ME, the hold feature can be achieved through the SFC Place Hold activity. The hold type can be immediate or future:

- **Immediate** holds allows you to put the SFC on hold status immediately in the current operation.
- **Future** holds put the SFC on hold when it is in queue in the next operation.

You can also set multiple SFCs on hold at a time, but to do so you need to search through shop orders or process lots, which will return multiple SFCs for the same shop orders or process lots.

This activity also provides the option to put the material, routing, and shop order associated with the SFC on hold by selecting the checkbox options as shown in Figure 6.9.
If a future hold is selected, you can provide the future hold operation number in the **Future Hold Operation** input field. For an immediate hold, this field is disabled. You can also provide **Reason Code**, **Expected Release Date/Time**, and **Comments** when putting an SFC on hold (see Figure 6.9).

![Figure 6.9 Placing SFC on Hold](image1)

### 6.2.4 SFC Release Hold

An SFC on hold cannot be used for any shop floor manufacturing activity until it is released. You can release the SFC hold via the SFC Release Hold activity in SAP ME. Materials, routings, and shop orders, will also be released with this activity if they were placed on hold earlier through the SFC Place Hold activity.

![Figure 6.10 Releasing SFC from Hold](image2)

### 6.2.5 SFC Quantity Adjustment

If you want to increase or reduce the quantity of an SFC, use the SFC Quantity Adjustment activity in SAP ME. However, keep in mind that the SFC status should be either New or In Queue. Along with SFC quantity adjustment, the associated shop order quantity will also be adjusted automatically.
6.2.6 SFC Scrap/Delete

Use the SFC Scrap/Delete activity when you want to remove an SFC from the shop floor production process for any issue with that SFC. For example, in the car assembly process, if a defect is not closed for a car in the QUARANTINE operation of the designed routing, then you want to scrap it using SFC Scrap/Delete activity. The adjustment through SFC Scrap/Delete activity is not sent to SAP ERP.

In this activity, select Scrap or Delete for Activity. Based on your selection, the Scrap or Delete button will appear, as shown in Figure 6.11. SAP ME allows you to scrap multiple SFCs at a time; to do so, you can retrieve the SFC list by shop order number or process lot.

Figure 6.11 Scrapping SFCs in Routing Operation

Based on the activity rule setting in the SFC Scrap/Delete activity (activity ID: SU580), the system takes the appropriate action. Figure 6.12 shows the default rule settings in activity SU580.

The rule settings for the SFC Scrap/Delete activity are as follows:

- **SCRAP COMPONENT OPTION**
  The default value for SCRAP_COMPONENT_OPTION is SCRAP_AND_RETURN_COMP. This default value SCRAP_AND_RETURN_COMP is used to scrap the parent SFC and return components to floor stock.

- **SCRAP DEL ACTIVE SFC**
  The default value for SCRAP_DEL_ACTIVE_SFC is Yes. If the value is Yes, then system will allow you to delete or scrap an SFC with Active status. For No, the system will not allow you to delete or scrap an SFC with Active status.

- **SCRAP DEL DONE SFC**
  The default value for SCRAP_DEL_DONE_SFC is Yes. If the value is Yes then the system will allow you to delete or scrap an SFC with Done status. For No, the system will not allow you to delete or scrap an SFC with Done status.

- **SCRAP OR DELETE**
  This rule is used to display the Scrap or Delete options in SFC Scrap/Delete activity page within the Activity dropdown field. The default value for SCRAP_OR_DELETE is BOTH, which means Scrap and Delete will both be displayed in the Activity dropdown field of SFC Scrap/Delete activity page. If you specify SCRAP in the SCRAP_OR_DELETE rule, then only the Scrap value will be displayed. If you specify DELETE in the SCRAP_OR_DELETE rule, then only the Delete value will be displayed.

Figure 6.12 Default Rule Settings for SFC Scrap/Delete Activity (SU580)

6.2.7 SFC Unscrap/Undelete

If you want to bring the SFC back from scrapped or deleted status to its previous status, use the SFC Unscrap/Undelete activity in SAP ME. For example, the SFC number 9998144 was in Active status in the QUARTN_1 operation of routing 50000250 (as shown in Figure 6.13), and SFC was scrapped from there. To
unscrap the same SFC, return it to In Queue status in the QUARTN_1 operation of routing 50000250.

Figure 6.13 shows an example of unscrapping an SFC using the SFC Unscrap/Undelete activity. Choose one ACTIVITY from the dropdown, either UNSCRAP or UNDELETE; based on your selection, the respective button will appear. SAP ME allows you to unscrap/undelete multiple SFCs at a time: to do so, retrieve the SFC list through Shop Order or Process Lot. You can also enter comments before unscrapping or undeleting.

Figure 6.13 Unscrapping SFC to Use it Again in Production

6.2.8 Change Production

In SAP ME, the Change Production activity allows you to change the material, routing, BOM, and shop order for one or multiple SFCs in the shop floor manufacturing process. For example, in the car assembly process, a car can be assembled using two production lines on the shop floor. In middle of the assembly process, if a breakdown happens in line 1, the remaining cars (SFCs) can be assembled using production line 2 (assuming that production line 2 is not occupied with another production) to meet the order quantity within the required time. Here also, we assume that different routings are used for each production line. In SAP ME, using the Change Production activity, you can change the routing of remaining SFCs with routing used in production line 2 and continue the assembly process.

In this activity you can specify an SFC number to retrieve details of a single SFC or providing a shop order number or process lot to retrieve multiple SFCs to change from one routing to another. The Change Production screen provides options to enter New Material and/or New Routing and/or New BOM and/or New Shop Order numbers, as shown in Figure 6.14. On the Change Production screen, select the Adjust Original Order Build Qty Down checkbox to reduce the original shop order’s build quantity by the total SFC quantity that will be moved to new shop order. You can also specify the engineering change order (ECO) number and COMMENTS.

Figure 6.14 Initial Screen for Change Production

Click on CONTINUE to move to the next screen, where you can choose routing operation placement for the SFC. SAP ME provides four options for routing operation placement, as seen in Figure 6.15:

- **PLACE IN QUEUE AT OPERATION** (specify one operation from routing)
- **PLACE IN QUEUE AT FIRST OPERATION**
- **PLACE IN QUEUE AT FIRST UNCOMPLETED OPERATION**
- **PLACE IN QUEUE AT CURRENT OPERATION**
Click **CHANGE PRODUCTION** to change the production for the SFC.

![SFC Disposition](image)

**Figure 6.15 SFC Disposition for Change Production**

6.3 Reporting on SFC Activities

In this section we will discuss multiple standard reporting activities available in SAP ME such as the Activity Log Report, Hold Report, SFC Report, SFC Average Cycle Time by Operation Report, SFC Average Cycle Time by Shop Order Report, and the SFC Cycle Time Report. These reports are very useful on the shop floor to track the SFCs during the production process and after.

6.3.1 Activity Log Report

In SAP ME, the Activity Log Report provides information about activities performed by the operator on the shop floor during the production process. For example, say that an operator has started an SFC in an operation or put an SFC on hold status and then released it; all those activities will be visible within the Activity Log Report. The report includes activities performed on SFCs, dates and times, activity codes, material numbers related to SFCs with versions, shop order numbers related to SFCs, and details of SFCs, as shown in Figure 6.16. You can search the report by providing at least one input parameter, such as date range, material, SFC, or activity code. You can also search activities that are not related to an SFC, such as shop order release, shop order close, resource status change, and so on. To get a search result for those activities, set the shop order type as **All** in the **Miscellaneous** tab and specify the **Date Range** value in the **Main** tab. Use the **Print** icon at the top-right to print the report. Click the **Activity Code** link to access the SFC Details Report.

![Activity Log Report](image)

**Figure 6.16 Activity Log Report**

You can also search activities that are not related to an SFC, such as shop order release, shop order close, resource status change, and so on. To get a search result for those activities, set the shop order type as **All** in the **Miscellaneous** tab and specify the **Date Range** value in the **Main** tab. Use the **Print** icon at the top-right to print the report. Click the **Activity Code** link to access the SFC Details Report.

6.3.2 Hold Report

The Hold Report provides information about SFCs on hold. For example, say that an operator found a defect in an SFC during an operation and placed the SFC on hold through the SFC Place Hold activity. Search for that SFC using the Hold Report activity to find out the details. For a single SFC, provide an SFC number in the **Search By** field, or provide a shop order or process lot to find the report for multiple SFCs if the shop order contains multiple SFCs. The Hold Report provides shop orders, materials, routings, operations, activity codes, hold IDs, and reason codes along with hold details associated with an SFC. Click the **Hold Details** icon to access the Hold Details Report, which contains SFC details, hold details, and hold comment sections. Each section describes information for multiple parameters. Figure 6.17 shows a Hold Report and Hold Details Report.
6.3.3 SFC Report

The SFC Report provides the current status of an SFC in the shop floor production process. For example, say that an operator is working on an SFC and you want to find out the current status of that SFC and for which operation it is in queue or active. You may also want to know how many SFCs are completed for the current shop order or how many SFCs are scrapped. All that information is available through the SFC Report. To find the status for a single SFC, search by SFC number only, and to get the report for all SFCs of a shop order, search by shop order number. In the search input, you can also provide values for material, operation, resource, SFC status, and process lot. In a miscellaneous search, you can provide routing, order type, customer, customer order number, reporting center, work center category, RMA number, and work center.

Search results will provide you with the SFC status, shop order number associated with the SFC, material, operations with current SFC statuses, quantity of the SFC, SFC step details link, As-Built link, and NC Log link. Through each link you can find the details information.

SFC step details will provide you the status of the SFC in each operation of the routing, and you can find the current position of the SFC in the routing operation with quantity.

The As-Built link will show the details of used BOM components with required quantity, assembled quantity, operation in which it is used, component type, performed user with date and time, and actual component.

The NC Log link can provide details of nonconformance logged against an SFC with operation, resource, work center, NC code, NC code description, NC state, NC category, incident number, activity date/time, logged user ID, activity close date/time, closed user ID, and so on. This report also shows the parent and child NCs. Figure 6.18 shows an SFC Report with SFC step details, as-built, and NC log details.
6.3.4 SFC Average Cycle Time by Operation Report

The SFC Average Cycle Time by Operation Report provides the cycle time information of an SFC within an operation. For example, in the car assembly process, you might look for the cycle time spent for a car assembly in each operation of a routing, and you can find out which operation has taken the maximum time and which operation has taken the minimum time for assembling the same car. The SFC Average Cycle Time by Operation Report provides the information in two sections, QUEUE TIME and ELAPSED TIME:

- QUEUE TIME provides the minimum, maximum, and average time of an SFC spent for each operation along with the shop order number.
- ELAPSED TIME provides the waiting time of the SFC in each operation.

You can view the search results in a graphical or tabular view, as shown in Figure 6.19.

6.3.5 SFC Average Cycle Time by Shop Order Report

The SFC Average Cycle Time by Shop Order Report provides the total cycle time taken in an operation in a shop floor execution process. For example, in a car assembly process, you might look for the total time taken in each operation to process the shop order, which you can find with this report. You need to keep in mind that this report shows only the total time for SFCs of a shop order with status Done, Done (Hold), or Scrapped.

This report also provides graphical and tabular views of search results. In search results, initially you will see a graphical view of the report with shop order number and cycle time (average, minimum, and maximum). Click on the graphical bar to see the queue time and elapsed time for each operation. In search parameters, you can search by shop order number to see the cycle time for a shop order. Figure 6.20 shows the report.

Figure 6.19 SFC Average Cycle Time by Operation Report

Figure 6.20 SFC Average Cycle Time by Shop Order Report
6.3.6 SFC Cycle Time Report

If you are looking for the cycle time of a particular SFC, use the SFC Cycle Time Report. This report provides the queue time and elapsed time of an SFC in each operation where the SFC is executed on the shop floor. When you look for the cycle time for an SFC, SFC is a mandatory input parameter in the search criteria. Figure 6.21 shows an SFC Cycle Time Report.

![SFC Cycle Time Report](image)

Figure 6.21 SFC Cycle Time Report

6.4 Summary

In this chapter, you learned about SFCs and how to generate and work with them in SAP ME. You also discovered the purpose of creating trackable SFCs, RMA SFC receipts, SFC groups, and multiple SFC statuses. We also discussed the list of SAP ME activities that can be performed on SFCs, such as SFC Merge, SFC Split, SFC Place Hold, SFC Release Hold, SFC Quantity Adjustment, SFC Scrap/Delete, SFC Unscrap/Undelete, and Change Production. At the end of this chapter, we introduced the SFC-based standard reports in SAP ME and the required setup data to find report results.

The next chapter explains data collection in SAP ME.
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