SmartPlant Materials

Excel Import and Export



PROCESS, POWER & MARINE

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Preface

| This document describes the Excel import and export features of SmartPlant Materials. | | | | | |
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Setup

To enable the Excel import and export features in SmartPlant Materials, ensure that the requirements that are described in this section are fulfilled.

Software Prerequisites

Microsoft Excel 2007 or 2010 must be installed on the Oracle application server.

Excel Templates

The Excel import feature uses pre-defined templates. These templates are delivered with the software and installed on the application server in the <SPMAT>\others\excel_templates folder. The template directory is determined by the DBA setting PRINT_TO_FILE_DEST. For an overview of the available templates, see *Appendix: Templates* (on page 87).

DBA Settings

You can find a detailed description of how to set DBA settings and the purpose and usage of each DBA setting in the *SmartPlant Materials DBA Settings* document, available from the **Printable Guides** page in the software.

The DBA settings needed for the Excel export and import are listed below.

General

EXCEL_DATE_FORMAT - Excel date format.

EXCEL_FUNCTION_IF - The IF keyword in the language of the local Excel installation.

EXCEL FUNCTION SUM - The SUM keyword in the language of the local Excel installation.

EXCEL_MAX_LINES - Maximum number of lines for Excel output.

IMPORT_FROM_FILE_DEST - Name of the directory on the application server where an uploaded Excel import file is stored.

PRINT TO FILE DEST - Name of the directory used by the Print to File functionality.

PRINT_TO_FILE_SEP - The separator character for CSV file generation (Export format='Excel') in the language of the local Excel installation. Default value = ;

PRINT_TO_FILE_URL - The URL for accessing the created file via http.

SERVLET_PATH - Path in the file system of the application server, including the name of the application server. This path is used for loading the upload servlet.

XLS_FORMAT - Extension of the Excel files, xls or xlsx.

SPRD

COMPANY_IDENT_DOWNLOAD_DEST - Destination directory for download of company ident files.

COMPANY_IDENT_DOWNLOAD_URL - Virtual directory for downloaded company ident files.

COMPANY IDENT UPLOAD DEST - Destination directory for upload of company ident files.

BOM

BOM_EXCEL_MPV_EXPORT_TEMPLATE - Name of the multi position values export template.

BOM_EXCEL_SPV_EXPORT_TEMPLATE - Name of the single position values export template.

BOM_EXCEL_TEMPLATE_DIR - Directory for BOM Excel templates.

MSCM

BID_EXPORT_DEST - Destination for Excel export of bids.

BID_EXPORT_URL - Virtual directory for Excel export of bids.

BID IMPORT PATH - Database server path for bid load.

MS_DOWNLOAD_DEST - Destination for Excel export of requisition milestones.

MS_DOWNLOAD_URL - Virtual directory for a downloaded and generated Excel export file from requisition milestones.

OPI IMPORT PATH - Database server path for OPI import.

OPI_UPLOAD_DEST - Destination path on the application server where the imported files are stored.

OPI_UPLOAD_URL - Virtual directory for OPI import.

Site

MTR_DOWNLOAD_URL - Virtual directory for a downloaded MTR file.

MTR_UPLOAD_DEST - Directory on the application server where an uploaded MTR Excel import file is stored.

Others

PRICE_LIST_EXPORT_DEST - Destination for download of price list Excel files.

PRICE LIST IMPORT DEST - Destination for upload of price list Excel files.

Project Defaults

You can find a detailed description of how to set project defaults and the purpose and usage of each project default in the *SmartPlant Materials Project Defaults* document, available from the **Printable Guides** page in the software.

The project defaults needed for the Excel export and import are listed below.

ZP_TP_BID - Template file name (without path) for the bid export from P.30.24.

ZP_TP_PCO - Template file name (with entire path) for the PCO (Potential Change Order) export from SM.40.01.

ZP_TP_PK - Template file name (with entire path) for the package export/import (without release notes) from P.70.74.

ZP_TP_PKRN - Template file name (with entire path) for the package export/import (with release notes) from P.70.74.

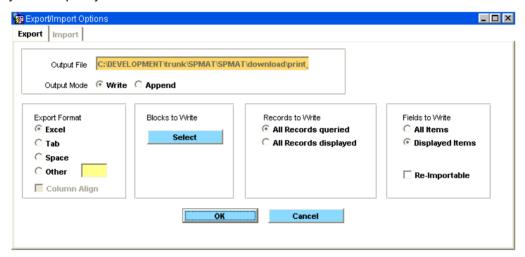
ZP_TP_TRFC - Template file name (with entire path) for the traffic data export from P.80.51.

ZP_TPL_XLS - Template file name for the expediting export/import from P.70.71.

General Excel Export

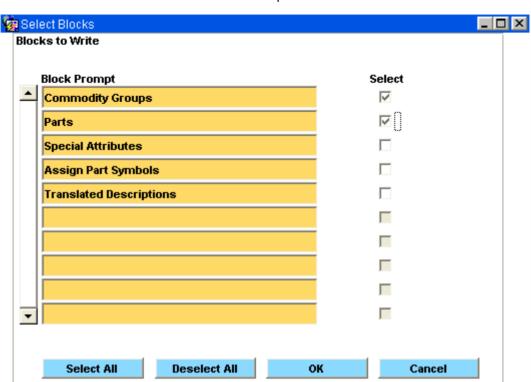
You can use the **Excel Export** button in all SmartPlant Materials screens to export the displayed data to an Excel file.

1. Click the **Excel Export** button. The **Export/Import Options** window opens where you can specify how to store the data.



The **Output File** field displays the name of the output file with the entire path. The name is automatically generated by the software and cannot be changed.

In the **Export Format** section, you specify how the text is formatted in the file. Select Excel if you want to export the data into a semicolon separated Excel file. The other options create plain ASCII (txt) files with a tab, a space, or any other specified character as a separator. To align the columns, select the **Column Align** check box.



2. Click Select in the Blocks to Write section to open the Select Blocks window.

- 3. Select the **Select** check boxes of all screen blocks to be exported to the file and click **OK**. You can specify the records to be stored in the file in the **Records to Write** section.
- 4. Select **All Records queried** to export all queried records or **All Records displayed** to export only the records currently displayed on the screen.

You can also specify the fields to be stored in the file in the **Fields to Write** section. With **All Items** selected, the job exports all fields on the screen, whereas **Displayed Items** exports the currently displayed fields only. With the **Re-Importable** indicator selected, the data is exported in a format that allows re-import into SmartPlant Materials where applicable.

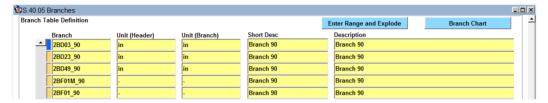
5. Click **OK** to start the export. The picture below shows an example file.



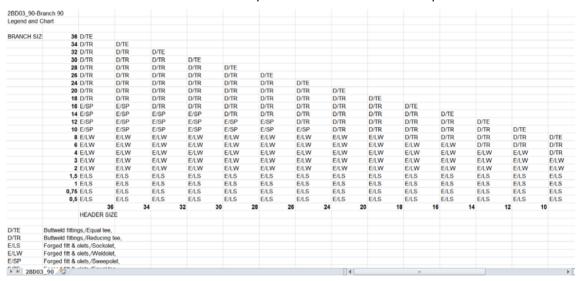
For more information, see *Print to File* in the *SmartPlant Materials User Interface Basics* document, available from the **Printable Guides** page in the software.

Branch Chart Export

On the **S.40.05 Branches** screen, you can export branch charts to an Excel file using the **Branch Chart** button.



Select a branch table and click **Branch Chart** to export the selected table. The **Branch Chart** button is also available on Window 2. The picture below shows an example file.



Company Ident Export/Import

On the **S.80.C.01 Company Idents** screen, you can export company idents to an Excel file or import from an Excel file.

Setup

To enable this feature, you must set up the following:

1. Create a Where condition for module S80C01 on the A.60.06 Where Conditions screen.

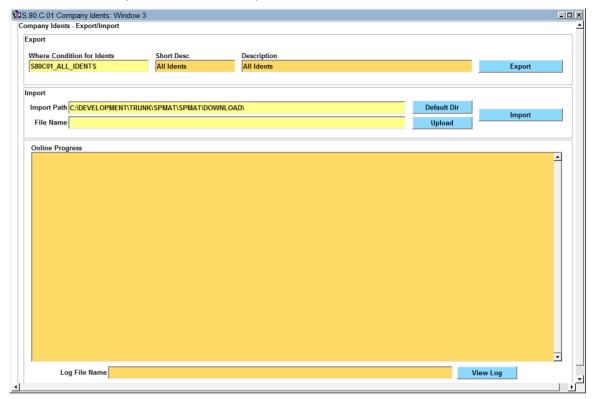


With this Where condition you define which idents are to be exported. For more information, see *Where Conditions* in the *SmartPlant Materials Administrator's Guide*, available from the **Printable Guides** page in the software.

- 2. Define DBA setting values on A.60.04 DBA Settings:
 - COMPANY_IDENT_DOWNLOAD_DEST Destination directory for download of company ident files.
 - COMPANY_IDENT_DOWNLOAD_URL Virtual directory for downloaded company ident files.
 - COMPANY_IDENT_UPLOAD_DEST Destination directory for upload of company ident files.
- 3. Ensure that the template file COMP_IDENT_TEMPLATE.xls is available. You can usually find this file in the ..\others\excel templates folder on the application server.

Export or Import

1. Click the **Export/Import Company Idents** button on Window 2 of **S.80.C.01 Company Idents**. Window 3 opens as shown in the picture below.



2. For an export operation, select a pre-defined Where condition from the LOV, and click the **Export** button.

When the export operation is finished, you can download the created Excel file.



- 3. For an import operation, click the **Upload** button to upload the Excel sheet with the ident codes from your local computer to the application server.
- 4. When this is done, click the **Import** button to start the import from the Excel file.

SmartPlant 3D Excel Sheets

On the **SP3D 20.01 Export Jobs** screen, you can click the **Start Job** button to create SmartPlant 3D Excel workbooks. These workbooks can be downloaded and bulkloaded into SmartPlant 3D.

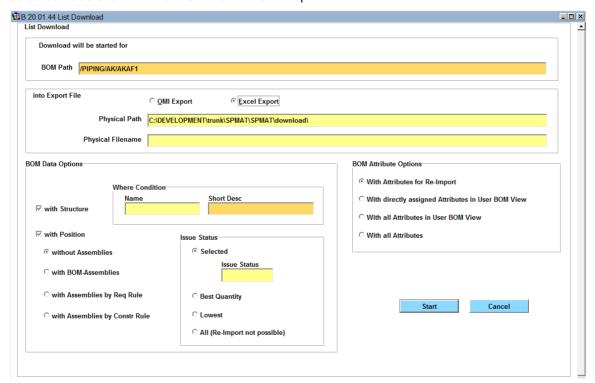
For more information, see *Transfer to SP3D* in the *SmartPlant Reference Data Smart 3D Interface User's Guide*, available from the **Printable Guides** page in the software.

BOM Excel Export

On the **B.20.01.44 List Download** screen, you can download BOM data (nodes, positions, attributes) to an Excel file.

NOTE The DBA settings BOM_EXCEL_MPV_EXPORT_TEMPLATE, BOM_EXCEL_SPV_EXPORT_TEMPLATE, BOM_EXCEL_TEMPLATE_DIR, BOM_DOWNLOAD_DEST, and BOM_DOWNLOAD_URL must be set before starting a list download.

Open this screen from **B.20.03 Adv. Maintain BOM**, and select the **List Download** option from the shortcut menu in the BOM tree. The **B.20.01.44 List Download** screen opens, with the selected node shown in the **BOM Path** field on top.



In the Into Export File section, select the OMI Export or Excel Export option. The download path assigned to the DBA setting BOM_DOWNLOAD_DEST is displayed in the Physical Path field. Enter the name of the file to be created in the Physical Filename field.

In the **BOM Data Options** section, select the **with Structure** check box to export the BOM structure also. Select the **with Position** check box to export the BOM positions assigned to the selected nodes.

Use the **with Positions** options to determine the complexity of the download. Select one of these options:

- without Assemblies The assembly structures present in the BOM positions are not downloaded.
- with BOM-Assemblies Assemblies are exploded and downloaded according to the BOM Copy rule assigned to the ZB_COCP project default.
- with Assemblies by Requisition Rule Assemblies are exploded and downloaded according to the BOM Copy rule assigned to the ZR_COREQ project default.
- with Assemblies by Construction Rule Assemblies are exploded and downloaded according to the BOM Copy rule assigned to the ZB_COCON project default.

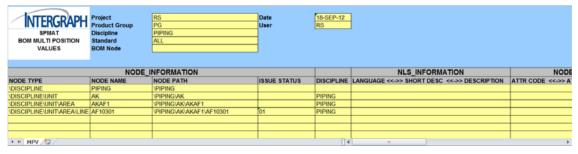
Select an option from the Issue Status radio group. The available options are listed below.

- Selected You must select a particular issue status from the LOV in the Issue Status field.
 Only this selected issue status of the positions is exported.
- Highest Only the highest issue status of the positions is exported.
- Lowest Only the lowest issue status of the positions is exported.
- All The positions are exported with all issue statuses, and re-import of the exported data is not possible.

In the **BOM Attribute Options** section on the right, you define which attributes are exported. The available options are:

- With Attributes for Re-Import With this option, attributes directly assigned to each
 position are exported. To prevent import processing performance being negatively affected,
 no attributes are downloaded in duplicate within the path.
- With directly assigned Attributes in User BOM View Only node and position attributes
 that were directly allocated through the node type or the discipline allocation are exported.
- With all Attributes in User BOM View The node and position attributes that are defined in the current BOM view, used by the user who called this function, are exported.
- With all Attributes With this option, all variable attributes for each selected node and each position are exported.

To start the list download, click **Start**. After downloading, you can open or save the file. An example file appears in the picture below.



For more information, see *List Download* in the *SmartPlant Materials E&PI (BOM) User's Guide*, available from the **Printable Guides** page in the software.

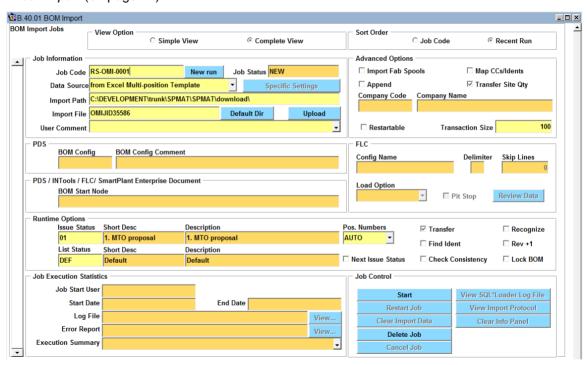
BOM Excel Import

On the **B.40.01 BOM Import** screen, you can (re-) import BOM data from an Excel workbook in two different ways.

- Select the From Excel Multi-position Template option from the drop-down list in the Data Source field.
- Select the Flat Loading Config option from the drop-down list in the Data Source field, and select Excel File from the drop-down list in the Load Option field in the FLC section.

Multi-Position Template

Perform the BOM import with the From Excel Multi-position Template option to re-import an Excel file that was created using the List Download functionality. For more information, see *BOM Excel Export* (on page 21).



For more information, see *Data Import* in the *SmartPlant Materials Open MTO Interface (OMI)* documentation, available from the **Printable Guides** page in the software.

Flat Loading Config

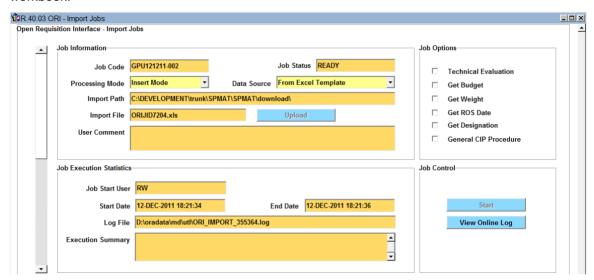
The FLC (Flat Loading Config) method is an easy way to import BOM data into SmartPlant Materials. Collect your data in an Excel workbook, define the column mappings in SmartPlant Materials, and start the Flat Loading Config import.

- 1. Collect your data in an Excel workbook. Use this workbook for the import, or generate a csv file that contains the columns of the data separated with a freely definable separator.
- 2. Define the column mapping so that SmartPlant Materials knows the meaning of the columns in the Excel or csv file.
- 3. Start the import.

For more information, see *Flat Loading Config Import* in the *SmartPlant Materials Open MTO Interface (OMI)* documentation, available from the **Printable Guides** page in the software.

Requisition Excel Import

On the **R.40.03 ORI - Import Jobs** screen, you can import requisition data from an Excel workbook.



For more information, see the *SmartPlant Materials Open Requisition Interface (ORI)* documentation, available from the **Printable Guides** page in the software.

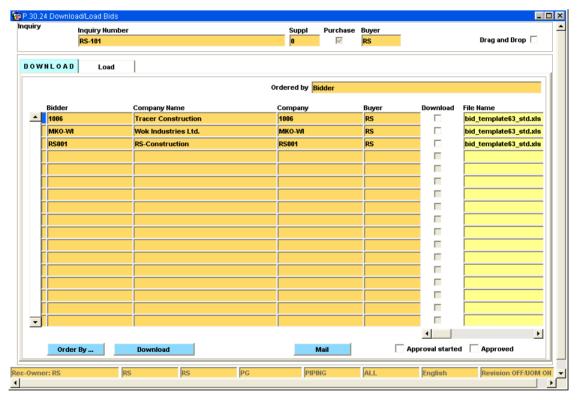
Bid Export/Import

On the **P.30.24 Download/Load Bids** screen, you can download a request for quotation to an Excel sheet. When the bidder returns this Excel sheet, you can import the bid from this Excel sheet.

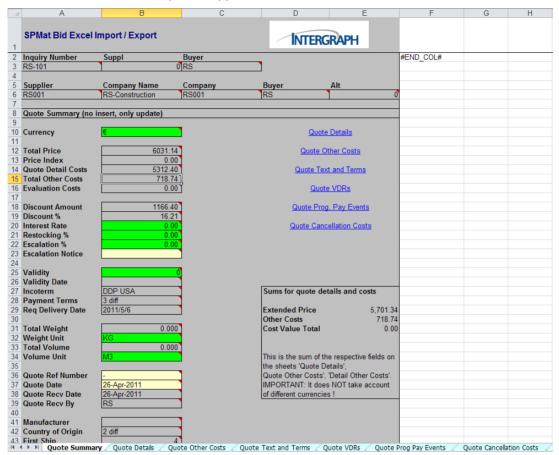
NOTE The DBA settings BID_EXPORT_DEST, BID_EXPORT_URL, and BID_IMPORT_PATH must be set before you download or load a bid.

Download Bids

You can download a bid from the **Download** tab on the **P.30.24 Download/Load Bids** screen.



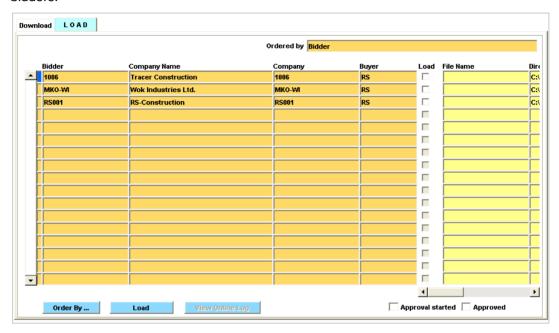
Select the **Download** check box for all quotes to be downloaded, and click **Download** to start the bid download. An example file appears below.



For more information, see *Download Bids* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

Load Bids

On the **Load** tab of **P.30.24 Download/Load Bids**, you can upload the Excel sheets that have been created on the **Download** tab, sent to bidders, modified, and finally returned by the bidders.



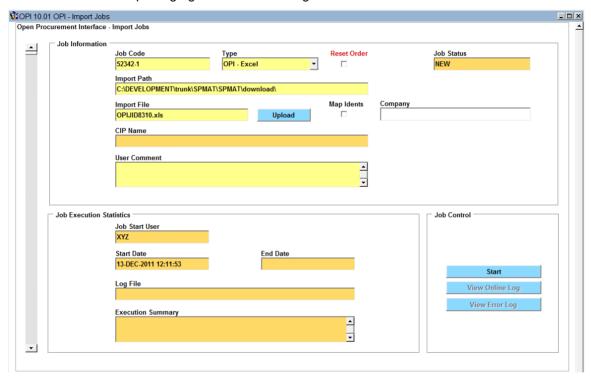
To upload the data, you must select the bidders, enter the directory and file name, and click the **Load** button.

For more information, see *Load Bids* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

Agreement Import

On the **OPI.10.01 OPI - Import Jobs** screen, you can import agreement data from an Excel sheet.

NOTE The DBA settings OPI_IMPORT_PATH, OPI_UPLOAD_DEST, and OPI_UPLOAD_URL must be set before importing agreement data using OPI.

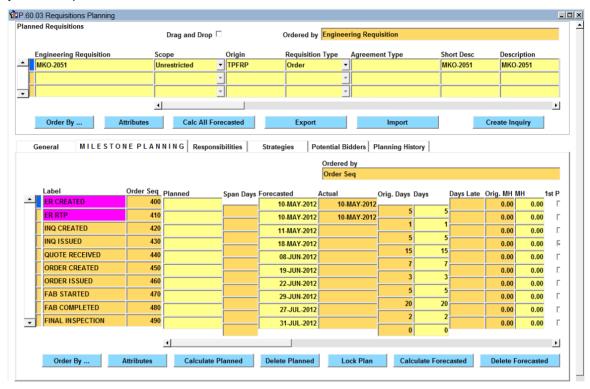


To import an agreement from an Excel workbook, select the **OPI - Excel** type, click **Upload** to upload the Excel workbook, and click **Start** to run the import job.

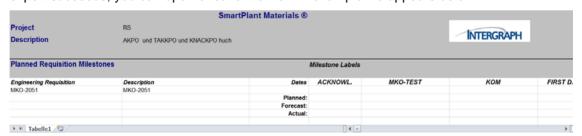
For more information, see the *SmartPlant Materials Open Procurement Interface (OPI)* documentation, available from the **Printable Guides** page in the software.

Req Planning Export/Milestone Import

On the **P.60.03 Requisition Planning** screen, you can export requisition planning data with assigned milestones to an Excel workbook. After editing the milestone dates on this workbook, you can import the milestone dates from this Excel workbook.



Select the **Sel** check box of all planned requisitions to be exported, and click **Export**. When the export succeeds, you can open or save the file. An example file appears below.



After editing the Excel workbook, you can import milestone labels of planned requisitions into SmartPlant Materials. Click **Import**, and a browser window opens. Click **Browse**, select the file, and click **Submit Query**. The selected file is uploaded to the application server. Close the browser window.

On the **Export/Import Options** window, click **OK** to continue.

For more information, see *Requisitions Planning* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

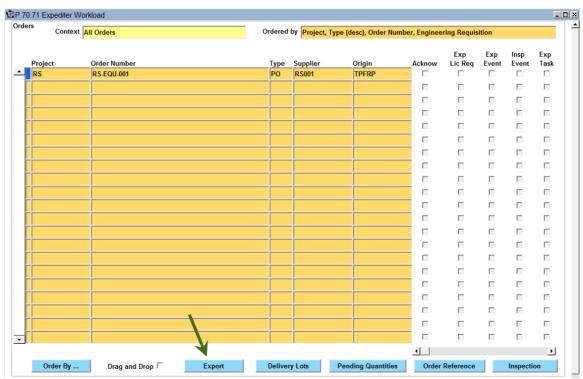
Expediting Export/Import

On the **P.70.71 Expediter Workload** screen, you can export purchase orders (item shipments) to an Excel workbook. After splitting the item shipments, adjusting quantities, and adding the promised ship dates to this workbook, you can import the data from this Excel workbook on the **P.70.72 Expediting Details** screen.

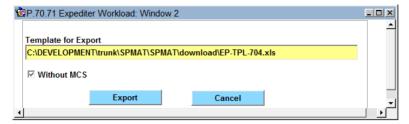
For more information about expediting, see *Expediting* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

Export Expediting Data

To export expediting data of a purchase order to an Excel file, select the order on the **P.70.71 Expediter Workload** screen, and click **Export**.



A box opens, displaying the name and path of the template.



This information is retrieved from the project default ZP_TPL_XLS. You can select another template using the LOV in the **Template for Export** field. Click **Export** to continue.

The **File Download** box is displayed. Click **Open** to open the created Excel file, or click **Save** to save the file to a folder on your file system.

Split Item Shipments

A split shipment is normally used with bulk material (SOT items, Standard withOut Tag). A shipment is often split because the supplier agrees to split the delivery after the agreement is placed. For example, partial shipments due to a large amount require a split of an item shipment.



The supplier creates the number of splits he needs, copies the value of the original line, and adjusts the **IS Sub** field to 2, 3, 4, and so on.

The supplier sends the updated Excel sheet back to you. This updated Excel sheet can be imported into SmartPlant Materials to add or update item shipment data. For more information, see *Import Expediting Data* (on page 42).

| Possibility |

The loaded item shipment data can be viewed on the Item Shipment tab of P.70.72.

Split Tags

When the requisition/purchase order contains tagged items that during the expediting/inspection/packaging stage require a more detailed breakdown, the Split Tag function allows the supplier to provide this information by using the Excel template. An example of this information is a vessel and template, and only the vessel was specified as a purchase order line item. The template provides these details.

After exporting the purchase order to an Excel file, send this file to the supplier, who can now create the split tags.

In the **Split** column (the first column), X indicates original items and D indicates splits.

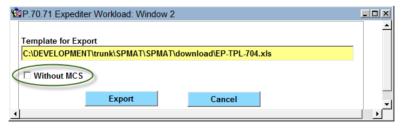
Review the information to ensure that all split tags receive a new tag number. If there is not a new tag number, there will be loading errors when importing the Excel file. After the supplier is done with his review, he returns the completed file. This updated Excel sheet can be imported into SmartPlant Materials to add or update item shipment data. For more information, see *Import Expediting Data* (on page 42).

The loaded item shipment data can be viewed on the Item Shipments tab of P.70.72.

MCS (Material Certificate Summary)

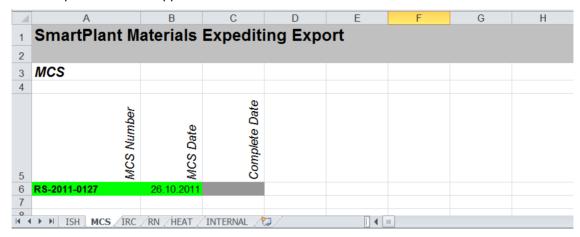
Material certification papers from suppliers certify the material quality. These papers typically come from the manufacturer, for example, a steel mill.

You can export with or without MCS. This setting is controlled by the **Without MCS** indicator on the box (Window 2) that opens when you click **Export** on P.70.71.

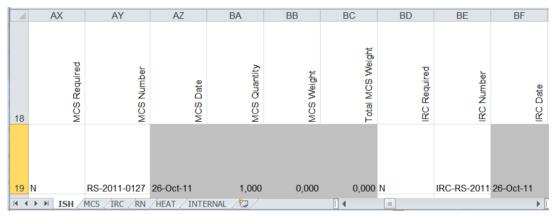


NOTE If you export with MCS, you must first create the MCS header on **P.70.72 Expediting Details**.

Send the exported Excel workbook to the supplier to complete. If the purchase order was exported without MCS, the supplier first creates an MCS number and date on the MCS sheet. An example MCS sheet appears below.

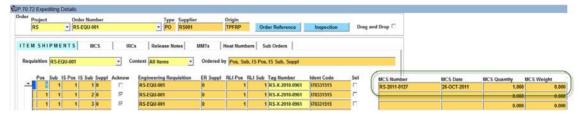


Then, the supplier adds this MCS number to the correct items on the **ISH** sheet, adds the date, and identifies the MCS quantity.

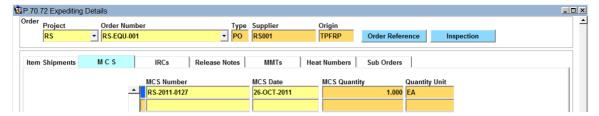


The supplier sends the updated Excel workbook back to you. This updated Excel sheet can be imported into SmartPlant Materials to add or update the MCS data. For more information, see *Import Expediting Data* (on page 42).

The loaded MSC data can be viewed on the **Item Shipments** tab of P.70.72.



You can also view the loaded data on the MCS tab of P.70.72.

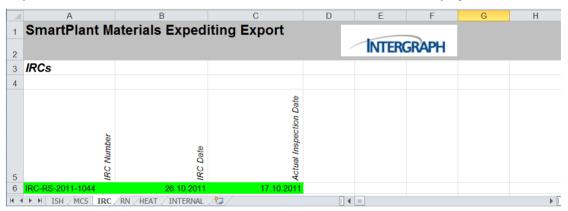


IRC (Inspection Release Certificate)

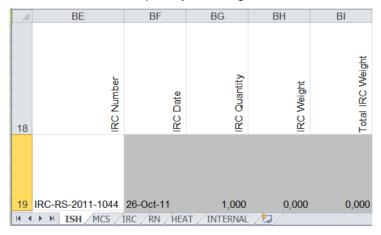
The Inspection Release Certificate (IRC) process is completed by the shop inspector, unlike the Material Certificate Summary (MCS) process, which is completed by the supplier. The IRC process can work in these two ways:

- The supplier gives a copy of the MCS template to the inspector during the shop visit.
- The expediter/inspection coordinator issues the IRC template to the inspector.

For the second way, send the exported Excel workbook to the inspector to complete. The inspector will first create an IRC number and date on the **IRC** sheet as displayed below.



Then, the inspector adds this IRC number to the correct items on the **ISH** sheet, adds the date, and identifies the IRC quantity and weight.



The inspector sends the updated Excel workbook back to you. This updated Excel sheet can be imported into SmartPlant Materials to add or update the IRC data. For more information, see *Import Expediting Data* (on page 42).

The loaded IRC data can be viewed on the **Item Shipments** tab of P.70.72.



You can also view the loaded data on the **IRCS** tab of P.70.72.



RN (Release Notes)

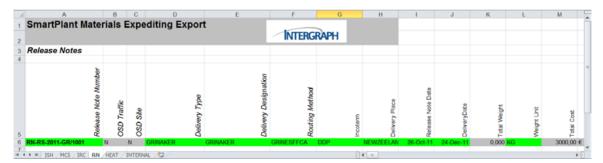
The RN (Release Note) is usually entered by the expediter/traffic coordinator in SmartPlant Materials before the supplier uses the data to indicate which items to apply to this RN. The release note (or shipping note) documents the shipment of the materials.

Create a release note on the Release Notes tab of the P.70.72 Expediting Details screen.

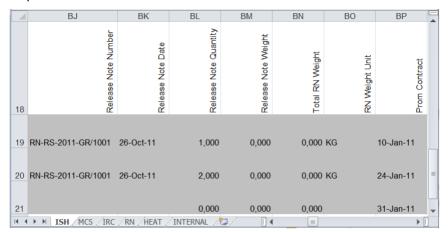


Close P.70.72 to return to **P.70.71 Expediter Workload**, and click **Export** to export the selected purchase order to an Excel workbook.

You can view the release note data on the RN sheet.



Send the file to the supplier. The supplier copies and pastes to add the RN number on the **ISH** tab and enters the correct RN quantity to indicate if all or part of an item is ready for actual shipment.



After the supplier has finished entering the data and sent back the Excel file, you are ready to issue the file to the expediter/traffic coordinator. The expediter/traffic coordinator imports the updated file. For more information, see *Import Expediting Data* (on page 42).

The loaded RN data can be viewed on the **Item Shipments** tab of **P.70.72 Expediting Details**.



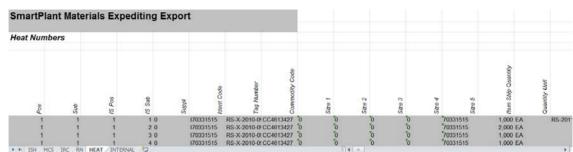
NOTE If the full quantity of an item is not assigned to the release note in the Excel workbook, the software creates a second item shipment line with the remaining quantity that is not on this RN.

HEAT (Heat Numbers)

The heat numbers and associated information like certificate, manufacturer, and so forth can be entered on the **Heat Numbers** tab of the **P.70.72 Expediting Details** screen.



Close P.70.72 to return to **P.70.71 Expediter Workload**, and click **Export** to export the selected purchase order to an Excel workbook.



You can view the heat number data on the **HEAT** sheet.

Send the file to the supplier. The supplier adds the heat numbers, certificates, and so forth.

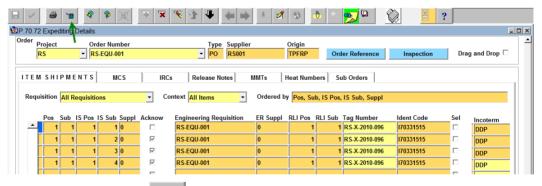
After the supplier has finished entering the data and sent back the Excel file, you are ready to issue the file to the expediter/traffic coordinator. The expediter/traffic coordinator imports the updated file. For more information, see *Import Expediting Data* (on page 42).

The loaded heat data can be viewed on the **Heat Numbers** tab of **P.70.72 Expediting Details**.

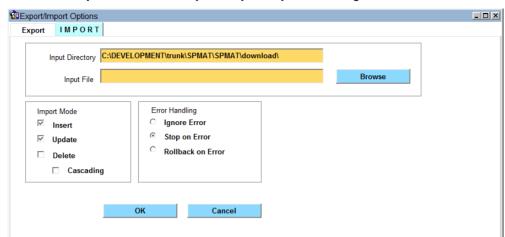


Import Expediting Data

1. On the **P.70.71 Expediter Workload** screen, double-click the correct PO number. The **P.70.72 Expediting Details** screen opens.



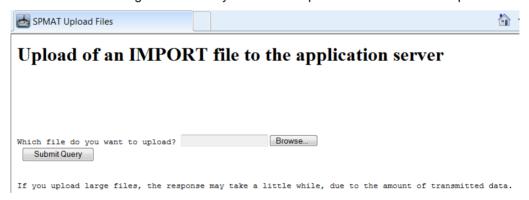
2. Click the **Excel Export** butto



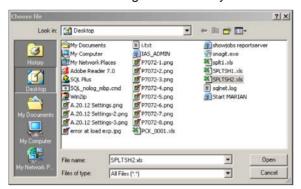
3. Select the Import tab on the Export/Import Options dialog box.

The available **Import Mode** options are:

- Insert Creates new item shipments/MCS/IRCs/heat numbers
- Update Updates existing item shipments/MCS/IRCs/heat numbers
- Delete Any item shipments/MCS/IRCs/heat number that do not exist in the import file are deleted. (Use this option with caution).
- Cascading Delete Deleting release notes and/or IRCs will set the corresponding values in the affected item shipments to empty.
- Select the Insert and Update check boxes.
- Select the Stop on Error option.
- 6. Click Browse to navigate to the file you want to import. A browser window opens.



7. Click **Browse** to navigate to the file you want to import.



8. Select the file and click **Open**.



- 9. After the **Upload Feedback** message appears, close the window.
- 10. Click **OK** on the **Export/Import Options** window.
- 11. When the import finishes successfully, click **OK** to acknowledge the message.

Expediting Template Fields

The fields of the expediting template are listed below with their descriptions. The **Mandatory** column indicates if the field must be filled (Mandatory=Y) to ensure a successful import. These columns are highlighted with a green background color on the sheet.

Data in fields with names enclosed by # # are imported to SmartPlant Materials. Fields with names enclosed by * * are not considered by the import.

ISH Sheet (Item Shipments)

| Name | Description | Mandatory? |
|--------------------|-------------|------------|
| #SPLIT# | Split | N |
| #ISH_POLI_POS# | Pos | N |
| #ISH_POLI_SUB_POS# | Sub | N |
| #ISH_POS# | Is Pos | N |
| #ISH_SUB_POS# | IS Sub | N |

| Name | Description | Mandatory? |
|-------------------------|-----------------------------------|------------|
| #ISH_REVISION_ID# | Suppl | N |
| #ISH_ACKNOWLEDGE_IND# | Acknow | Υ |
| #ISH_IDENT_CODE# | Ident Code | N |
| *IDENT_SHORT* | Ident Short Description | N |
| #ISH_TAG_NUMBER# | Tag Number | Υ |
| #TAG_SHORT_DESC# | Tag Description (only for import) | N |
| #ISH_COMMODITY_CODE# | Commodity Code | N |
| #ISH_ITY_CODE# | Item Type | N |
| #ISH_INPUT_1# | Size 1 | N |
| #ISH_INPUT_2# | Size 2 | N |
| #ISH_INPUT_3# | Size 3 | N |
| #ISH_INPUT_4# | Size 4 | N |
| #ISH_INPUT_5# | Size 5 | N |
| #ISH_R_CODE# | Engineering Requisition | N |
| #ISH_R_SUPP# | ER Suppl | N |
| #ISH_RLI_POS# | RLI Pos | N |
| #ISH_RLI_SUB_POS# | RLI Sub | N |
| #ISH_PROC_ORDER_SEQ# | Proc Seq | N |
| #ISH_REV_FRT_CODE# | Incoterm | Υ |
| #ISH_REV_FREIGHT_VALUE# | Delivery Place | Υ |
| #ISH_DTP_CODE# | Delivery Type | Υ |
| #ISH_DD_CODE# | Delivery Designation | Υ |
| #ISH_RM_CODE# | Routing Method | Υ |
| #ISH_SEL_CODE# | Selection Code | Υ |

| Name | Description | Mandatory? |
|--------------------------|-------------------------|------------|
| #ISH_EXPED_PAR_CODE# | Pertinent Area(Exp.) | Υ |
| #ISH_INSP_PAR_CODE# | Pertinent Area(Insp.) | Y |
| #ISH_REQ_QTY# | Requisition Quantity | N |
| #ISH_RELEASED_QTY# | Released Quantity | N |
| #ISH_POLI_QTY# | Order Quantity | N |
| #ISH_POLI_VARIATION# | Order Variation | N |
| #ISH_ITEM_SHIP_QTY# | Item Ship Quantity | Y |
| #ISH_REQ_DELTA# | ISH-Req Delta | N |
| #ISH_PO_DELTA# | ISH-PO Delta | N |
| #ISH_PO_REQ_DELTA# | PO-Req Delta | N |
| #ISH_APPROVED_QTY# | Approved Quantity | N |
| #ISH_TOTAL_APPROVED_QTY# | Total Approved Quantity | N |
| #ISH_RECEIVED_QTY# | Received Quantity | N |
| #ISH_QUANTITY_UNIT# | Quantity Unit | N |
| #ISH_ITEM_SHIP_WEIGHT# | Item Ship Weight | Y |
| #ISH_TOTAL_ISH_WEIGHT# | Total ISH Weight | N |
| #ISH_WEIGHT_UNIT# | Weight Unit | Υ |
| #ISH_HEAT_IND# | Heat | N |
| #ISH_HEAT_COMP_IND# | Heat Comp | N |
| #ISH_MCS_REQUIRED_IND# | MCS Required | N |
| #ISH_MCS_NUMBER# | MCS Number | N |
| #ISH_MCS_DATE# | MCS Date | N |
| #ISH_MCS_QTY# | MCS Quantity | N |
| #ISH_MCS_WEIGHT# | MCS Weight | N |

| Name | Description | Mandatory? |
|----------------------------|-----------------------|------------|
| #ISH_TOTAL_MCS_WEIGHT# | Total MCS Weight | N |
| #ISH_IRC_REQUIRED_IND# | IRC Required | N |
| #ISH_IRCT_NUMBER# | IRC Number | N |
| #ISH_IRCT_DATE# | IRC Date | N |
| #ISH_IRC_QTY# | IRC Quantity | N |
| #ISH_IRC_WEIGHT# | IRC Weight | N |
| #ISH_TOTAL_IRC_WEIGHT# | Total IRC Weight | N |
| #ISH_RELN_NUMBER# | Release Note Number | N |
| #ISH_RELN_DATE# | Release Note Date | N |
| #ISH_RELN_QTY# | Release Note Quantity | N |
| #ISH_RELN_WEIGHT# | Release Note Weight | N |
| #ISH_TOTAL_RELN_WEIGHT# | Total RN Weight | N |
| #ISH_RELN_WEIGHT_UNIT# | RN Weight Unit | N |
| #ISH_PROM_CONTRACT_DATE# | Prom Contract | N |
| #ISH_ACTUAL_CONTRACT_DATE# | PO Actual | N |
| #ISH_PROM_INSPECT_DATE# | Prom Inspect | N |
| #ISH_FINAL_INSPECT_DATE# | Final Inspect | N |
| #ISH_READY_PREDICTED# | Ready Predicted | N |
| #ISH_READY_ACTUAL# | Ready Actual | N |
| #ISH_PROM_SHIP_DATE# | Prom Ship | N |
| #ISH_REV_PROM_SHIP_DATE# | Curr/Rev Prom Ship | N |
| #ISH_PRED_SHIP_DATE# | Pred Ship | N |
| #ISH_ACTUAL_SHIP_DATE# | Actual Ship | N |
| #ISH_PRED_TRAFFIC_ARRIVAL# | Pred Traffic Arrival | N |

| Name | Description | Mandatory? |
|------------------------------|------------------------|------------|
| #ISH_ACTUAL_TRAFFIC_ARRIVAL# | Actual Traffic Arrival | N |
| #ISH_FORECAST_ETA_SITE_DATE# | Prom On Site | N |
| #ISH_PRED_ON_SITE_DATE# | Pred On Site | N |
| #ISH_ACTUAL_ON_SITE_DATE# | Actual On Site | N |
| #ISH_REQ_SITE_DATE# | Req On Site | N |
| #ISH_MAJ_MATL_ORDER_DATE# | Maj Matl Order | N |
| #ISH_MAJ_MATL_RECV_DATE# | Maj Matl Recv | N |
| #ISH_ACTUAL_FAB_START_DATE# | Actual Fab Start | N |
| #ISH_FAB_COMPLETE_PERCENT# | Comp % | N |
| #ISH_FIFTY_PERCENT_FAB_COMP# | 50% Comp | N |
| #ISH_PROM_FAB_COMP_DATE# | Prom Fab Comp | N |
| #ISH_ACTUAL_FAB_COMP_DATE# | Actual Fab Comp | N |
| #ISH_FAB_LOCATION# | Fab Location | N |
| #ISH_FAB_SHOP_CNTRL_NUMBER# | Fab Ctrl Number | N |
| #ISH_INSP_LOCATION# | Inspection Location | N |
| #ISH_ITEM_SHIP_DIMENSIONS# | Dimensions | N |
| #ISH_SG_CODE# | Shipment Group | N |
| #ISH_INSPECTABLE_IND# | Inspectable | N |
| #ISH_INSP_RELEASE_NOTE_IND# | Release Note | N |
| #ISH_INSP_WAIVER_IND# | Waiver | N |
| #ISH_INSP_REL_WAIVER_DATE# | Release/Waiver Date | N |
| #ISH_INSP_NCR_DATE# | NCR Date | N |
| #ISH_INSP_NCR_RELEASE_DATE# | NCR Release Date | N |
| #ISH_INSP_NCR_REMARKS# | NCR Remarks | N |

| Name | Description | Mandatory? |
|------------------------------|-------------------------|------------|
| #ISH_ITEM_SHIP_VOLUME# | Volume | N |
| #ISH_TOTAL_VOLUME# | Total Volume | N |
| #ISH_VOLUME_UNIT# | Volume Unit | N |
| #ISH_X_DIM# | x Dimension | N |
| #ISH_Y_DIM# | y Dimension | N |
| #ISH_Z_DIM# | z Dimension | N |
| #ISH_DIM_UNIT# | Dim Unit | N |
| #ISH_CALC_VOLUME# | Calculated Volume | N |
| #ISH_TOTAL_CALC_VOLUME# | Total Calculated Volume | N |
| #ISH_DEFAULT_VOLUME# | Def. Volume Unit | N |
| #ISH_EXPORT_LICENSE_REQ_IND# | Exp Lic Req | N |
| #ISH_ACTUAL_IND# | Actual | N |
| #ISH_COMMENTS# | Comment | N |
| #ISH_DOC_IND# | Doc | N |
| #ISH_VDR_IND# | VDR | N |
| #ISH_PACKAGE_IND# | Package | N |
| #ISH_MRR_IND# | MRR | N |
| #ISH_TRAFFIC_OSD_IND# | OSD Traffic | N |
| #ISH_SITE_OSD_IND# | OSD Site | N |
| #ISH_CARRIER_NAME# | Carrier Name | N |
| #ISH_LAST_INFO_DATE# | Last Info Date | N |
| #ISH_IE_CODE# | Info Type | N |
| #ISH_DES_CODE_INSP# | Inspection Destination | N |
| #ISH_PLANNED_DATE_INSP# | Inspection Planned | N |

| Name | Description | Mandatory? |
|------------------------------|-----------------------------|------------|
| #ISH_FORECASTED_DATE_INSP# | Inspection Forecasted | N |
| #ISH_ACTUAL_DATE_INSP# | Inspection Actual | N |
| #ISH_DES_CODE_IRC# | IRC Destination | N |
| #ISH_PLANNED_DATE_IRC# | IRC Planned | N |
| #ISH_FORECASTED_DATE_IRC# | IRC Forecasted | N |
| #ISH_ACTUAL_DATE_IRC# | IRC Actual | N |
| #ISH_DES_CODE_EXWO# | Hand-Over Destination | N |
| #ISH_PLANNED_DATE_EXWO# | Hand-Over Planned | N |
| #ISH_FORECASTED_DATE_EXWO# | Hand-Over Forecasted | N |
| #ISH_ACTUAL_DATE_EXWO# | Hand-Over Actual | N |
| #ISH_DES_CODE_SHIP_1# | 1st Shipping Destination | N |
| #ISH_PLANNED_DATE_SHIP_1# | 1st Shipping Planned | N |
| #ISH_FORECASTED_DATE_SHIP_1# | 1st Shipping Forecasted | N |
| #ISH_ACTUAL_DATE_SHIP_1# | 1st Shipping Actual | N |
| #ISH_DES_CODE_SHIP_2# | 2nd Shipping Destination | N |
| #ISH_PLANNED_DATE_SHIP_2# | 2nd Shipping Planned | N |
| #ISH_FORECASTED_DATE_SHIP_2# | 2nd Shipping Forecasted | N |
| #ISH_ACTUAL_DATE_SHIP_2# | 2nd Shipping Actual | N |
| #ISH_DES_CODE_SHIP_3# | 3rd Shipping Destination | N |
| #ISH_PLANNED_DATE_SHIP_3# | 3rd Shipping Planned | N |
| #ISH_FORECASTED_DATE_SHIP_3# | 3rd Shipping Forecasted | N |
| #ISH_ACTUAL_DATE_SHIP_3# | 3rd Shipping Actual | N |
| #ISH_DES_CODE_TA# | Traffic Arrival Destination | N |
| #ISH_PLANNED_DATE_TA# | Traffic Arrival Planned | N |

| Name | Description | Mandatory? |
|---------------------------|-----------------------------|------------|
| #ISH_FORECASTED_DATE_TA# | Traffic Arrival Forecasted | N |
| #ISH_ACTUAL_DATE_TA# | Traffic Arrival Actual | N |
| #ISH_DES_CODE_AOS# | Arrival On Site Destination | N |
| #ISH_PLANNED_DATE_AOS# | Arrival On Site Planned | N |
| #ISH_FORECASTED_DATE_AOS# | Arrival On Site Forecasted | N |
| #ISH_ACTUAL_DATE_AOS# | Arrival On Site Actual | N |

MCS Sheet (Material Certificate Summary)

| Name | Description | Mandatory? |
|-----------------|---------------|------------|
| #MCS_NUMBER# | MCS Number | Υ |
| #MCS_DATE# | MCS Date | Υ |
| *COMPLETE_DATE* | Complete Date | N |

IRC Sheet (Inspection Release Certificate)

| Name | Description | Mandatory? |
|---------------|------------------------|------------|
| #IRCT_NUMBER# | IRC Number | Υ |
| #IRCT_DATE# | IRC Date | Υ |
| #INSP_DATE# | Actual Inspection Date | Υ |

RN Sheet (Release Notes)

| Name | Description | Mandatory? |
|-----------------------|----------------------|------------|
| #RN_RELN_NUMBER# | Release Note Number | Υ |
| #RN_TRAFFIC_OSD_IND# | OSD Traffic | N |
| #RN_SITE_OSD_IND# | OSD Site | N |
| #RN_DTP_CODE# | Delivery Type | Y |
| #RN_DD_CODE# | Delivery Designation | Υ |
| #RN_RM_CODE# | Routing Method | Υ |
| #RN_FRT_CODE# | Incoterm | Υ |
| #RN_FREIGHT_VALUE# | Delivery Place | Υ |
| #RN_RELN_DATE# | Release Note Date | Υ |
| #RN_DELV_DATE# | DeliveryDate | Υ |
| *RN_TOTAL_WEIGHT* | Total Weight | N |
| #RN_WEIGHT_UNIT_CODE# | Weight Unit | Υ |
| *RN_TOTAL_COST* | Total Cost | N |
| *RN_CURRENCY* | Currency | N |
| *RN_INVOICE_OK_IND* | Invoice OK | N |
| *RN_PACKAGE_IND* | Package | N |
| *RN_AWB_IND* | B/L or AWB | N |
| *RN_APPROVED_BY* | Approved By | N |
| *RN_APPROVED_DATE* | Approved Date | N |
| *RN_COUNT_REVISION* | Number of Revisions | N |

HEAT Sheet (Heat Numbers)

| Name | Description | Mandatory? |
|---------------------|-----------------------|------------|
| #HD_POLI_POS# | Pos | Υ |
| #HD_POLI_SUB_POS# | Sub | Y |
| #HD_ISH_POS# | IS Pos | Y |
| #HD_ISH_SUB_POS# | IS Sub | Y |
| #HD_REVISION_ID# | Suppl | Y |
| *HD_IDENT_CODE* | Ident Code | N |
| *HD_TAG_NUMBER* | Tag Number | N |
| *HD_COMMODITY_CODE* | Commodity Code | N |
| *HD_INPUT_1* | Size 1 | N |
| *HD_INPUT_2* | Size 2 | N |
| *HD_INPUT_3* | Size 3 | N |
| *HD_INPUT_4* | Size 4 | N |
| *HD_INPUT_5* | Size 5 | N |
| *HD_ITEM_SHIP_QTY* | Item Ship Quantity | N |
| *HD_QUANTITY_UNIT* | Quantity Unit | N |
| *HD_MCS_NUMBER* | MSC Number | N |
| *HD_MCS_QTY* | MSC Quantity | N |
| *HD_IRCT_NUMBER* | IRC Number | N |
| *HD_IRC_QTY* | IRC Quantity | N |
| *HD_RELN_NUMBER* | Release Note Number | N |
| *HD_RELN_QTY* | Release Note Quantity | N |
| #HD_VENDOR_CODE# | Vendor Code | Y |

| Name | Description | Mandatory? |
|--------------------------|----------------------|------------|
| #HD_POLI_POS# | Pos | Υ |
| #HD_HEAT_NUMBER# | Heat Number | Υ |
| #HD_HEAT_NUMBER2# | Heat Number 2 | Υ |
| #HD_QUANTITY# | Heat Number Quantity | Y |
| #HD_CERTIFICATE_NUMBER# | Certificate Number | Y |
| #HD_CERTIFICATE_NUMBER2# | Certificate Number 2 | Y |
| #HD_MANUFACTURER# | Manufacturer | Y |
| #HD_MANUFACTURER2# | Manufacturer 2 | Y |
| #HD_MARK# | Mark | Y |
| #HD_MARK2# | Mark 2 | Y |
| #HD_FILE_LOCATION# | File Location | Y |

Modifying the Excel Template

The supplied template can be modified according to the following rules:

- It is not allowed to modify the names of the sheets (ISH, MCS, IRC, RN, HEAT, INTERNAL).
- The display of data is controlled by identifiers in the following format:

```
#FIELD_NAME#
```

FIELD_NAME - Using this format excludes the field from the import. There is no difference in the created export file.

- The start identifier of each data block (#ORDER#, #ISH#, #MCS#, #RN#, #HEAT#) cannot be omitted.
- The end identifiers of each block (#END_ISH#, #END_MCS#, #END_RN#, #END_HEAT#)
 cannot be omitted.
- Processing of each sheet of the template stops at the identifier #END_TEMPLATE#.
 Removing this identifier results in a large increase in processing time for the export.
- Columns 250 255 are reserved for internal use.
- Positions of the identifiers of the ORDER block can be changed horizontally or vertically.
- All identifiers of the blocks ISH (Item Shipments), MCS, IRC, RN (Release Notes) and HEAT (Heat Numbers) must reside on one line.

- The identifiers corresponding to the **Pos**, **Sub**, **IS Sub**, and **Suppl** fields are required for item shipments and heat numbers (ISH and HEAT sheets).
- Data type formats of the identifier fields must correspond to the datatypes on P.70.72 (this is the case in the supplied template).
- Color coding in the supplied template in general has the following meaning (although this is not a complete representation of the application logic of P.70.72).

| Color | Meaning | |
|-------|---|--|
| Gray | Fields that cannot be modified by the import and thus should not be changed. | |
| Green | Mandatory; input is required for these fields by the import. | |
| White | Optional; input is not required for these fields. | |
| Blue | Fields in the order block cannot be modified. For the identifier #SPLIT#, see the information about splitting tags. | |

SECTION 13

Packages Export/Import

The Packages functionality allows the supplier to provide packing list details using an Excel template. This provides the user with a detailed view of each shipment item as well as in which package and in which quantity these can be found.

The Excel interface for packages can be used to exchange data between SmartPlant Materials and external systems using an Excel workbook for data transfer. The data can be exported in a customer-defined format (some restrictions apply) by using a template file. Templates are provided with SmartPlant Materials.

The import checks all data in the Excel workbook for compliance with the rules of SmartPlant Materials and rejects incorrect data to maintain data integrity. You cannot import data using the Excel interface that you cannot enter manually on P.70.74.

Additionally, you can import package data by using an import file created by an external system.

On the **P.70.74 Packages** screen, you can export packages with or without release notes to an Excel workbook. After editing the Excel workbook, you can import the data from this Excel workbook back into SmartPlant Materials using the **P.70.74 Packages** screen.

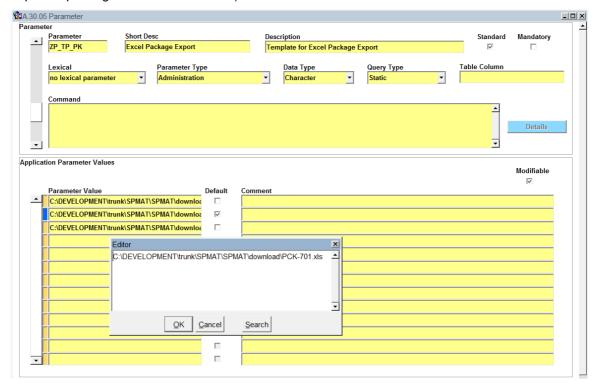
For more information about packages, see *Packages* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

Excel Templates

The following template files are available for the package export/import:

| Template | Description |
|------------------------|---|
| PCK-701.xls | Export of existing packages without release notes |
| PCK-IMP-701-NEW.xls | Import of new packages without release notes |
| PCK-RN-708.xls | Export of packages for a release note |
| PCK-IMP-RN-701-NEW.xls | Import of new packages for a release note |

Enter the template(s) for the export on the **A.30.05 Parameters** screen as values for the parameters ZP_TP_PK (for export of packages without release notes) and ZP_TP_PKRN (for export of packages with release notes).



These templates are available in the list of values on the export window of P.70.74.

Modifying the Excel Templates for Export

The supplied templates can be modified according to the following rules:

- It is not allowed to modify the names of the INTERNAL sheet.
- The display of data is controlled by identifiers in the following format :

#FIELD_NAME#

FIELD_NAME - Using this format excludes the field from the import. There is no difference in the created export file.

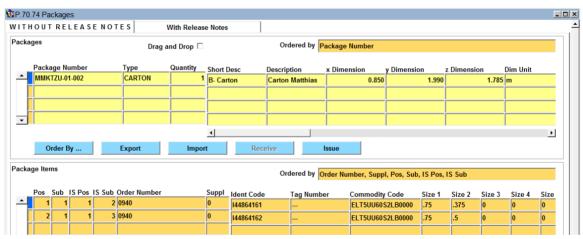
- The start identifier of each data block (#PK#, #PKI# for packages without release notes, #RN#, #PCKI# for packages with release notes) cannot be omitted.
- The end identifiers of the package items data block (#END_ISH#) cannot be omitted.
- Processing of each sheet of the template stops at the identifier #END_TEMPLATE#.
 Removing this identifier results in a large increase in processing time for the export.
- Columns 250 255 are reserved for the definition of code lists. You can enter additional value lists for fields of the template.
- Positions of the identifiers of the #PK#/#RN# blocks can be changed horizontally or vertically.

- All identifiers of the blocks for package items must reside on one line.
- The identifiers corresponding to the Pos, Sub, Is Pos, IS Sub, and Suppl fields are required for package items to identify the correct item shipment during import.
- Data type formats of the identifier fields must correspond to the data types on P.70.74 (this
 is the case in the supplied templates).
- Color coding in the supplied template in general has the following meaning (although this is not a complete representation of the application logic of P.70.74).

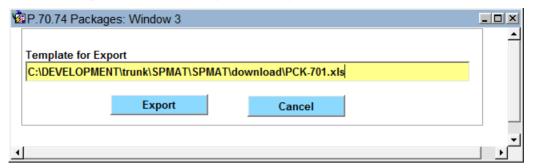
| Color | Meaning |
|-------|---|
| Gray | Fields that cannot be modified by the import and thus should not be changed. |
| Green | Mandatory; input is required for these fields by the import. |
| White | Optional; input is not required for these fields. |
| Blue | Fields in the order block cannot be modified. For the identifier #SPLIT#, see the information about splitting tags. |

Export Package Data

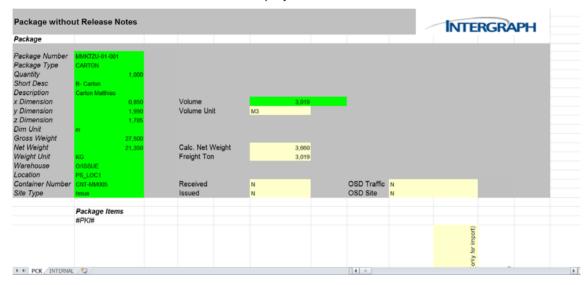
You start the export operation on the **P.70.74 Packages** screen by clicking the **Export** button (available on both tabs) after navigating to the selected record.



A window appears, showing the template defined in the project default. You can change the template using the LOV in the **Template for Export** field.



After you click the **Export** button, the information of the selected package/release note is written to an Excel file. Depending on the amount of data, this process might take a few minutes. After the export operation is complete, a window offer s you the option to either open the created export file in a new browser window or to store it in a directory on your file system. An example of the Excel workbook that is created is displayed below.



Packages without Release Notes

- Only one package at a time can be selected for export.
- The template PCK-701.xls includes all possible fields for the export.
- If the file will be imported again, the required fields cannot be omitted from the template. For more information about the required fields, see *Import Package Data* (on page 61).

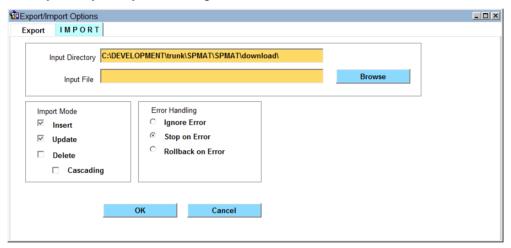
Packages with Release Notes

- All packages and package items belonging to the selected release note are exported.
- Additionally, all item shipments of the release note not belonging to a package are exported.
- The template PCK-RN-708.xls, provided with SmartPlant Materials release 7.0.8, includes all possible fields for the export.
- If the file will be imported again, the required fields cannot be omitted from the template. For more information about the required fields, see *Import Package Data* (on page 61).

Import Package Data

 On the P.70.74 Packages screen, click the Import button (available on both tabs) after navigating to the selected record.

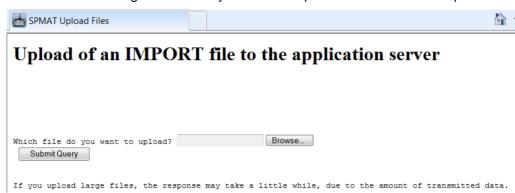
Alternatively, click the **Excel Export** button, and select the **Import** tab from the **Export/Import Options** dialog box.



NOTE Be sure that the **Insert** (creation of new package items) and **Update** (update of existing packages/package items) check boxes are selected.

2. Select the **Stop on Error** option.

3. Click Browse to navigate to the file you want to import. A browser window opens.



- 4. Click **Browse** to navigate to the file you want to import.
- 5. Select the file and click **Open** to continue.
- 6. After the Upload Feedback message appears, close the window.
- 7. Click **OK** on the **Export/Import Options** dialog box.
- 8. When the import finishes successfully, click **OK** to acknowledge the message.

The import operation identifies the correct item shipments to create new positions or update existing positions by using the information provided in the following fields:

- Pos
- Sub
- IS Pos
- IS Sub
- Ident Code
- Tag Number
- Commodity Code
- Order Number
- Size1..5

If one or more of these fields are omitted, the information in the remaining fields must identify a unique item shipment. Otherwise, no package item is created or updated; instead, an error message is written to the log file.

Packages without Release Notes

The import operation offers the option for either single or multi package import. Details are described in the following sections.

Import of a File Created by Export

This import mode allows the update of an existing package. Only the information that is also updateable in SmartPlant Materials can be changed. It is important that the INTERNAL sheet of the file generated by the export is not modified; otherwise, there is the danger of errors preventing a successful import or even data corruption.

Import of an Externally-Created File

This file must be based on a template (PCK-IMP-701-NEW.xls might be used as an example). In this template, the field information on the INTERNAL sheet must match the fields on the data sheet. Furthermore, the entry #NEW# must be available on the INTERNAL sheet in column 1 row 2. This import mode allows you to load multiple packages with one file.

Assignment of Package Positions

The import identifies the correct item shipments to create new positions or update existing positions by using the information provided in the following fields:

- Pos
- Sub
- IS Pos
- IS Sub
- Ident Code
- Tag Number
- Commodity Code
- Order Number
- Size1..5

If one or more of these fields are omitted, the information in the remaining fields must identify a unique item shipment. Otherwise, no package item is created or updated; instead, an error message is written to the log file.

Issued/Received Packages

If a package for which the Excel import is started is already issued or received, there are no changes to this package. Instead, the import creates a second package (always of site type 'ISSUE') that contains the modified information. The package name is that of the original package followed by a three-digit number. The software automatically selects the highest number that is not yet used for a package name. If quantity reductions compared to the data stored in SmartPlant Materials are imported, a second package is created containing the quantity differences.

Packages with Release Notes

It is possible to import multiple packages for one release note.

Import of a File Created by Export

Enter the information in the file created by the export and start the import. Please note that the import only works for the same release note as selected for export. It is important that the INTERNAL sheet of the file generated by the export is not modified; otherwise, there is the danger of errors preventing a successful import or even data corruption.

Import of an Externally-Created File

This file must be created based on a template (PCK-IMP-RN-638-NEW.xls is provided as an example). In this template, the field information on the INTERNAL sheet must match the fields on the data sheet. Furthermore, the entry #NEW# must be available on the INTERNAL sheet in column 1 row 2. This import mode also allows you to load multiple packages with one file.

Splitting of Item Shipments

The import offers the option to split tag items. To accomplish this, the identifier #SPLIT# is needed in the PKI and PCKI section (the column will from now on be called 'split column' in this document). It can appear in any column, but it is recommended to place it before the columns **Pos**, **Sub**, **IS Pos**, and **IS Sub** for clarity (as you can see in the supplied templates).

To mark a line for split, enter 'X' in the split column. Create as many new lines as you would like splits right after this line and mark each of them with 'D' in the split column. The values for the fields **Pos**, **Sub**, **IS Pos**, **IS Sub**, and **Suppl** are not required for these columns because the software will automatically assign the correct values when creating the split. Enter all required information (like tag numbers) in the split lines.

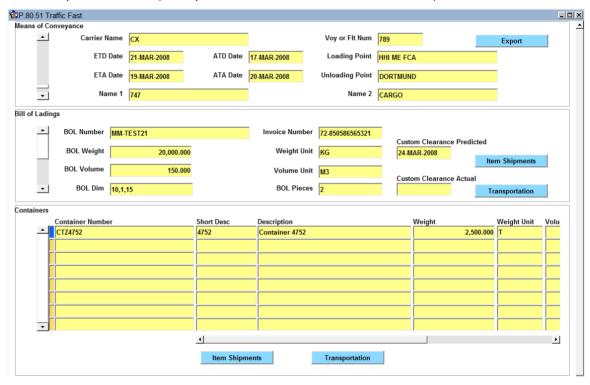
To add more splits to a specific item shipment, there are two ways:

- Export the data created by the import and then add the splits in the Excel workbook directly under the item shipment you want to split.
- Remove the split indicator from the already imported lines in the Excel workbook and enter the required number of lines directly under the item shipment you want to split and mark them with 'D'. Also, update the fields for Pos, Sub, IS Pos, and IS Sub to the values on P.70.74.

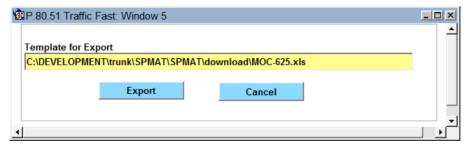
SECTION 14

Traffic Data Export

On the **P.80.51 Traffic Fast** screen, you can export traffic data to an Excel workbook. Before exporting traffic data, set the project default ZP_TP_TRFC to the entire folder path where your Excel template is stored. (Example: C:\SPMAT7\download\MOC-625.xls)



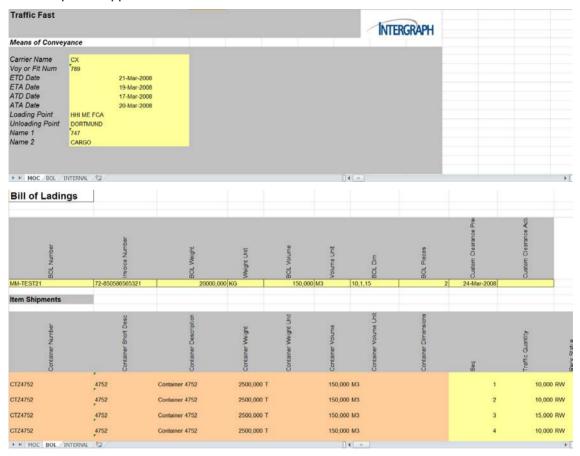
To export traffic data to an Excel workbook, click the **Export** button. A box opens where you can select a template file and start the export.



The **Template for Export** field displays the name of the template file assigned to the project default ZP_TP_TRFC, with the path where it is located on the application server. You can use the LOV in this field to select another template. The LOV provides the templates that are pre-defined on A.30.05 for the parameter ZP_TP_TRFC.

Click the **Export** button to start the export. All detail data belonging to the selected means of conveyance (bills of lading and item shipments) are exported to an Excel workbook. When the export operation is complete, you can choose to download the created file to a directory on your file system or to open the file.

An example file appears below.

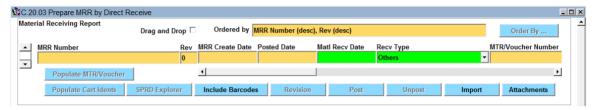


For more information, see *Traffic Fast* in the *SmartPlant Materials MSCM User's Guide*, available from the **Printable Guides** page in the software.

SECTION 15

MRR Import

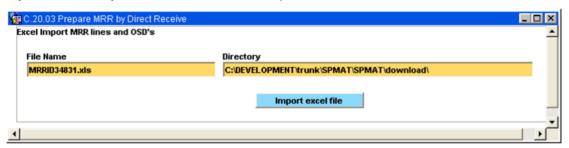
On the **C.20.03 Prepare MRR by Direct Receive** screen, you can import MRRs (Material Receiving Reports) for direct receiving from an Excel workbook.



To use this functionality, the Excel template Excel_import_direct_mrr_template.xls must be available on the application server in the download directory.

MOTE The Import button is only enabled if the MRR has revision 0 and the MRR is not posted.

If you click the Import button, a new window opens.



The name of the Excel file is automatically generated and displayed in the File Name field.

For more information, see *Direct Receiving* in the *SmartPlant Materials Site User's Guide*, available from the **Printable Guides** page in the software.

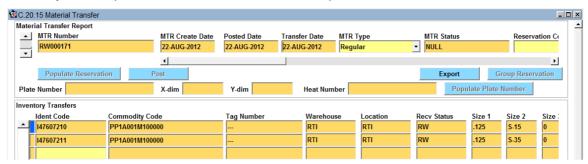
SECTION 16

MTR Export/Import

On the **C.20.15 Material Transfer** screen, you can export MTRs (Material Transfer Reports) to an Excel workbook and re-import MTRs from an Excel workbook. To use this export/import feature, you must set the DBA settings MTR_DOWNLOAD_URL and MTR_UPLOAD_DEST.

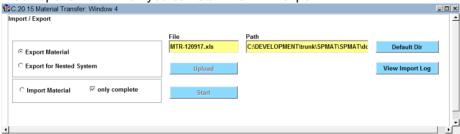
Export MTRs

Click **Export** to export the selected material transfer report into an Excel workbook.

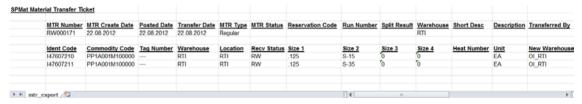


NOTE Only MTRs of type 'Regular' can be exported.

A box opens from which you can start the MTR export.



To export an MTR, select **Export Material** and click **Start**. After downloading the file, you can open or save the file. An example of this file appears below.



Re-Import MTRs

To re-import a modified Excel workbook, select the **Import Material** option.

Select the **only complete** check box if only complete MTRs will be imported. If this check box is selected, any line rejected due to an error will cause the entire file to be rejected. If this check box is not selected, only incorrect lines are rejected.

The MTR can only be re-loaded if it is not posted and if the MTR type is 'Regular.' An Excel workbook must contain no more than one MTR. The import job creates a log file that shows the Excel line number for rejected, updated, or inserted lines and in the case of rejection, the reason why the line was rejected.

If you have selected the **Import Material** option, click the **Upload** button to upload the Excel workbook to the application server. Then click **Start** to launch the MTR import.

Restrictions for updating or inserting records in Excel

Inserting, deleting, or renaming of columns in the Excel workbook leads to a complete rejection of the sheet and not just a single line.

For lines with an internal MTR line item reference (value in ITR_ID column), an update is allowed only for the following fields:

- New Warehouse
- New Location
- New Status
- Move Qty
- Comment

For lines with an internal MTR line item reference (value in ITR_ID column), an update of the following fields leads to a rejection:

- Ident Code
- Commodity Code
- Tag Number
- Warehouse
- Location
- Recv Status
- Sizes 1 to 4
- Heat Number
- Unit
- Ident Deviation

The update of the following fields is ignored:

- On Hand Qty
- Ident Short Description

For lines with an internal MTR header reference (value in MTR_ID column), an update is allowed only for the following fields:

- Short Desc
- Description
- Transferred By
- ETA Date
- Shipper Reference

For lines with an internal MTR header reference (value in MTR_ID column), an update of the following fields is ignored:

- MTR Number
- MTR Create Date
- Posted Date
- Transfer Date
- MTR Type
- MTR Status
- Reservation Code
- Run Number
- Split Result
- Warehouse

New lines can be inserted. These lines don't have an internal MTR line item reference (value in ITR_ID column). The insert of such a record is rejected if:

- the line cannot be found in the inventory,
- the line is found multiple times in the inventory,
- or not enough onhand quantity is available.

Lines are rejected if no new warehouse, new location, and new status are entered, or if the entered new warehouse, new location, or new status does not exist.

For more information about MTRs, see *Material Transfer* in the *SmartPlant Materials Site User's Guide*, available from the **Printable Guides** page in the software.

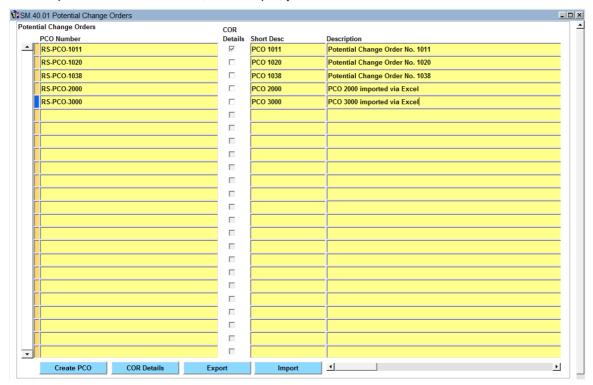
PCO Export/Import

On the **SM.40.01 Potential Change Orders** screen, you can export PCOs (Potential Change Orders) to an Excel workbook and import PCOs from an Excel workbook.

Export Potential Change Orders

Before exporting PCOs, set the project default ZP_TP_PCO to the entire folder path where your Excel template is stored. (Example: C:\SPMAT7\download\PCO-TPL-636.xls)

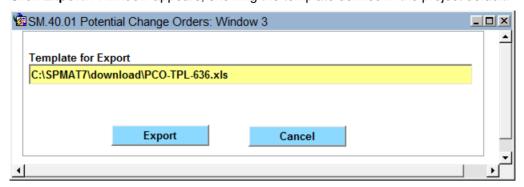
In addition, store the template on the application server in the folder assigned to ZP_TP_PCO. The template can be customized; for example, you can reduce the number of fields.



Enter a query to display the PCOs to be exported. You can export:

- All PCOs
- A filtered list of PCOs
- One PCO

Click **Export**. A window appears, showing the template defined in the project default.



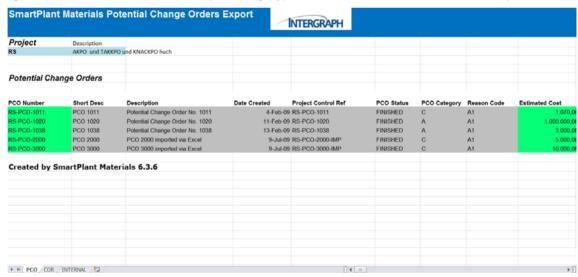
Click **Export** again. The records on SM.40.01 are exported.

When the software finishes the process, Excel opens. You can open or save the file.

Import Potential Change Orders

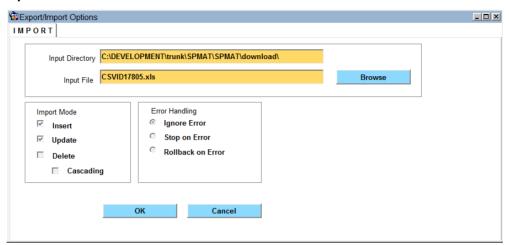
Before you import, query all records on SM.40.01 Potential Change Orders.

The file to be imported must have the same format as the export template. The mandatory (green) fields must be filled. The optional (gray) fields do not have to be filled with any data.



If the import file contains data that is not yet defined in SmartPlant Materials (such as PCO status, SC category, or reason code), the software displays a message, allowing you to specify whether you want to continue or not.

On **SM.40.01 Potential Change Orders**, click **Import**. On the **Upload** window, browse to select an Excel workbook, and then click **Submit Query** to send the request. Click **OK** on the **Import Options** window.



The software imports the data. When the operation is complete, you can check the log file for messages.

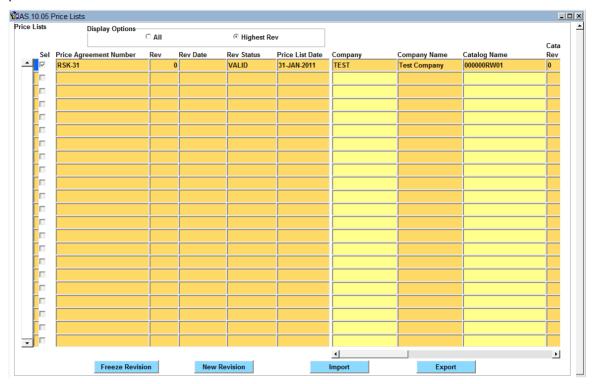
- PCOs are imported with or without assigned CORs.
- PCOs that already exist in SmartPlant Materials are updated with new data.
- PCOs imported without CORs are updated in SmartPlant Materials if they already exist, without deleting or updating the assigned CORs.

For more information about PCOs, see *Potential change orders* in the *SmartPlant Materials Subcontractor Management System (SMS)* documentation, available from the **Printable Guides** page in the software.

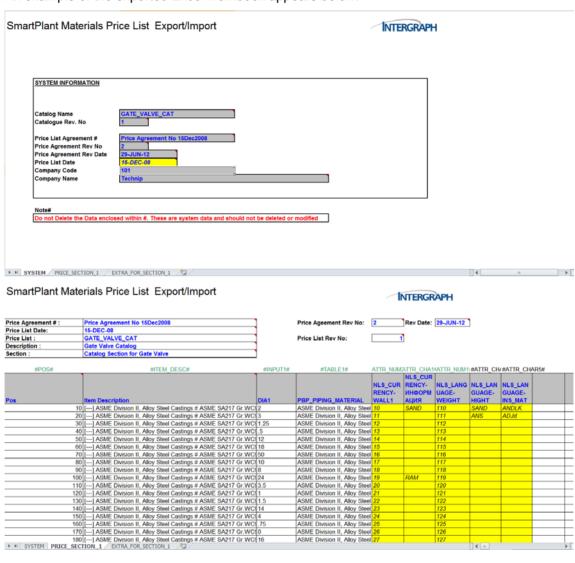
SECTION 18

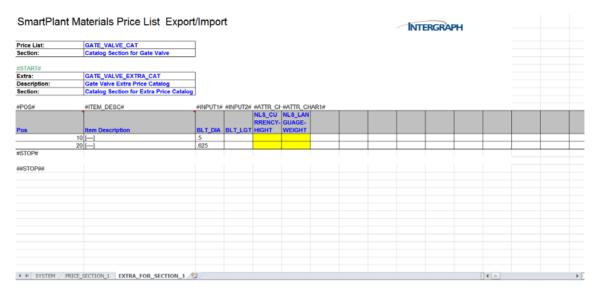
Price List Export/Import

On the **AS.10.05 Price Lists** screen, you can export price lists to an Excel workbook and import price lists from an Excel workbook.



To export a price list, select the **Sel** check box of the price list, and click **Export**. When the export succeeds, you are asked to download the file.





To import a price list into SmartPlant Materials, click Import on AS.10.05. Window 5 opens.



Click **Upload** to open a browser window. Click **Browse**, select the file, and click **Submit Query**. The selected file is uploaded to the application server. Close the browser window.

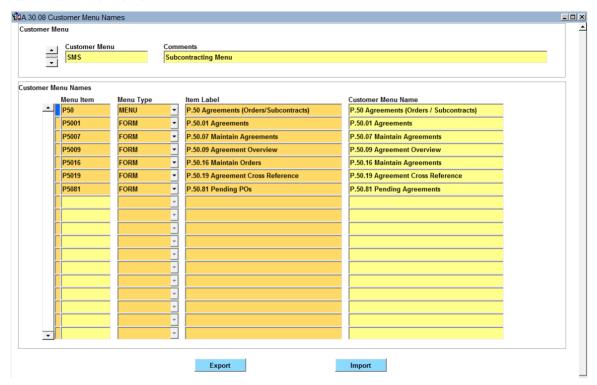
On Window 5, click **Start Import**. The progress of the import appears in the **Online Progress** field. When the import is finished, you can click **View Log** to display the import log file.

For more information about price lists, see the *SmartPlant Materials Price Lists* documentation, available from the **Printable Guides** page in the software.

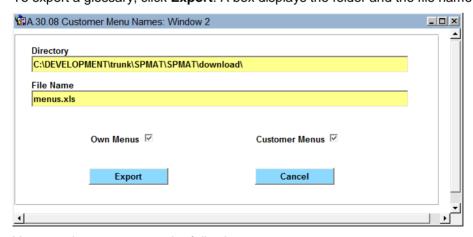
SECTION 19

Customer Menu Export/Import

On the **A.30.08 Customer Menu Names** screen, you can export/import customer menu data to/from an Excel workbook.



To export a glossary, click **Export**. A box displays the folder and the file name for the export.



You can choose to export the following:

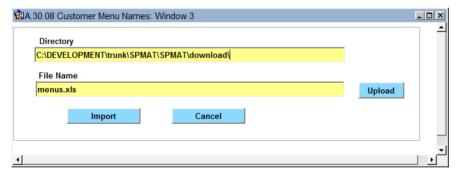
- Own Menus If this check box is selected, all menu items that were created by you on A.30.01 are exported; that is, all menu items for which the Standard indicator is not selected.
- Customer Menus If this check box is selected, all data displayed on A.30.08 is exported to the Excel workbook.

Click **Export** to launch the export job.

The picture below shows an example of an exported customer menu.



To import customer menu items into SmartPlant Materials, click **Import** on A.30.08. Window 3 opens.



Click **Upload** to open a browser window. Click **Browse**, select the file, and click **Submit Query**. The selected file is uploaded to the application server. Close the browser window.

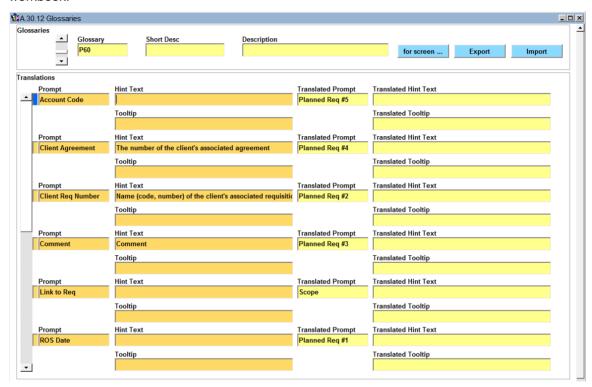
On Window 3, click Import.

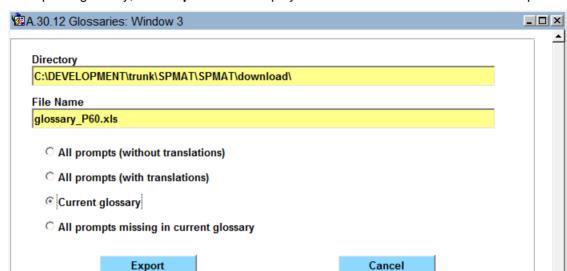
For more information about customer menus, see *Customer Menu Names* in the *SmartPlant Materials Administrator's Guide*, available from the **Printable Guides** page in the software.

SECTION 20

Glossary Export/Import

On the **A.30.12 Glossaries** screen, you can export/import glossaries to/from an Excel workbook.





To export a glossary, click Export. A box displays the folder and the file name for the export.

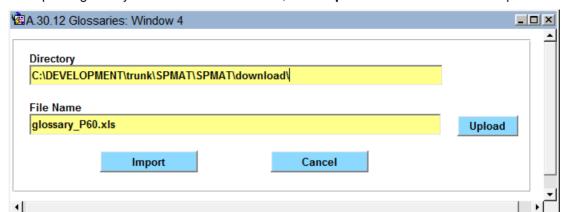
You can choose which data to export. The available options are:

- All prompts (without translation) Exports all prompts available in the database.
- All prompts (without translation) Exports all prompts available in the database with their translations.
- Current glossary Exports the prompts of the selected glossary, including their translations.
- All prompts missing in current glossary Exports all prompts available in the database that are not assigned to the selected glossary.

Click **Export** to launch the export job.

The picture below shows an example of an exported glossary.





To import a glossary into SmartPlant Materials, click Import on A.30.12. Window 4 opens.

Click **Upload** to open a browser window. Click **Browse**, select the file, and click **Submit Query**. The selected file is uploaded to the application server. Close the browser window.

On Window 4, click Import.

For more information about glossaries, see *Glossaries* in the *SmartPlant Materials Administrator's Guide*, available from the **Printable Guides** page in the software.

APPENDIX A

Appendix: Templates

| Export/Import | Screen | Action | Template | | |
|--------------------------------|--------------------------------|-------------------------|---|--|--|
| SPRD | | | | | |
| Branch Chart Export | S.40.05 Branches | Branch Chart button | J. | | |
| Company Ident Export/Import | S.80.C.01 Company Idents | Export or Import button | COMP_IDENT_TEMPLATE.xls | | |
| SP3D Download | SP3D 20.01 Export Jobs | Start Job button | SP3D_EJ_TEMPLATE.xls | | |
| EP&I(BOM) | | | | | |
| BOM Export | B.20.01.44 List Download | Start button | BOM_MultiPositionView_template.xls BOM_SinglePositionView_template.x ls | | |
| BOM Import | B.40.01 BOM Import | Start button | BOM_MultiPositionView_template.xls BOM_SinglePositionView_template.x ls | | |
| EP&I(Req) | | | | | |
| Requisition Import | R.40.03 ORI - Import Jobs | Start button | Requisitions_Template.xls | | |
| MSCM | | | | | |
| Bid Export/Import | P.30.24 Download/L oad Bids | Download/Load button | BID_template63_comp.xls | | |
| | | | BID_template63_enh.xls | | |
| | | | BID_template63_std.xls | | |
| Agreement Import | OPI.10.01 OPI - Import Jobs | Start button | OPI-PO-IMP-705.xls | | |

| Export/Import | Screen | Action | Template | |
|---|---|----------------------|---------------------------------------|--|
| Requisition Planning Export Milestone Label Import for a Requisition Planning | P.60.03 Requisitions Planning | Export/Import button | Milestone.xls | |
| Expediting Export | P.70.71 Expediter Workload | Export button | EP-TPL-704.xls | |
| Expediting Import | P.70.72 Expediting Details | Excel Export button | | |
| Packages Export/Import | P.70.74 Packages | Export/Import button | PCK-701.xls | |
| | | | PCK-IMP-701-NEW.xls | |
| Release Notes | P.70.74 Packages | Export/Import button | PCK-RN-708.xls | |
| | | | PCK-IMP-RN-701-NEW.xls | |
| Traffic Fast Export | P.80.51 Traffic Fast | Export button | MOC-625.xls | |
| Site | | | | |
| MRR Import | C.20.03 Prepare MRR by Direct Receive | Import button | Excel_import_direct_mrr_template.xl s | |
| MTR Export/Import | C.20.15 Material Transfer | Export button | J. | |
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| Others | | | | |
| Price List Export/Import | AS.10.05 Price Lists | Export/Import button | PRICE_LIST_TMPL.xls | |
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