SmartPlant® Instrumentation

External Editor

FLUOR

SmartPlant ©

Implementation Team

FLUOR®

INTERGRAPH

SPI External Editor

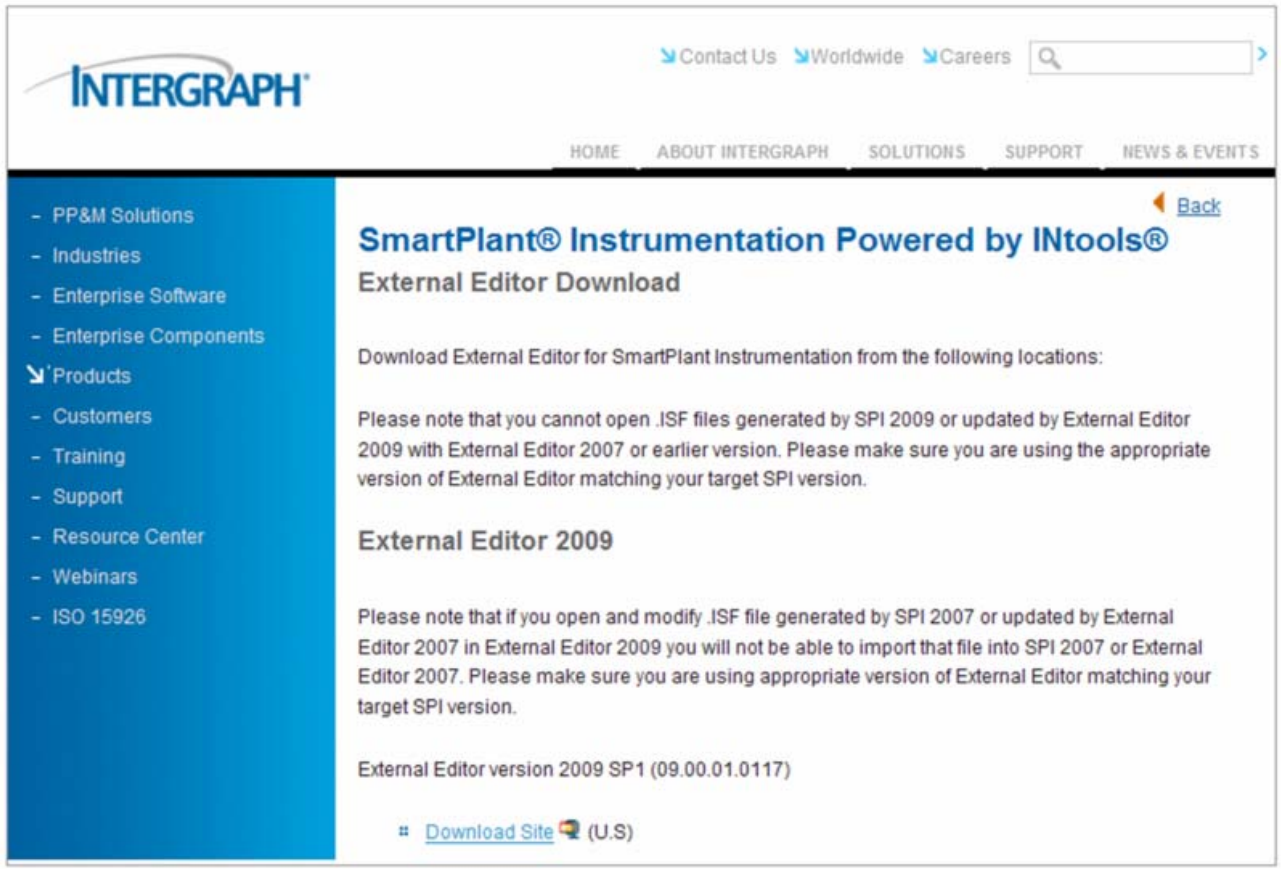
- SmartPlant Instrumentation External Editor enables an external party (Vendor, contractor, engineering company, and so forth) to modify specifications outside of SmartPlant Instrumentation.
- The External Editor allows the user to open specification sheets that have been created in SPI and modify them as needed.
- The modified specification sheets can then be import back into SmartPlant Instrumentation for further processing.
- The External Editor supports .psr and .isf file formats.
- Using the External Editor, users may Edit a Single-Tag Specification or Edit a Multi-Tag Specification
- The External Editor is a freeware program distributed by Intergraph

FLUOR®

SmartPlant® Instrumentation

SPI External Editor Download

- SmartPlant Instrumentation External Editor may be downloaded from:
  http://www.intergraph.com/products/ppm/smartplant/instrumentation/external_editor_download.aspx

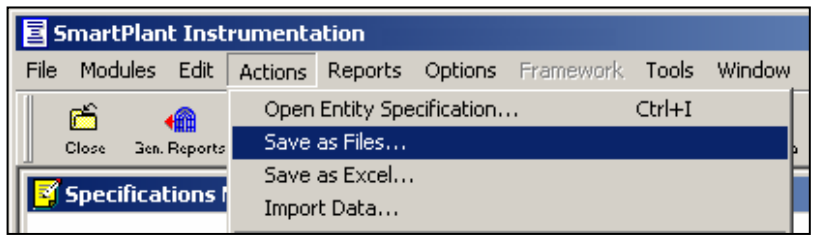


FLUOR®

SmartPlant® Instrumentation

SPI Side of External Editor

- Use of the External Editor starts within SPI
- All Specs that need to be edited in the External Editor need to originate in SPI
- Identify the Tag numbers that you wish to Edit externally and create a Spec sheet for each one
  - You may also create a multi-item spec sheet
- The Tag number, Title block and Revision information cannot be edited with the External editor, so this data is the responsibility of the originator.

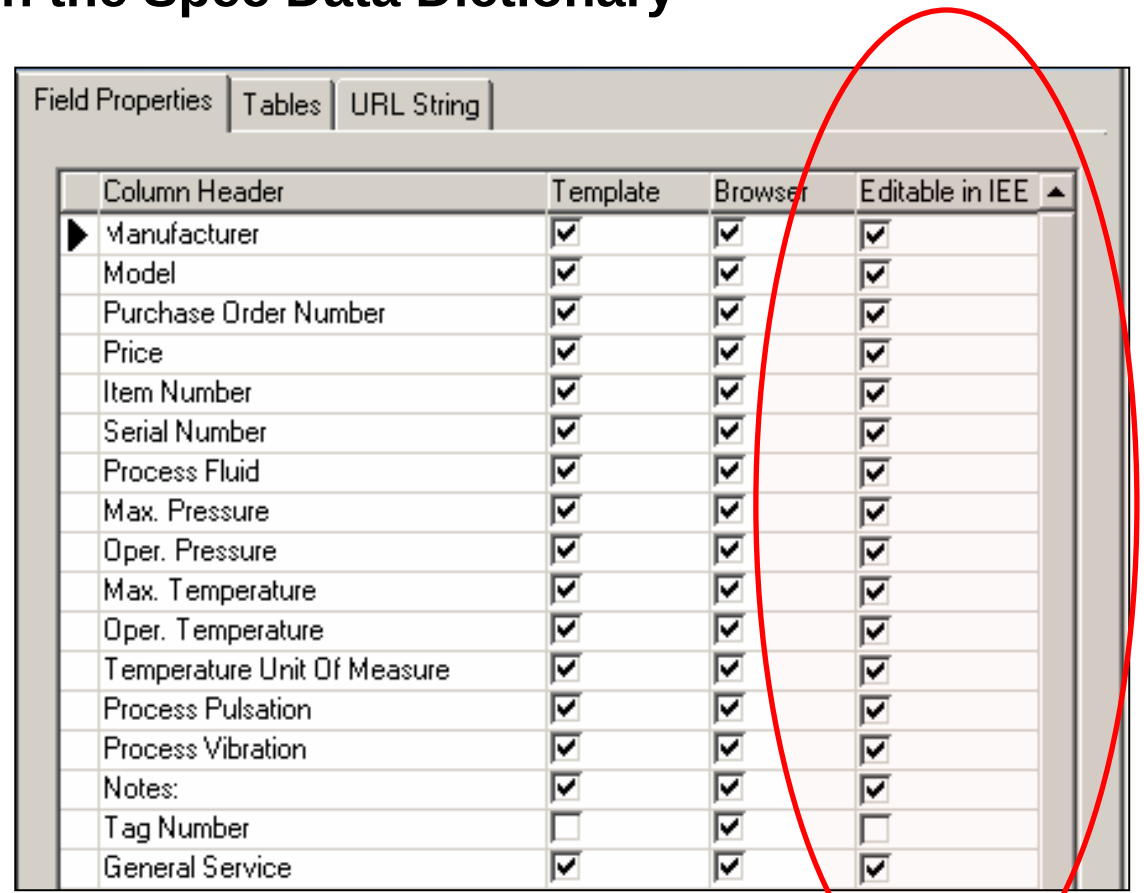


FLUOR®

SmartPlant® Instrumentation

SPI External Editor

- **Be sure to select which fields you wish to edit in the External Editor in the Spec Data Dictionary**

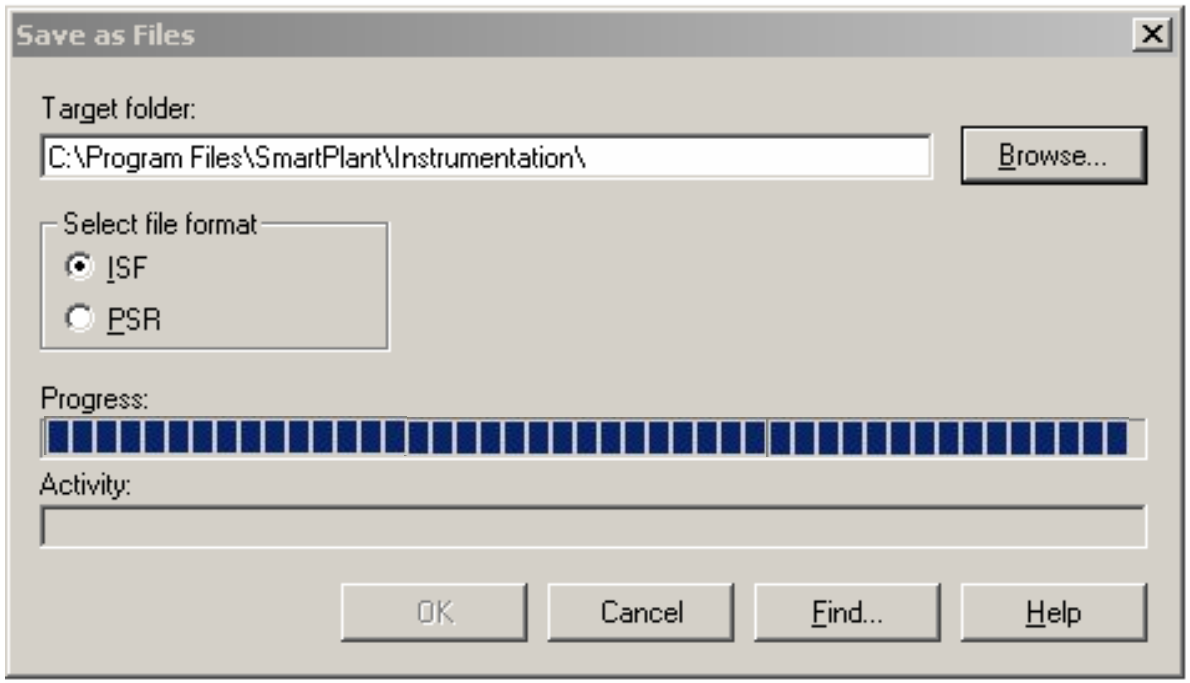


FLUOR®

SmartPlant® Instrumentation

SPI External Editor

- **In the Spec Module select “Actions / Save as Files” then “Find” to select the Specs you wish to export**
- **The ISF or PDF files will be placed in your SPI destination directory.**



FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Edit a Single-Tag Specification**
  1. On the **File** menu, click **Open**.
  2. From the **Files of type** list, do one of the following:
     - **Select Spec files (*.isf).**
     - **Select .psr files.**
  3. Navigate to the SmartPlant Instrumentation specification file that you want to edit, and click **Open**.
  4. Click inside each field that you want to edit and do one of the following, as available:
     - **Type a new entry, or edit the existing data.**
     - **Select values from available lists.**
     - **If necessary, you can add entries to the Manufacturers list and to the Model list, and include these in your specification.**

Using SPI External Editor

- **Edit a Single-Tag Specification**
  5. If you click the unit of measure fields, select values from the **Select Unit of Measure** dialog box that opens.
  6. On the **File** menu, do one of the following:
     - Click **Save**. This option is available only if you loaded an .isf file.
     - Click **Save As**, and in the dialog box that opens, change the existing file name or type a new name, and then click **Save**.
- **Notes**
  - The tag number field is never enabled for editing in External Editor.
  - If you are editing a file with the older .psr suffix, the software automatically converts it to .isf format upon saving.

Using SPI External Editor

- **Edit a Single-Tag Specification**

External Editor

File Edit Window Help

11-PT -310087 - 11-PT -310087.isf - *

Page 1 | Notes

GENERAL	1	Tag Number		11-PT -310087				
	2	Service		SUMP PUMP DISCH				
	3	Location	P&ID			11-J-31003		
	4	Function	Line No			3-61C61		
	5	Mounting						
	6	Area Classification						
	7	Certification						
	8	Enclosure		NEMA 7				
	9	Ambient Temperature		-20 °F to 115 °F				
PROCESS CONDITIONS	10	Fluid	State			Liquid		
	11	Pressure Max.	Oper.	60	psi-g	30	psi-g	
	12	Temperature Max.	Oper.	120	°F	80	°F	
	13	Oper. Spec. Gravity	Oper. Viscosity				cP	
	14	Design Pressure	Design Temperature					
	15	Minimum Design Temperature						
TRANSMITTER	16	Instrument Range Min.	Max.	0	psi	200	psi	
	17	Calibration Range Min.	Max.	0	psi	60	psi	
	18	Elevation	Suppression	N/A		N/A		
	19	Element Type	Power Supply	capsule		12 to 30 VDC		
	20	Element Material		Hastelloy C-276				
	21	Body Material	Body Rating	SUS 316L				
	22	Process Flange Material		SUS 316L				
	23	Wetted O-Ring Material		Teflon PTFE				
	24	Fill Fluid	Output	Silicone Oil		4-20 mA		
	25	Bolts	Housing	n/a		Low Copper Cast Aluminum		
	26	Paint	Tx Failure Mode	Polyethane		Up Scale		
	27	Process Connection	Electrical Connection	1/2" NPT (F)		1/2" NPT (F)		
	28	Flow Rate	Load Resistance					
	29	Allowable Temp.	Max. Static Pressure	-40 to 140	°F	600 psi		

FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Edit a Multi-Tag Specification**
  1. On the **File** menu, click **Open**.
  2. From the **Files of type** list, do one of the following:
     - **Select Spec files (*.isf).**
  3. Navigate to the SmartPlant Instrumentation specification file that you want to edit, and click **Open**.
  4. Edit the numbered pages containing the fields that are identical for all of the tags. Click inside each field that you want to edit and do one of the following, as available:
     - **Type a new entry, or edit the existing data.**
     - **Select values from available lists.**
     - **If necessary, you can add entries to the Manufacturers list and to the Model list, and include these in your specification.**

Using SPI External Editor

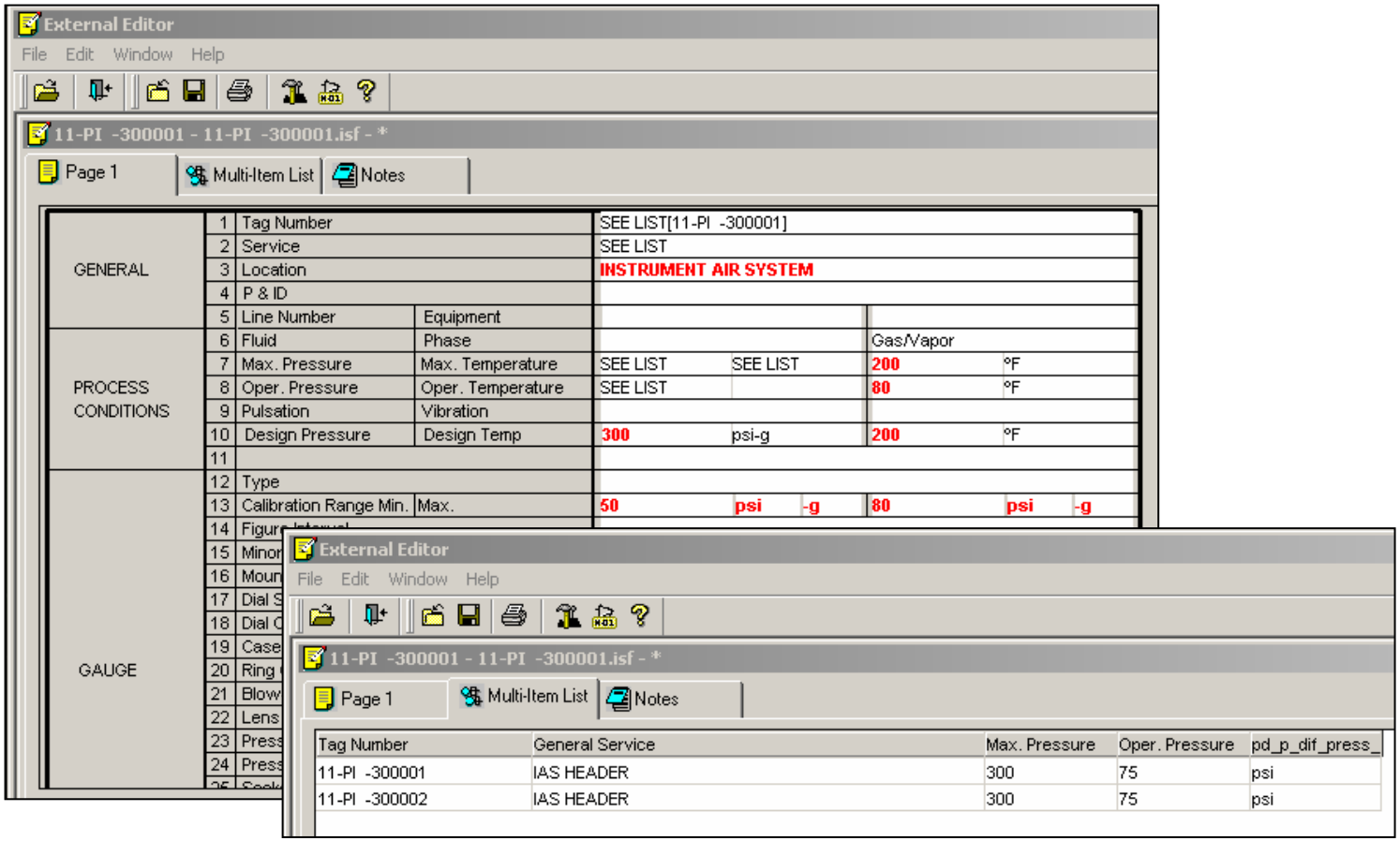
- **Edit a Multi-Item Specification**
  5. If you click the unit of measure fields, select values from the **Select Unit of Measure** dialog box that opens.
  6. To edit the fields that differ from tag to tag, click the **Multi-Item List** tab.
  7. On the **File** menu, do one of the following:
     - Click **Save**. This option is available only if you loaded an .isf file.
     - Click **Save As**, and in the dialog box that opens, change the existing file name or type a new name, and then click **Save**.
- **Notes**
  - The tag number field is never enabled for editing in External Editor.
  - If you are editing a file with the older .psr suffix, the software automatically converts it to .isf format upon saving.

FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Edit a Multi-Tag Specification**



FLUOR®

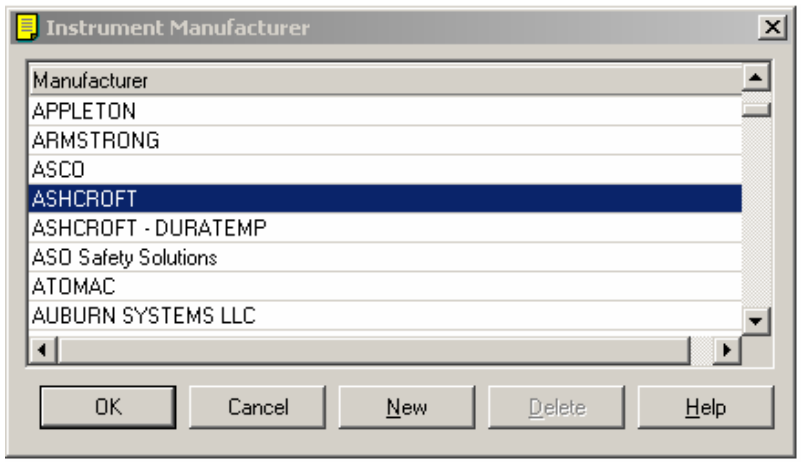
SmartPlant® Instrumentation

Using SPI External Editor

- **Manufacturer and Model Tables**
  - **You can add and edit manufacturers and models to the Instrument Manufacturer and Instrument Model supporting tables.**
  - **These manufacturers and models are available when you edit specifications in External Editor.**
  - **When you open and then save an externally edited specification file in SmartPlant Instrumentation, the new manufacturers and models are added to the relevant supporting tables within SmartPlant Instrumentation.**
  - **To manage manufacturer and model tables, use the following procedures:**
    - Add Manufacturers to the Instrument Manufacturer Table
    - Edit Manufacturers in the Instrument Manufacturer Table
    - Delete Manufacturers in the Instrument Manufacturer Table
    - Add Models to an Instrument Model Table
    - Edit Models in an Instrument Model Table
    - Delete Models from an Instrument Model Table

Using SPI External Editor

- **Add Manufacturers to the Instrument Manufacturer Table**
  1. **Open a specification file in External Editor.**
  2. **On the Edit menu, click Instrument Manufacturer.**
  3. **Click New.**
  4. **Under Manufacturer, type the name of the new manufacturer and click OK.**

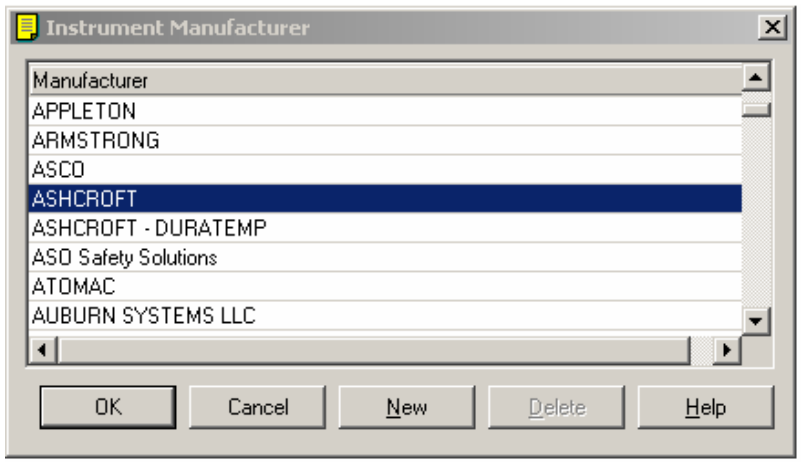


FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Edit Manufacturers in the Instrument Manufacturer Table**
  1. Open a specification file in External Editor.
  2. On the **Edit** menu, click **Instrument Manufacturer**.
  3. Change the name of manufacturers that you want to edit, and click **OK**.

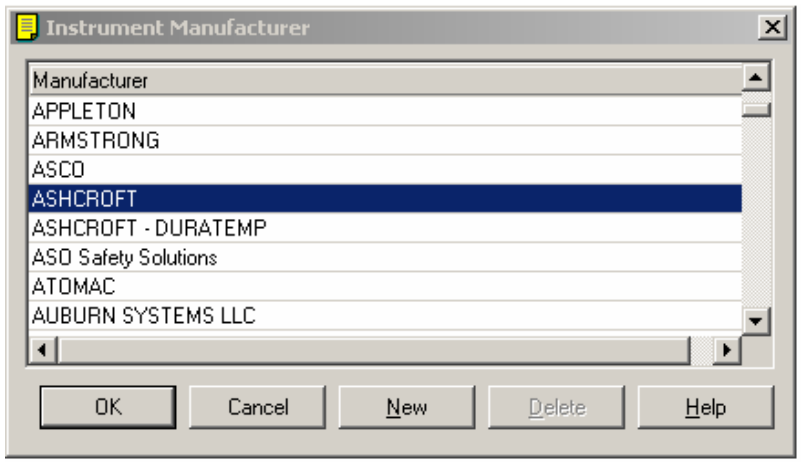


FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Delete Manufacturers in the Instrument Manufacturer Table**
  1. Open a specification file in External Editor.
  2. On the **Edit** menu, click **Instrument Manufacturer**.
  3. In the data window, select the manufacturer that you want to delete, and click **OK**.

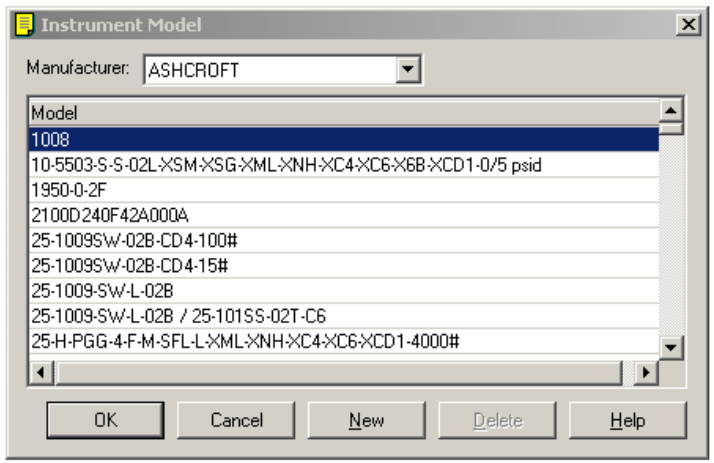


FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Add Models to an Instrument Model Table**
  1. Open a specification file in External Editor.
  2. On the **Edit** menu, click **Instrument Model**.
  3. From the **Manufacturer** list, select the manufacturer of the model that you want to add.
  4. Click **New**.
  5. Under **Model**, type the name of the new model and click **OK**.

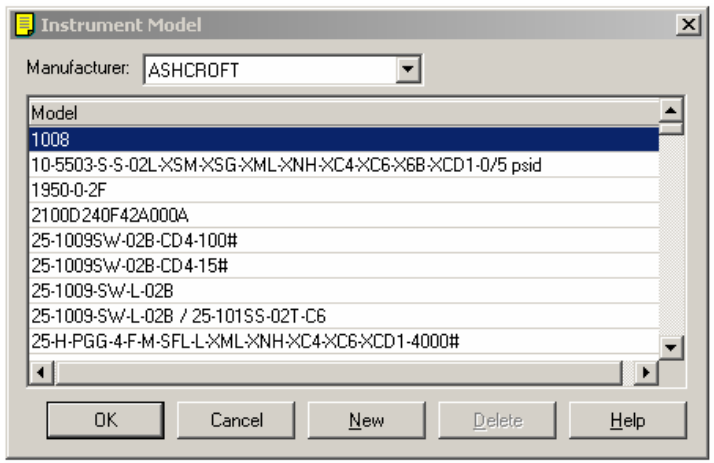


FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Edit Models in an Instrument Model Table**
  1. Open a specification file in External Editor.
  2. On the **Edit** menu, click **Instrument Model**.
  3. From the **Manufacture**r list, select the manufacturer of the models that you want to edit.
  4. Change the name of models that you want to edit, and click **OK**.

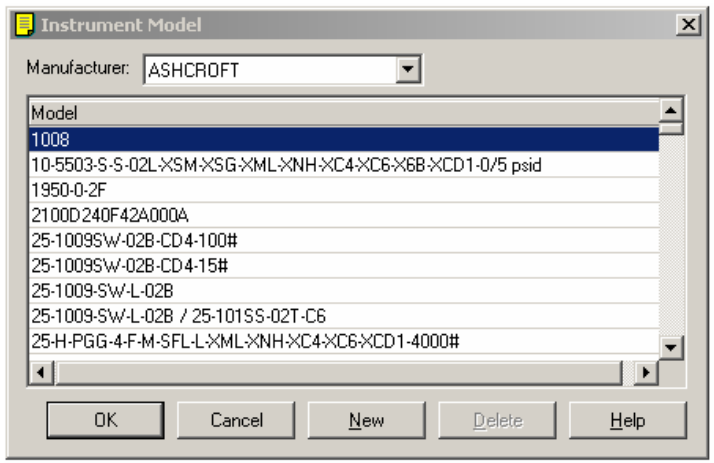


FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Delete Models from an Instrument Model Table**
  1. Open a specification file in External Editor.
  2. On the **Edit** menu, click **Instrument Manufacturer**.
  3. From the **Manufacturer** list, select the manufacturer of the model that you want to delete.
  4. In the data window, select the model that you want to delete, and click **OK**.



FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

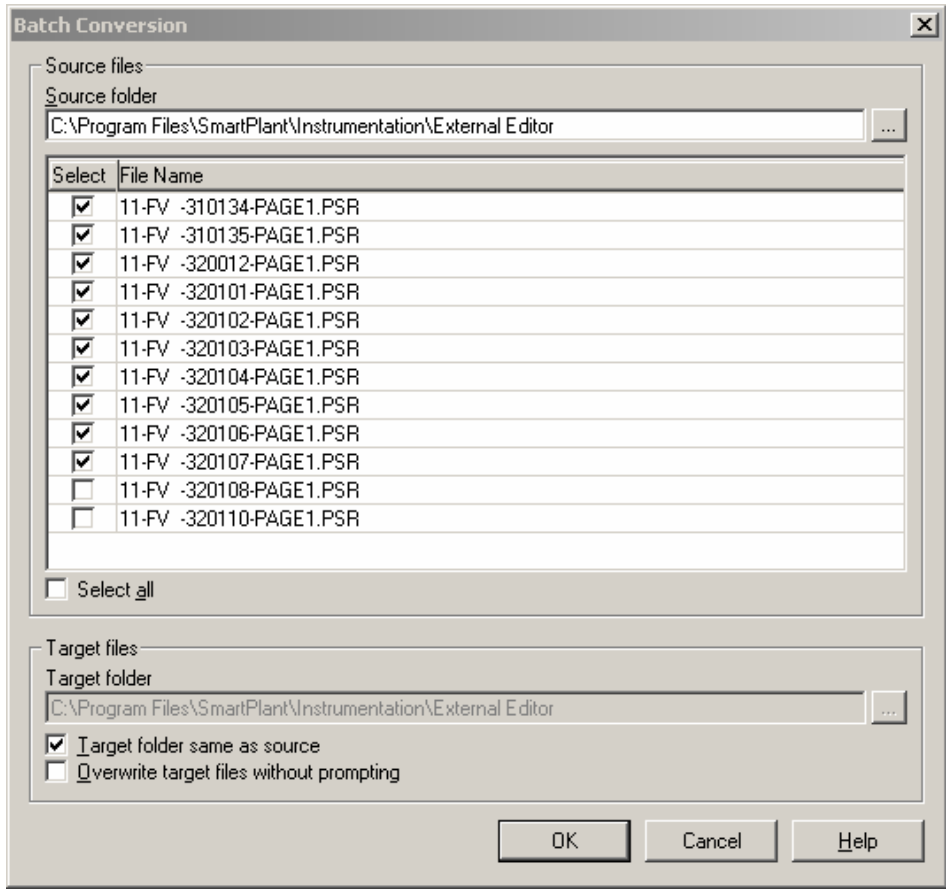
- **Printing from External Editor**
- A number of options are available for printing specification sheets using External Editor.
  - **Print Individual Specification Sheets**
    - You can print specification sheets from External Editor one at a time.
      - On the **File** menu, click **Print**
  - **Print Specification Sheets Without Notes**
    - You can print specification sheets without printing the accompanying note pages.
    - 1. On the **File** menu, click **Preferences**.
    - 2. On the **General** tab, clear **Print ISF note page**.
    - 3. Do one of the following:
      - Print a specification from External Editor.

Using SPI External Editor

- **Convert a Batch of Specification Files PSR to ISF Format**
  - 1. On the **File** menu, click **Batch Conversion**.
  - 2. In the **Source folder** text box, do one of the following:
    - Type the path and name of the folder containing your source files.
    - Click , and navigate to the folder.
  - 3. Do one of the following to set the target folder:
    - Select **Target folder same as source**.
    - Clear **Target folder same as source**, click , and navigate to the folder.
  - 4. Do one of the following to select the files that you want to convert to .isf format:
    - In the data window, under **Select**, select the check box beside each file.
    - To convert all of the displayed files, select the **Select all** check box.

Using SPI External Editor

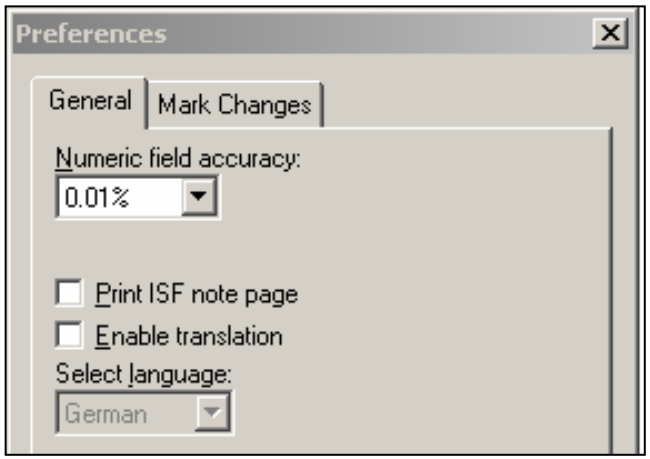
- **Convert a Batch of Specification Files PSR to ISF Format**



FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor



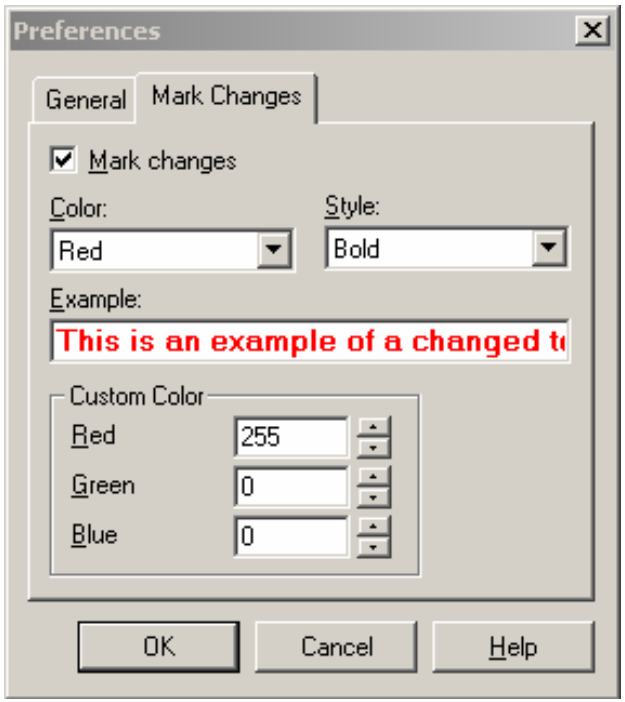
- **Preferences Dialog Box**
  - **General Tab**
    - **Numeric field accuracy** - Select a percentage value from this list to determine the level of accuracy for display of specification sheets.
    - **Print ISF note page** - Select to include note pages in specifications that you print from within External Editor - Clear to exclude note pages from the printing.
    - **Enable translation** - Select to allow an interface other than English. **Select language** - available if you selected **Enable translation** to Select an interface language.

FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **Preferences Dialog Box**
  - **Mark Changes Tab**



- **Mark changes** — Select to mark changes in the current specification sheet.
- **Color** — Marks changes on the screen, but not in printed reports. Select a predefined color or **Custom**.
- **Style** — To display changes on the screen and in the printout, select **Regular**, **Italic**, **Bold**, or **Bold Italic** as the font style .
- **Example** — Displays a sample sentence in the font style and color that you select.
- **Custom color** — If in the Color box you selected **Custom**, these three spin boxes allow you to enter a value between 0 and 255 for each of the primary colors. If you selected a predefined

FLUOR®

SmartPlant® Instrumentation

Using SPI External Editor

- **External Editor Issues**
  - The vendor spec sheets must be initially created by the GEC for export to the "External Editor Folder" and then to the vendor.
  - The External Editor software and user interface is not very user friendly requiring vendors to spend a lot of time populating the data onto each spec form.
  - The export and import of over Citrix is very time consuming usually requiring the manual delivery of files using CD or FTP transfer.
  - Revision control is handled manually by modifying the file names of the .isf files.
  - The use of the External Editor adds cost to the vendor that may not be included in their estimate or bid.
  - Printing of Spec Sheets is one at a time from within External Editor

Using SPI External Editor

- **External Editor Aids**
  - When first distributing the "External Editor" software to a vendor, include a "readme.txt" file with installation and user instructions.
  - Give the vendor specific times as to when the files are to be returned to meet the project schedule.
  - Since vendor spec sheets can be repetitive, allow the vendor to populate one spec form and list the Tags that it applies to in notes. This will facilitate the data loading and import into SmartPlant Instrumentation.
  - Carefully select the fields in the Spec Module Data Dictionary (Spec DD) that will import into the SmartPlant Instrumentation database.
  - Return a copy of the completed SmartPlant Instrumentation spec forms to the vendor for approval before final issue.

SPI Side of External Editor

- Use of the External Editor ends within SPI
- Specs that are edited in the External Editor need to imported back into SPI
- Specs may be imported to different Tag Numbers as long as the Spec Form is the same
- The Tag number, Title block and Revision information cannot be edited with the External editor, so this data must be edited in SPI
- Use caution when importing data and check the results carefully

SPI External Editor

- Questions?

FLUOR®

By: John Dressel - FLUOR