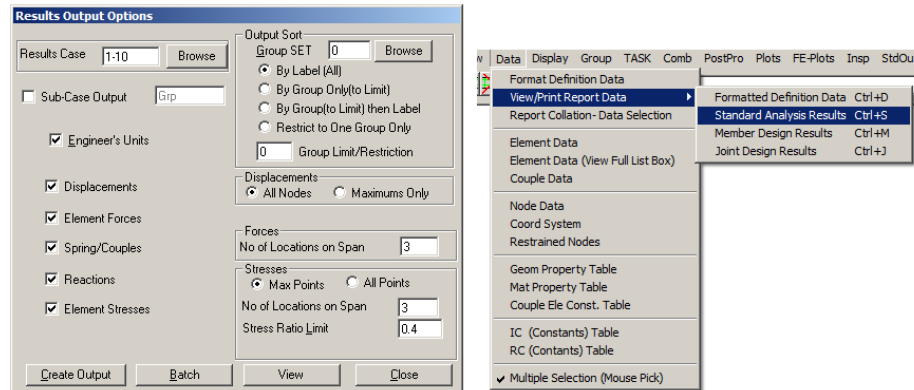
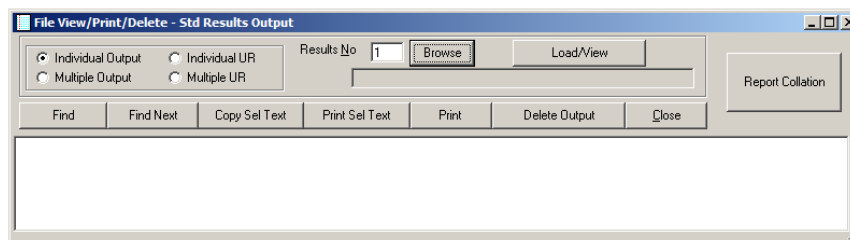


REPORT COLLATION

When working with a model a number of formatted output files will be created. These output files include both definition data and results data. The different types of output files created may be accessed using the **View** button on the form used to create them or from the **Data** menu command (accessed from all TASKS).



The above commands will make the File Viewer visible. The Option types and Browse button are used to select the file to be viewed.



Only printed data files (**Print** button) have headers and are paginated. The purpose of the **Copy Sel Text** button is to copy the continuous data for additional user processing e.g. in Excel. It should not be used to paste into Word for report purposed because the data will lack traceability i.e no headers etc. Similarly the **Print Sel Text** does not produce report quality output. See [Section 7](#) if there is a requirement to include data in a WORD (or similar) document

REPORT COLLATION

It is nearly always a requirement to compile these separate files into a structured report. A collation utility for doing this is provided in FS2000.

Effectively, what the collator does is to create an ordered print list. The page numbering between each of the formatted files in the list is linked to provide an indexed output. The list can may then be directly submitted to a printer for direct printing or printed to file. The use of a PDF writer (CutePDF is an excellent freeware product) provides a very convenient method of handling large output.

To enable output to be used for different purposes more than one print list may be created.

An efficient way to write analysis reports to use the Report Collator to produce Appendices that can be included with the document analysis report e.g. Word document. The object is to embed as little model data as possible into the document, and keep the model data in separate Appendices that can be easily updated and appended to the document report.

Help information on this utility can be found under 'Collate' in the Help system Search.

The following tutorial will demonstrate the basic use of the Report Collator utility.

Collating Model Data - Tutorial

OPEN THE DEMONSTRATION MODEL

You will first open a model from Archive format. This model is called **PropCant**. This model was the subject of the second basic tutorial.

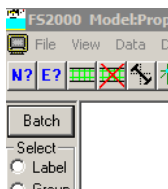
From the **File** menu, click **Open**. Change the *File of Type* from Std Models to Archive Models. Now select '**PropCant.mod**' from the FS2000\Examples directory.

The Model Recovery form will prompt for a recipient directory. Select a directory or use the default.

Click the **Recover** button to open the model.

The model is a propped cantilever with 3 load cases and a load case combination that contains all 3 load cases. The model is set up to create 4 formatted result cases. To create the formatted data the model will be run in batch mode.

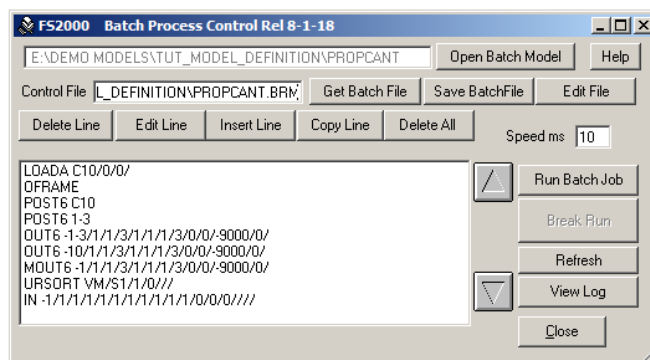
1. RUN THE MODEL IN BATCH MODE



Click the Batch button (upper LHS).

This will start the Batch Process Control application. When the program starts it will either load the current batch file i.e. the last one used or in the case of a newly opened model, the <modelName>.BRM file. In this example the BRM file will be opened.

When loaded the following Batch form will become visible.



Click the **Run Batch Job** button.

This will start the analysis process.

When it stops Click the **View Log**. This will show if and what errors occurred during the analysis.

If the batch ran successfully all the formatted results will now exist. The model definition data will also have been formatted.

Close the log viewer and Close the Batch.

2. THE REPORT COLLATOR

From the **Data** menu click the **Report Collation - Data Selection** command.

The Collate Report - Output Selection form will become visible.

Collate Report - Output Selection

Results Type:
☒ Standard Analysis
☐ Member Design
☐ Joint Design

Standard Analysis:
☒ Individual Output
☐ Individual UR
☐ Multiple Output
☐ Multiple UR

Section Description: Appendix

Buttons: Add All, Add Def'n Data, All Results to List, View Selected Data, Print Selected Data, Remove from List, Sub, Clear List

MTM	Formatted Definition Data	Def'n Data	
T1	All Result Cases	Std Multi UR	
M1	All Result Cases	Std Multi Results	
O1	L1 UDL 8kN/m & Self Weight	Std Results	
O2	L2 -10 kN Vertical at mid span	Std Results	Sub
O3	L3 -50kN Horizontal at tip	Std Results	Sub
O10	All Load Cases	Std Results	Sub

Existing Results Files: ☐ Sub-Section

Buttons: Add to Print List, Add Blank Sect, Add Comment

1	L1	UDL 8kN/m & Self Weight
2	L2	-10 kN Vertical at mid span
3	L3	-50kN Horizontal at tip
10		All Load Cases

Buttons: Secondary Lists (Second), Save List, Open List, Create DC3 Contents List, Print DC3 Contents List, File Print, Print, Close

If you have not already seen the Help on this topic press the F1 key now. Not all the features of this utility will be demonstrated, only the basic operation.

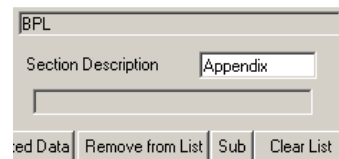
The form has two lists. The upper is the actual print lists and the lower the existing formatted result files. The contents lower files list will depend up on the Results Type options currently active and will be re-populated when the options are changed.

The print list shows the list when it was last saved. You will now delete this list and re-create it. Click the **Clear List** button. The list will now clear.

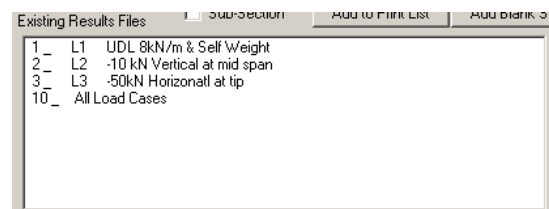
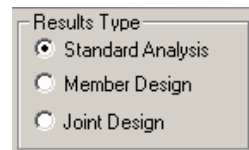
Note that a previously saved list may include data files that do not currently exist. A warning will be given identifying the missing section when printing a list with a missing file..

3. VIEWING AND SELECTING DATA FILES

The first thing to do when starting a print list is set the **Section Description**. In this example, the default 'Appendix' will be used. Note that the description can only be changed when the print list is empty.



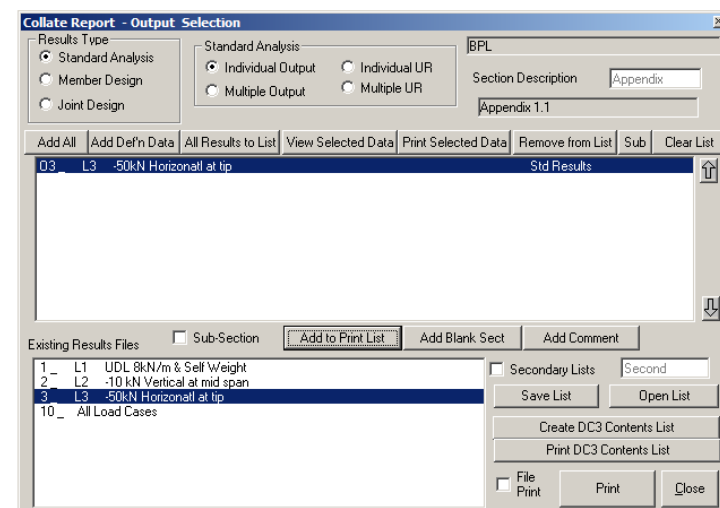
In the **Standard Analysis** frame the **Individual Output** can be seen to be selected.



The Results corresponding to this category are listed in the Existing Results File list box. In this model the formatted results for 4 cases have been created.

The results corresponding to the other categories can also be listed. Select **Multiple Output** to see the results under this category. For this category only 1 formatted output file exists.

To add a file to the **Print List** simply highlight it in the **Existing Results File** list and click the **Add to Print List** button.

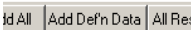


To remove a file from the Print List simply highlight it and click the **Remove from List** button.

4. MANUALLY COLLATING DATA FILES

Click the **Clear** button. This print list should now be empty.

In this report list the formatted definition is going to be added first (section 1) to become Appendix 1.

Click the **Add Def'n Data**  button. The definition data will be added to the print list. This will become Appendix 1.

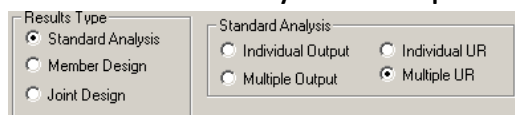
Each time a formatted file is added to the print list it is assigned to a new section number. If it is inserted at a mid-point in the list, all existing entries below that point in the list will be incremented. If the Sub-Section option is active the new entry will not be assigned a new section number, it will be assigned as a sub section of the preceding section.

In this example the results will be laid out in the following manner:

- Multiple UR Summaries Section 2
- Multiple Results Section 3
- Individual Results Cases Section 4

There are 4 Individual Result cases and these will form 4 sub-sections in Section 4.

Select the **Standard Analysis** and **Multiple UR** options.



Results Type

☒ Standard Analysis

☐ Member Design

☐ Joint Design

Standard Analysis

☐ Individual Output

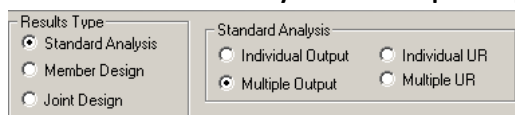
☐ Individual UR

☐ Multiple Output

☒ Multiple UR

Only one Multiple UR file was created so there will only be one visible in the lower list box. Highlight this file and click the **Add to Print List** Button. This file will now be added to the print list and become Section 2.

Select the **Standard Analysis** and **Multiple Output** options.



Results Type

☒ Standard Analysis

☐ Member Design

☐ Joint Design

Standard Analysis

☐ Individual Output

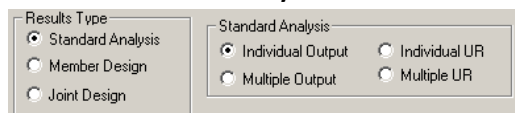
☐ Individual UR

☒ Multiple Output

☐ Multiple UR

Only one Multiple Output file was created so there will only be one visible in the lower list box. Highlight this file and click the **Add to Print List** Button. This file will now be added to the print list and become Section 3.

Select the **Standard Analysis** and **Individual Output** options.



Results Type

☒ Standard Analysis

☐ Member Design

☐ Joint Design

Standard Analysis

☒ Individual Output

☐ Individual UR

☐ Multiple Output

☐ Multiple UR


Four Individual Output files were created so there will be four visible in the lower list box. Highlight the top file and click the **Add to Print List** Button. This file will now be added to the print list and become Section 4. Note the Shift and Ctrl keys can be used to make multiple selections from the file list..



Make the **Sub-Section** option active. Now add results cases 2, 3 and 10 to the print list. They should now be added as sub-section to Section 4.

The appearance of the collator form should now be as below.

When files are highlighted in the print box the section description will be shown.

If it looks like the above, click the **Save List** button to save the list. If **Print List** is saved it will always be available with the model. This list is always archived with the model.

The  button can be used to assign to adjacent sections or de-assign from their current section.

The  and  buttons can be used to move files up and down the list. These enable existing lists to be easily modified at any time.

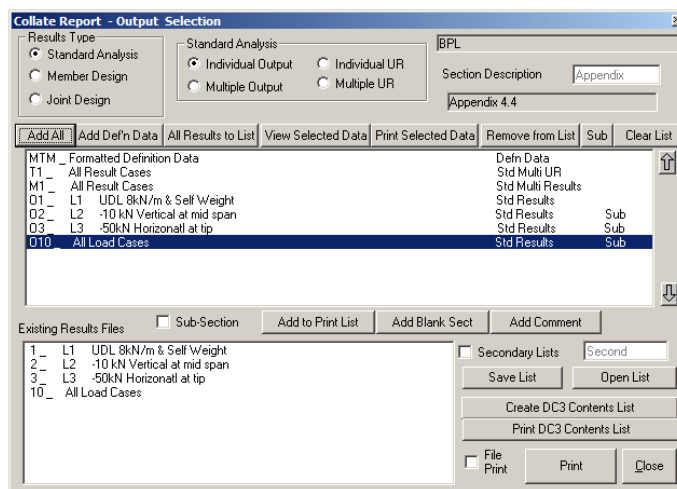
5. AUTOMATIC COLLATION OF DATA FILES

It is often more convenient to let the program scan the model to identify all existing data files, and then let it create the print list. The user can then edit the list as required.

If the Collate Report form is still visible click the **Close** button. From the **Data** menu click the **Report Collation - Data Selection** command and re-open the form. The form should now load with the previously saved print list.

Now click the **Clear List** button.

Now click the **Add All** button. All existing formatted data will now be added to the print list to produce the following.



When data is added to the list automatically the following hierarchy is broadly followed.

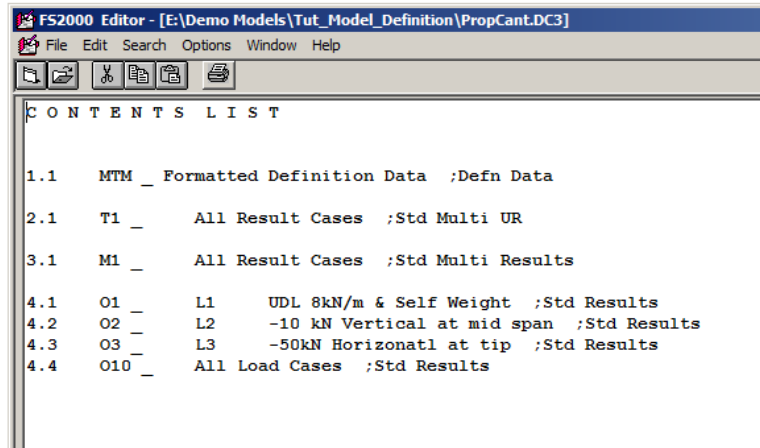
- Definition Data Section 1
- Multiple UR Summaries Section 2
- Multiple Standard Results Section 3
- Individual Standard Results Section 4
- Member Design Section 5
- Joint Design Section 6

The **Add Blank Sect** button may be used to add extra sections. These can be used to include data i.e. Plots or other relevant model source data. Because each section is numbered independently, inserted section can contain any number of pages.

It should be realised by now that the **Add All** button is an excellent way to see immediately what output has been created and currently exists.

6. CONTENTS LIST

The **Create DC3 Contents List** button can be used to create a text file called <modelname>.DC3. This file is the print list presented in the form of a contents list. It is a text file and can be easily edited to form a more descriptive contents list.



If the DC3 file for this example is loaded into FS-Edit (**Run Editor** command from the File menu) the above will appear in the editor.

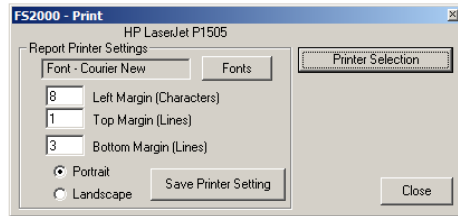
The contents list is similar to the print list but it also shows the section numbers and identifies the file type e.g. Std Multiple Results.

The column after the section number is the file extension of the file e.g. MTM is the formatted definition data file.

7. PRINTING MODEL DATA

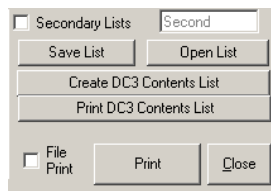
If the **Print** button is clicked the full contents of the print list will be submitted directly to current printer using the previously saved printer setting.

The **Printer Setting** command from the **File** menu makes the setting form visible.



Courier New is the probably the best of the most common fonts. When using this font the Left Margin can be set to a max of 14. If available, the best fonts to use are Consolus or Line Printer. These fonts are designed for technical use and are very compact, allowing the Left Margin to be set to 20.

USING THE FILE PRINT OPTION



When then File Print option is active the data will be printed to text files.

A sub-folder will be created below the model folder and each section in the print list will be printed to a separate text file.

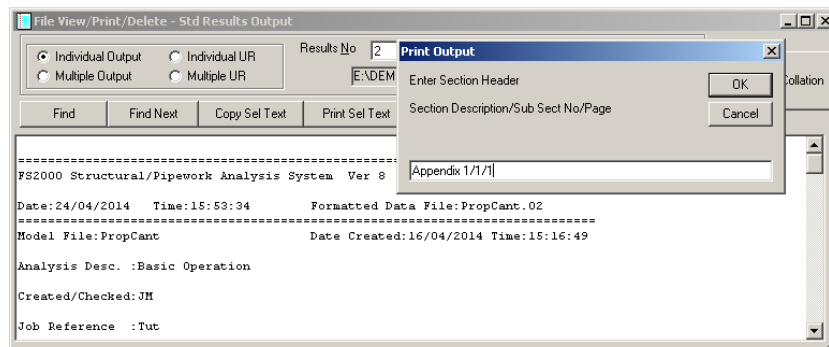
PRINTING TO PDF

If a PDF writer is installed, a more convenient method of writing to a file is to write to a PDF file. Freeware PDF writers such as a CutePDF are readily available.

PRINTING AN INDIVIDUAL FILE

The number system adopted is that every section or sub-section has a starting page i.e. Page 1. A typical reference page number would be **Appendix 4.3.1**. If a single file is selected to be printed from the report collator, the reference page number will be entered by the program. This allows previously printed list reports to be updated on a 'section by section' basis.

If the file is selected from the file viewer an opportunity to enter the page reference will also be given.



8. EMBEDDING OUTPUT INTO WORD (OR SIMILAR)

If there is a requirement to embed FS2000 files into Word documents the following procedure is recommended because it will maintain pagination and headers etc. as per the normal FS2000 print setup.

The basic approach is to use the **Print to File** option in the Report Collator to create a FS2000 paginated text file and then paste the file into or open the file in WORD.

If the whole of the print list is to be added then it is more convenient to have only one section and then only one file has to be loaded into WORD. To do this, simply make all files a sub section of the first in the list.

Now do the following.

- Print the list with the **File Print** option active. The paginated file or files created will now be in a sub folder call **<Modelname> TEXT**.
- Open the file(s) with FS-Edit or directly in WORD.
- Remove/mimimise the headers and footers.
- Change the font type and size to that used in FS2000 output.
- Adjust the RH margin so that the original lines are not broken.

The output should now have the same appear as would be obtained if it was printed directly from FS2000 to the printer.