

## FlexiSurv V1.10

### Release Notes

12<sup>th</sup> May 2010

#### Highlights

1. *FlexiSurv* is **Surpac Version 6.1.4** compatible
2. Flexi Offsets
  - a. new option to specify maximum offset from primary wall
  - b. new option to set maximum offset distance left and right of centreline.
  - c. new option to set the laser segment direction
3. Flexi Memo
  - a. New functions to insert scale bars and perform logic tests
4. Other enhancements, defect fixes, and spelling corrections

#### Recommendations

The following versions of *Surpac* have been tested with *FlexiSurv* and appear to be stable;

- Surpac Vision V5.0-M
- Surpac 6.0.3
- Surpac 6.1.4

#### Notes

This is a maintenance release to *FlexiSurv* V1.09 to solve issues with laser offset generation when no intersections can be found on the primary and/or secondary walls.

The version contains a few other minor bug fixes.



## 1. Flexi Offsets (Laser Offsets)

The flexi offsets program has been improved to better handle wall to wall offsets where no intersection can be found on the primary and/or secondary wall. It is now possible to select from three options to trim the offset lines

1. Distance from the primary wall

With this option you specify a maximum distance for the offset line. This distance is measured from the first wall you select.

2. Distance left and right of the centreline

With this option you specify maximum distances left and right of the centreline. Note that you will need to select the centreline when using this method

3. Distance left and right of the laser

With this option you specify maximum distances left and right of the laser.

A screenshot of the "FlexiSurv V1.10 (Generate Offsets)" dialog box. The window has a blue title bar and a standard Windows XP-style interface. Inside, there's a tabbed interface with "Main", "Offset Format", "String Format", "Note File Format", and "Note Preview". The "Main" tab is active. It contains several input fields and checkboxes. "Offset string No" is set to 8000. "Offset generation" has two radio buttons: "multiple offsets along laser" (selected) and "start and stop offset only". "Offset Spacing/Range" is set to 2, with a descriptive text below it: "Enter a single value as the offset spacing or a valid range. Ie '5,20,5;22,2,30' would give chainages at 5, 10, 15, 20, 22, 24, 26, 28, 30". "Force end offset" has a checkbox "create an offset at the end of laser" which is unchecked, with a note below: "Select to create the last offset at the end of laser regardless of specified chainage or range". A yellow-shaded section contains "Restrict offset length by" with a dropdown menu set to "distance from primary wall", and "Maximum distance" set to 5, with a note "from primary wall (ie drive width)". "Chamfer detection" is checked with "yes". "Create survey memo" has a checkbox "run survey memo script below on completion" which is unchecked. "Survey memo script" is set to "MS\_FLEXISURV:flexi\_Memo.tbc". At the bottom are "Apply" and "Cancel" buttons.



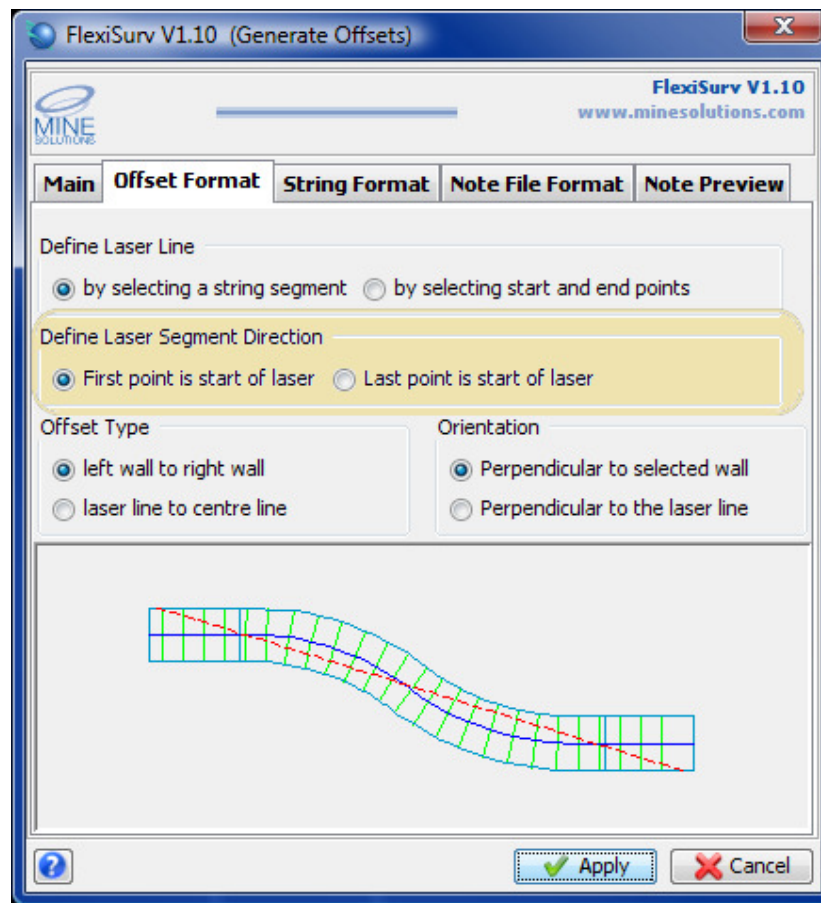
A new format option has also been included to allow the direction of your offset string segment to be set. You can elect to

1. First point is the start of the laser

This is the way all previous versions of FlexiOffsets worked. The first point on the selected laser string segment is assumed to be the start of the laser with the last point being the end of the laser

2. First point is the end of laser

The first point on the laser string segment is the end of the laser with the start of laser being the last point of the string segment





## FlexiSurv V1.09

### Release Notes

27<sup>th</sup> October 2009

#### Highlights

5. *FlexiSurv* is **Surpac Version 6.1.3** compatible
6. **NEW** general File Processor application
7. Flexi DVA (Over-break/Under-break calculations)
  - a. now allows chainages
  - b. slices can now be horizontal or relative to the centreline
  - c. new batch processing mode
8. Flexi Level Solids optionally handles spot heights as break lines
9. Flexi Offsets
  - a. permits maximum offset distance left and right of laser
  - b. new chamfer test on drive walls
10. Flexi Memo
  - a. directional arrows can now be drawn on overview map to show orientation of rotated plots
  - b. Text is more correctly centred for non fixed spaced fonts
  - c. Text can now be plotted at any angle in the title block
11. Several enhancements and defect fixes

#### Recommendations

The following versions of *Surpac* have been tested with *FlexiSurv* and appear to be stable;

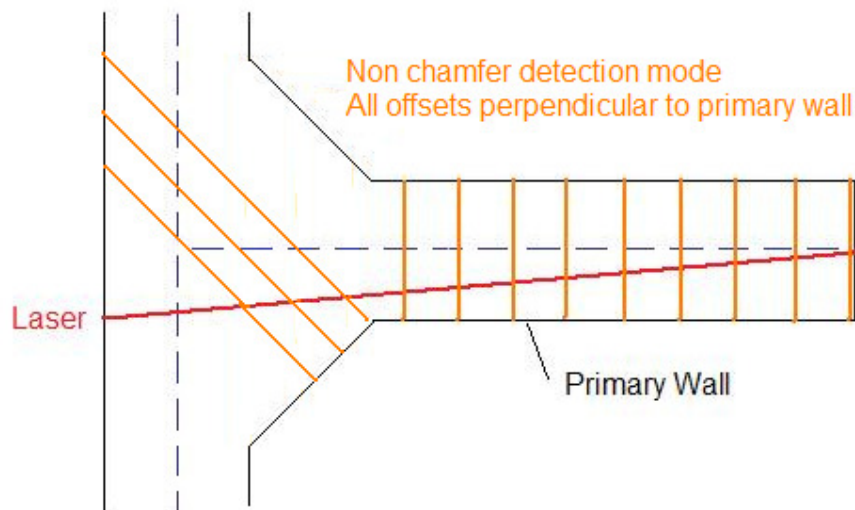
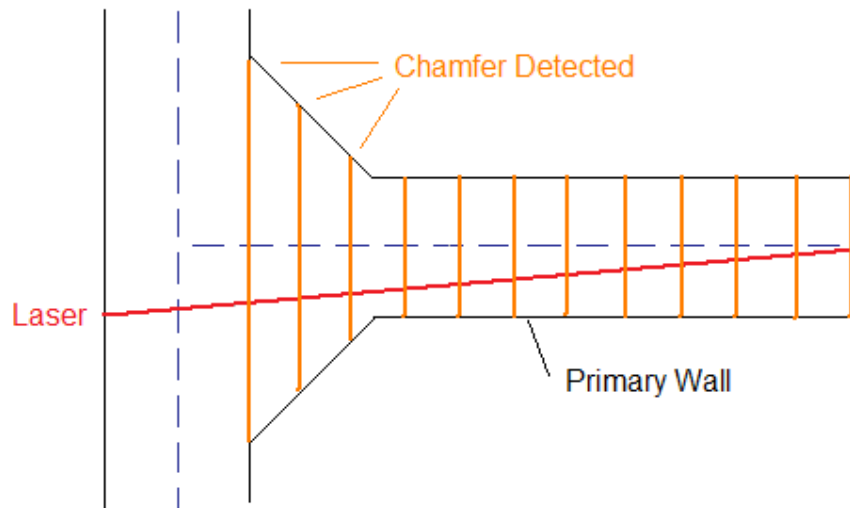
- Surpac Vision V5.0-M
- Surpac 6.0.3
- Surpac 6.1.3

#### FlexiSurv V2.01

FlexiSurv V2.01 is scheduled for release February 2010. This version will contain the long awaited CMS Filter and CMS Stitching functions. A lot of development has been carried out on these functions already and they are currently being tested on real data sets. Version 2.01 is a major release and will require new license tokens to be issued.

## 1. Flexi Offsets (Laser Offsets)

The flexi offsets program has been revamped to handle chamfers in drive designs. A new option (set to on by default) will turn the programs *chamfer detection* mode on or off.





It is now possible to specify a maximum offset distance left and right of the laser. This prevents wayward offsets from being generated along access drives and cut outs, etc.

A screenshot of the 'FlexiSurv V1.09 (Generate Offsets)' dialog box. The window has a blue title bar and a standard Windows XP-style interface. It contains several tabs: 'Main', 'Offset Format', 'String Format', 'Note File Format', and 'Note Preview'. The 'Main' tab is active. Inside the dialog, there are input fields for 'Offset string No' (set to 8000) and 'Offset Spacing/Range' (set to 2). There are radio buttons for 'multiple offsets along laser' (selected) and 'start and stop offset only'. A checkbox for 'Force end offset' is present with a descriptive note. A highlighted pink box contains two input fields for 'Maximum distance' (both set to 7) labeled 'left of laser' and 'right of laser'. Below this is a checked checkbox for 'Chamfer detection' set to 'yes'. At the bottom, there is a checkbox for 'Create survey memo' and a dropdown menu for 'Survey memo script' set to 'MS\_FLEXISURV:flexi\_Memo.tbc'. The dialog ends with 'Apply' and 'Cancel' buttons.

FlexiSurv V1.09 (Generate Offsets)

FlexiSurv V1.09  
www.minesolutions.com

**Main** Offset Format String Format Note File Format Note Preview

Offset string No: 8000

Offset generation: ☒ multiple offsets along laser  
☐ start and stop offset only

Offset Spacing/Range: 2

*Enter a single value as the offset spacing or a valid range. Ie '5,20,5;22,2,30' would give chainages at 5, 10, 15, 20, 22, 24, 26, 28, 30*

Force end offset: ☐ create an offset at the end of laser  
*Select to create the last offset at the end of laser regardless of specified chainage or range*

Maximum distance: 7 left of laser 7 right of laser

Chamfer detection: ☒ yes

Create survey memo: ☐ run survey memo script below on completion

Survey memo script: MS\_FLEXISURV:flexi\_Memo.tbc

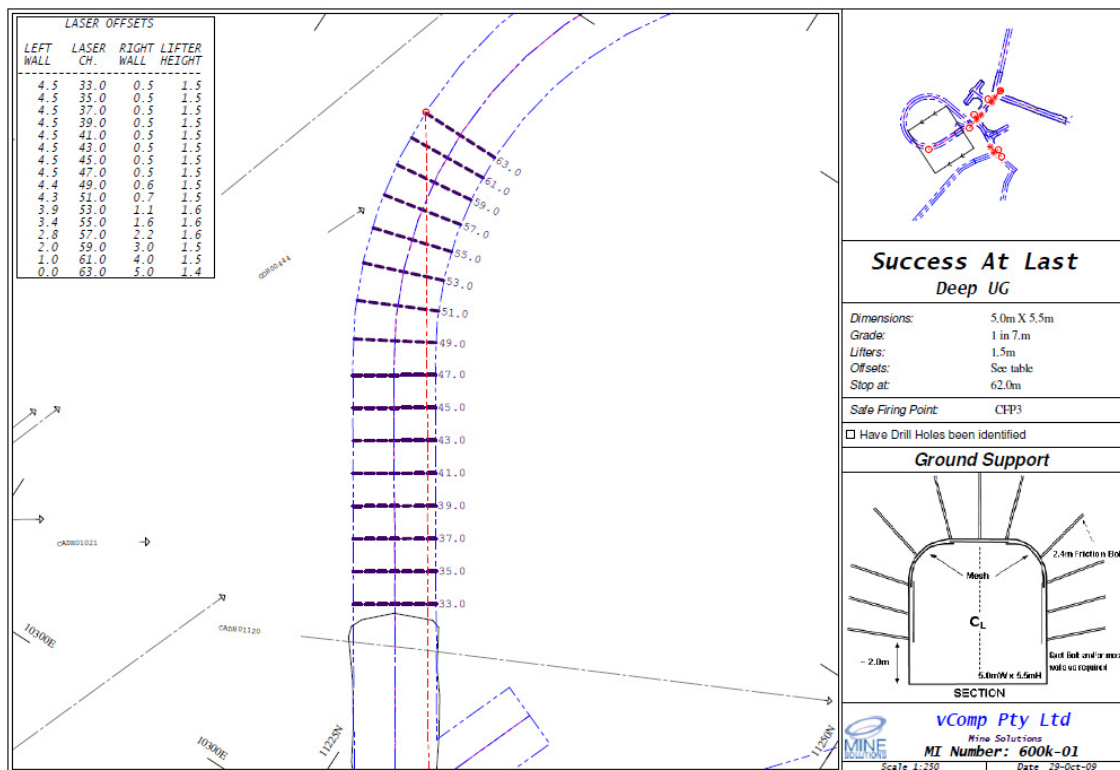
Apply Cancel



## 2. Flexi Memo (Mine Instruction)

A number of enhancements have been made to the flexi memo program.

1. Variable face fonts such as *Arial* and *Times New Roman* are now better centred in the title block.
2. Text can now be written at any angle within the title block
3. Fixed output name handling
4. New feature to draw directional arrows onto the overview plot boundary (see below)







### 3. Flexi DVA (Over-break / Under-break calculations)

Provision has been made to allow chainages to be used rather than simple section numbers. If you want to use chainages select the new option on the main form and then enter your start chainage. The chainage value will now appear in place of section numbers in your plots and reports.

A new option to allow the sections to be taken 90 degrees relative to centreline has been implemented. The default section method is to take the slices 90 degrees to the horizontal plane.

The image shows the 'FlexiSurv V1.09 (Calculate overbreak/underbreak)' dialog box. It has a title bar with the application name and a close button. The main area is divided into four tabs: 'Main', 'Plot Style & Title Block Setup', 'Stacked Sections & Overview Map Setup', and 'Batch Processing'. The 'Main' tab is active. It contains several sections of controls. The 'Input Parameters' section includes radio buttons for 'Select objects by' (graphical selection, entering object No's), radio buttons for 'Design solid' (create using centreline & profile, use exisiting solid), a dropdown for 'Design centre line' (dva\_cl17.str), a dropdown for 'Design profile string' (dva\_profile380.str), input fields for 'Profile offsets from centreline: X' (0), 'Y' (0), and 'Z' (0), a dropdown for 'Surveyed (as built) solid' (dva\_drive17.dtm) with an 'Object No' field (2), and a dropdown for 'Optional (ore body) solid' (dva\_ore17.dtm) with an 'Object No' field (7). The 'Processing Parameters' section includes a 'Sectioning interval' field (2), a 'Use chainages' checkbox (checked) with a 'Start chainage' field (2400), a 'Sections are 90 degrees' section with radio buttons for 'from horizontal' (selected) and 'relative to slope of the centreline', a 'Limit the section area by' section with radio buttons for 'Expansion % of drive profile' (selected) and 'Dimensions from centreline', and an 'Expansion %' field (25). The 'Output Parameters' section includes a 'Base name for output files' field (Flexi\_DVA\_Demo2\_) and checkboxes for 'Create the following outputs' (Plot files, Stacked sections, CSV file, Note file). The 'Plotting Parameters' section includes a 'Heading' field (Design versus Actuals), a 'Sheet' dropdown (A3), a 'Drawn by' field (DV), and a 'Scale' field (250). At the bottom, there are buttons for 'Apply' and 'Cancel'.





It is now possible to include the design outline onto the overview plot. The design outline must be present in the same file as the design centreline.

FlexiSurv V1.09 (Calculate overbreak/underbreak)

FlexiSurv V1.09  
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**Main | Plot Style & Title Block Setup | Stacked Sections & Overview Map Setup | Batch Processing**

**Stacked Sections**

Overbreak	FLEXI OVERBREAK	Pen	2
Underbreak	FLEXI UNDERBREAK	Pen	3
Design outline	FLEXI DRIVE OUTLINE	Pen	1
Development outline	FLEXI DESIGN OUTLINE	Pen	1
Section Details	FLEXI SECTION DETAILS	Pen	1
Optional feature (ie foot wall)	FLEXI CENTRELINE	Pen	4
Section frame	FLEXI PLAIN LINE	Pen	1

**Overview Map**

Scale factor: 1.5 (zoom out from sectioning area)

Grid: ☒ Include on plot Grid interval: 100

Centreline: ☒ Include on plot FLEXI CENTRELINE Pen 2

Section lines: ☒ Include on plot FLEXI SECTION LINES Pen 3

Section labels: ☐ on first and last sections only ☒ at intervals of 5 sections

Drive outline: ☒ Include on plot FLEXI DRIVE OUTLINE Pen 1 String(s) 1

**Design outline: ☒ Include on plot FLEXI DESIGN OUTLINE Pen 5 String(s) 2**

Other Features	String(s)	Plot style	Pen

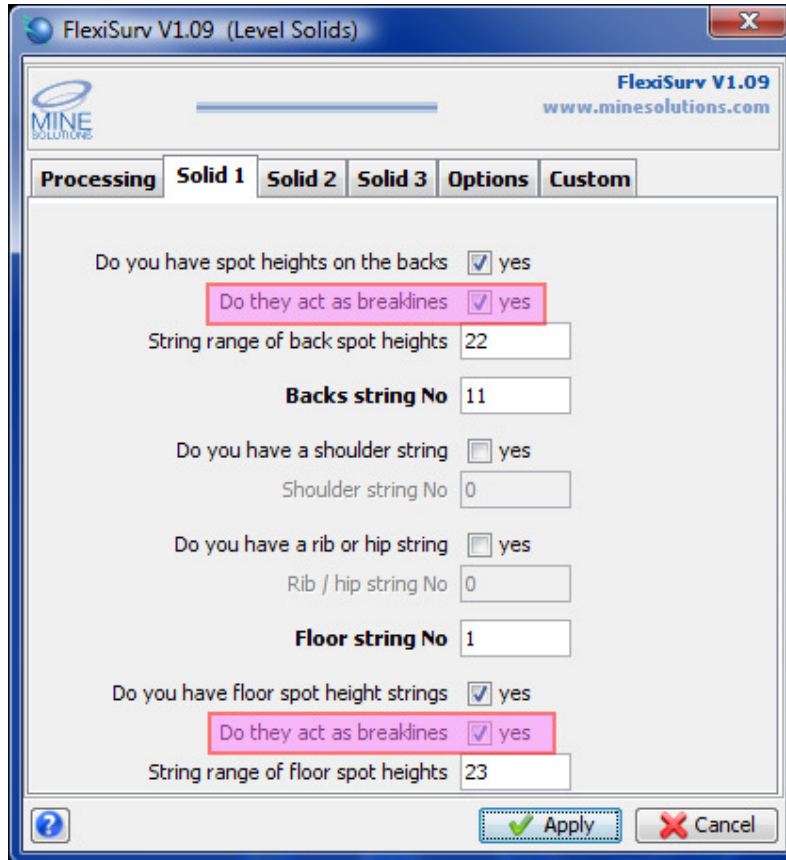
Right click on the table to add, insert, or remove rows

Apply Cancel

A new batch processing mode has been implemented. This mode will allow multiple over-break / under-break calculations to be run without user monitoring between runs. See the Batch Processing tab for further information.

#### 4. Flexi Level Solids (Wire framing)

The wire framing function has been updated such that spot height strings on the floor or backs can be treated as break lines as well as spot heights.



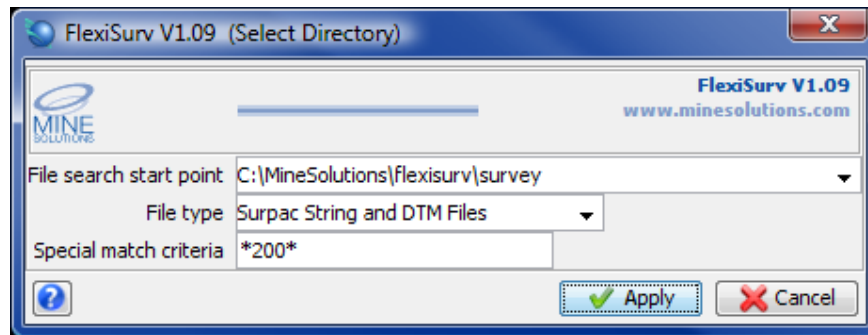
The level solids program will handle a number of issues that can make wire framing a headache such as:

- Duplicate points
- Points outside or coincident with break lines
- Sequencing of pillar segments on all break line strings
- Control strings
- Separate solids in the same file
- Multiple trisolations caused by disjointed strings
- Large numbers of pillars (> 100)



## 5. File Processor Utility

A new general purpose file processing tool has been included into the *FlexiSurv* suite. This utility function allows you to easily browse and select files from a given base directory and then have them displayed in a tree view. Files selected from the tree view will then be processed by your nominated function, which can include a custom macro. See below:



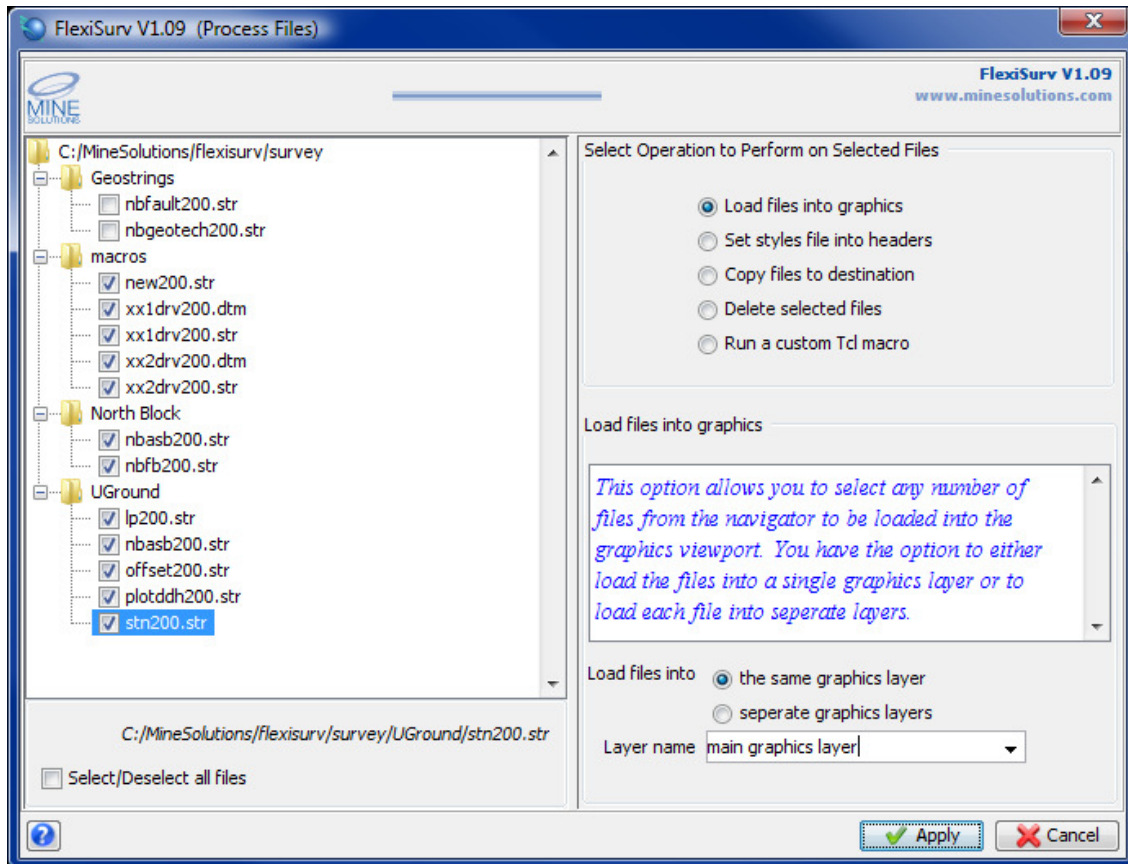
**File search start point** defines the base directory from which files will be searched, including subdirectories

**File type** describes the type of files that you wish to search for. This includes *All Files*, *Surpac String Files*, *Surpac Plot Files*, etc. You can also enter any file mask you like, i.e. \*.lf

**Special match criteria** allows you to further restrict the searched files by specifying a standard string match expression. This maybe blank or can include special characters such as:

*	Matches any sequence of characters in string, including a null string
?	Matches any single character in string
[chars]	Matches any character in the set given by chars. If a sequence of the form x-y appears in chars, then any character between x and y, inclusive, will match. To match all characters try [A-Za-z]

Once the **Select Directory** form is applied the **Process Files** form is shown which allows you to select and deselect files from the tree as required. On this form you nominate the process to perform on the files once the form is applied.



## Why Use Process Files?

Some example usages for process files:

1. Load a number of large CMS files into graphics in one step
2. Load a number of selected plot files into plot preview
3. Search and load all files for a particular level
4. Set a styles file into the header of a number of string files
5. Copy a set of files to another location maintaining the directory structure
6. Easily clean up files that are scattered over a number of directories
7. Create your own macro to process the files to solve a site specific issue



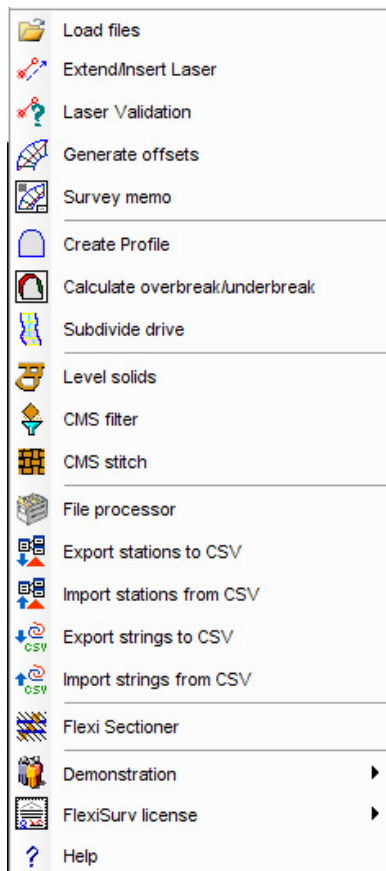
## Custom Tcl Macro

You can create your own macro and tell the file processor to run it when the form is applied. Your macro will have access to two variables:

1. baseDir → this contains the name of the base directory where your file search began
2. fileList → this is a Tcl list of all the files that were selected on the file process form. The code example below shows how to process the list.

```
foreach fileName $fileList {  
    puts "Processing $fileName"  
    # Your custom code goes hear  
}
```

The *File Processor* function is available off the standard FlexiSurv menu or from the toolbar.



File Processor is  
available from the  
FlexiSurv menu or  
toolbar