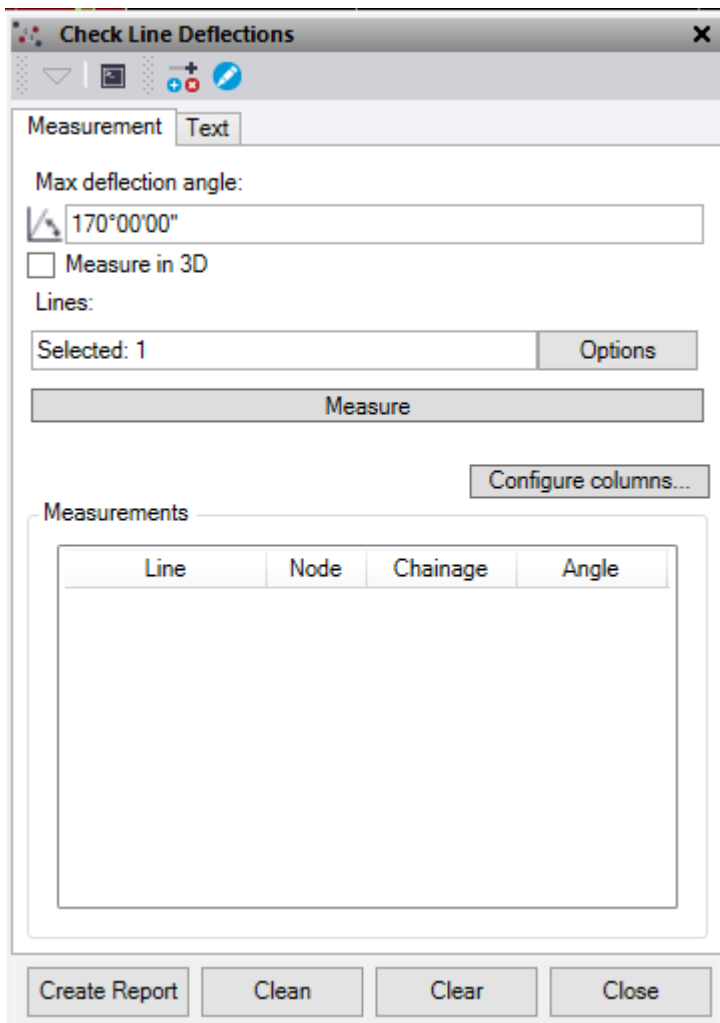




Command Description

The Check Line Deflections command allows the user to search selected lines to find and highlight nodes that exceed the deflection angle nominated. This command can be used to find string errors prior to sending data to the field or to display deflections as text on screen.



The screenshot shows the 'Check Line Deflections' dialog box. It has a title bar with a close button (X). Below the title bar is a toolbar with icons for undo, redo, and refresh. The dialog is divided into two tabs: 'Measurement' (selected) and 'Text'. Under the 'Measurement' tab, there is a 'Max deflection angle:' label followed by a text input field containing '170°00'00"'. Below this is a checkbox labeled 'Measure in 3D' which is currently unchecked. Under the 'Lines:' label, there is a text input field showing 'Selected: 1' and an 'Options' button. A large 'Measure' button is centered below these options. To the right of the 'Measure' button is a 'Configure columns...' button. Below these is a 'Measurements' section containing a table with the following columns: 'Line', 'Node', 'Chainage', and 'Angle'. The table body is empty. At the bottom of the dialog are four buttons: 'Create Report', 'Clean', 'Clear', and 'Close'.

Measurement Tab

1. Enter a **Max deflection angle** to use.
2. Check the **Measure in 3D** box if you need to check 3d deflection else the deflection will be measured in the XY plane only.
3. Select the **Lines** to be checked
4. Press the **Measure** button to check the lines and populate the **Measurements** text box.
 - The number of nodes that exceed the deflection angle is reported.
 - All the nodes that exceed the deflection angle will get an orange flag on them.
5. The **Configure columns** button allows the user to nominate which measured values are displayed in the measurements text box and reported.
6. Within the **Measurements** text box:
 - You can select a node of interest and the flag on screen will highlight red.
 - If you right click on the selected line, you have the option to **delete node** and the view automatically updates to remove the flag.
 - You can also use the short cuts at the top of the command to edit a linestring and if you leave the *Check Line Deflections* command open the flags will remain on the screen and will update as you edit them.
7. Press the **Create Report** button to create an excel file of the data in the *Measurements* text box.
8. Press the **Clean** button to automatically remove nodes that are flagged.
 - The way it works is to delete the first node on a line that has a deflection angle flagged and then recheck the line from the start and continue to delete the nodes until all nodes that have exceeded the deflection angle are removed. **Note:** *This can be very useful for cleaning up data prior to sending it to the field but care should be taken when using this function and reviewing your data prior and post use is recommended. If the closing angle of a “closed” linestring has been flagged, it will not be deleted.*
9. Press the **Clear** button to clear the measurements text box.

Text Tab

1. Go to the **Text** tab to draw the measurements taken and recorded in the measurement tab to text.
 - Define the **Layer** – A layer called “Text – CheckLineDeflections” is automatically created
 - Choose a **Colour**
 - Choose a text **Style**
 - Enter a text **Height**
 - Enter a **Gap** between the location and the start of the text (*moves to the right*)
2. **Create Text** button will create text of all the measurements taken and currently active on the *Measurement* tab.
3. **Clear Layer** button will delete everything on the selected layer that contains the text.

Note: The “delete node” option and “Clean” option only work on linestrings.