

HELP



# Trimble Access™

## Mines



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Trimble Inc.

[www.trimble.com](http://www.trimble.com)

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## Introduction Mines

Use the Trimble® Mines software to:

- Define and auto stake center, grade, and laser lines to align a drilling rig.
- Auto stake predefined blast hole positions.
- Auto stake predefined pivot points to position a drilling rig.

## Mines software menus

From the Trimble Access menu tap Mines to:

- Manage your [jobs](#)
- [Measure](#) points
- [Stakeout](#) points and lines
- [Auto stake](#) lines, blast holes and pivot points in the mine
- [Report](#) your surveyed mine

## Managing jobs

From Mines tap *Jobs* to manage jobs, review job properties and data, view the map and import and export files.

For more information, see [Managing jobs](#).

## Measuring points

From Mines tap *Measure* to measure points using the following methods:

- Measure topo points
- Measure codes
- Measure 3D axes
- Continuous topo
- Surface scan

For more information, see [Measuring points in a conventional survey](#).

## Stakeout

From Mines tap *Stakeout* to stake out points and lines.

For more information, see [Stakeout – overview](#).

## Auto Stakeout

From Mines tap *Auto Stakeout* to stake out lines, blast holes and pivot points in the mine.

For more information, see [Auto Stakeout from the map](#).

## Reports

From Mines tap *Reports* to generate reports for your surveyed mine while in the field. Use these reports to check data in the field, or to transfer data from the field to your client.

For more information, see [Generating a report](#).

## Further information

The contents of this file are installed on the controller with your application.

For information that extends or updates this Help, refer to the *Trimble Access Release Notes*. Go to <http://apps.trimbleaccess.com/help> to download the latest PDF file of the *Trimble Access Release Notes* or help file for each Trimble Access application.

**Tip** – For links between the Trimble Access application help PDF files to work, download PDF files to the same folder on your computer and do not change any of the file names.

To use this application with other applications, see [Interacting with other applications](#).

## Interacting with other applications

You can run more than one application at a time and easily switch between them. For example, you can switch between functions in *Roads*, *Tunnels*, *Mines*, and *General Survey*.

To run more than one application at a time, use the Trimble button or Trimble icon in the top left corner of the screen to open the Trimble Access menu. From there, you can run the other application.

To switch between applications:

- Tap the Trimble button in the task bar to access the menu of available applications and services currently running, including the Trimble Access menu. Select the application or service to switch to.
- On the TSC2/TSC3 controller, a short press of the Trimble button accesses the menu of available applications and services currently running, including the Trimble Access menu. Select the application or service to switch to.

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- On the Geo7X/GeoXR controller, tap the Trimble button to access the menu of available applications and services currently running, including the Trimble Access menu and the *Windows Start Menu*.
- On the Trimble Slate controller, tap the Trimble button to access the menu of available applications and services currently running, including the Trimble Access menu.
- Tap *Switch to* and then select the required function from the list. If the *Switch to* button is not on your current screen, press **CTRL W** to open the *Switch to* pop-up list.
- Press **CTRL TAB**. This is the keyboard shortcut to scroll through the current list of *Switch to* functions.
- Tap *Favourites* or press **CTRL A** to select a preconfigured favorite.
- On a controller that has application/function keys, configure the appropriate key for the function you want to run. This method opens an application even if that application is not running.

For more information, see General Survey buttons.

## Mines – Auto Stakeout

The Auto Stakeout menu contains functions for auto staking the following features:

- Center line
- Grade line
- Laser lines
- Laser lines offset from a center line
- Project line
- Blast holes
- Pivot points

**Tip** - To blink the laser when storing a point measured with DR, select *Instrument / EDM settings* and then set the number of times the laser will blink in the *Blink laser* field.

The Mines software *Auto Stakeout* menu supports Trimble VX/S Series instruments.

### Auto Stakeout from the map

You can select line work from a DXF or STR (Surpac) file to define and then auto stake a *Center line, Grade line, Laser lines, Project line, and Blast holes*. You can also use points in a DXF or STR file to define *Pivot points*. See the Active map for details on selecting features from the map.

To auto stakeout from the map:

1. Select *Jobs / Map*.
2. From the map, select the features that define the line(s), blast hole(s) or pivot point(s) to stake.
3. Tap *Auto Stakeout*. Alternatively, having selected the feature(s), exit the map and then select *Auto Stakeout* from the main menu.
4. Select the auto stake method.

#### Notes

- *The method must be appropriate for the features selected to auto stake.*
- *When selecting a line to auto stakeout, tap near the end of the line that you want to designate as the start. Arrows are then drawn on the line to indicate the direction. If the direction is incorrect, tap the line to deselect it and then tap it at the correct end to reselect the line in the direction required.*

- *If you select more than one line when staking a Center line, Grade line, and Project line, only the first selected line is available to auto stake.*
5. Tap *Next*.
  6. The selected entity(s) will be displayed for auto staking by the selected method.  
Refer to the links above for further details on the various methods.

## Auto staking a center line

Use Auto stake *Center line* to automatically mark out a line at set intervals along the mine backs (ceiling).

To auto stake a center line:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Center line*.
3. Define the *Start point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).
4. Define the *End point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).

### Tips

- Alternatively, you can use the [Active map](#) to select a line to define the center line.
  - Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.
5. Define an *Interval* for staking the line.  
Tap the *Page down* button to view the line definition.
  6. Define offsets if required. The center line can be offset by a:
    - *Horizontal offset* - applied left or right of the center line
    - *Vertical offset* - applied up or down from the center line
    - *Station offset* - applied backward or forward along the center lineThese offsets are used to calculate the design positions.
  7. To extend the center line, enter the extension distance in the *Extend beyond end point* field. To shorten the center line, enter a negative value in this field.
  8. Tap *Next* to go to the [Settings](#) screen.
  9. Enter values for the *Point details*, *Position tolerance*, and *Settings* or accept the default values.
  10. Tap *Next* to auto stake the line.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.



The software will use the previous position to reduce the number of iterations required to find the next position. However if a position is not found within tolerance the software will use the design position of the previous position to reduce the number of iterations required to find the next position.

**Tip** - If the instrument points to the floor rather than the backs, during the *Start delay* period, you can manually point the instrument to the backs.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in *Settings*. If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

11. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the end of the line is reached, the *Results* screen shows the number of points staked and the number of points skipped.

## Advanced pop-up arrow

The following methods of point definition are available from the advanced pop-up arrow:

Select...	To...
List	Select from a list of all database points
Wildcard search	Filtered search of the database
Key in	Create a point in the database by keying in the <i>Point name</i> , <i>Code</i> , and <i>Coordinates</i> .
Fast fix	Quickly measure and automatically store a point. Wherever the instrument is pointing, that position is stored.
Measure	View the measure topo screen so that you can enter the <i>Point name</i> , <i>Code</i> , and <i>Target height</i> .
Map selections	View a list of points selected from the map

## Auto staking a grade line

Use Auto stake *Grade line* to automatically mark out a line at set intervals along the mine walls.

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Grade line*.

3. Define the *Start point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).
4. Define the *End point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).

**Tips**

- Alternatively, you can use the [Active map](#) to select a line define the grade line.
- Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.

5. Define an *Interval* for staking the line.

Tap the *Page down* button to view the line definition.

6. Define offsets if required. The grade line can be offset by a:
  - *Horizontal offset* - applied left or right of the grade line
  - *Vertical offset* - applied up or down from the grade line
  - *Station offset* - applied backward or forward along the grade line

These offsets are used to calculate the design positions.

7. To extend the grade line, enter the extension distance in the *Extend beyond end point* field. To shorten the grade line, enter a negative value in this field.
8. Tap *Next* to go to the [Settings](#) screen.
9. Enter values for the *Point details*, *Position tolerance*, and *Settings* or accept the default values.
10. Tap *Next* to auto stake the line.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

The software will use the previous position to reduce the number of iterations required to find the next position. However if a position is not found within tolerance the software will use the design position of the previous position to reduce the number of iterations required to find the next position.

**Tip** - If the instrument fails to point in the correct direction, during the *Start delay* period, you can manually point the instrument in the correct direction.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in [Settings](#). If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

11. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the end of the line is reached, the *Results* screen shows the number of points staked and the number of points skipped.

## Auto staking laser lines

Use Auto stake laser line to stake the intersection points between the mine walls and a line defined by two points.

Matched pairs of points must be defined using their point names. A point must have a prefix or suffix to identify it as the left or the right hand end of the line. The remainder of the point name must be identical for a match pair to be found. For example, if the Left points prefix is L and the Right points prefix is R, then the following points would be identified as matched pairs: L1-R1, L15-R15, L101-R101, etc.

**Tip** - The points can be imported into the job, linked to the current job, or imported into another job and that job linked to the current job. Use the *Jobs / Import* option to import points.

To auto stake laser lines:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Laser lines*.
3. Set the *Selection method* to either *Prefix* or *Suffix* so it matches the naming convention of the points in your job.
4. Enter the *Left points prefix/suffix* and the *Right points prefix/suffix*, and then tap *Next*.

### Tips

- Alternatively, you can use the [Active map](#) to select line(s) to define the laser lines.
  - Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.
5. All matching pairs in the job's database with the correct prefix/suffix are listed. Highlight and delete any lines that do not require staking.
  6. Tap *Next* to go to the [Settings](#) screen.
  7. Enter values for the *Point details* and *Settings*, or accept the default values and then tap *Next*.
  8. Tap *Next* to auto stake the lines.

The Mines software stakes all the points on the left, starting with the first line and finishing on the last. It then stakes all the points on the right side, starting with the last line and finishing on the first.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

**Tip** - If the instrument fails to point in the correct direction, during the *Start delay* period, you can manually point the instrument in the correct direction.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in [Settings](#). If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

9. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the process has finished, the *Results* screen shows the number of points staked and the number of points skipped.

## Auto staking laser lines from a center line

Use Auto stake Laser line from CL to stake the intersection points between the laser line and the mine wall. The laser lines are defined at right angles relative to the center line at a defined interval.

To auto stake laser lines from a center line:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Laser lines offset from CL*.
3. Define the *Start point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).
4. Define the *End point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).

### Tips

- Alternatively, you can use the [Active map](#) to select line(s) to define the laser lines.
  - Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.
5. Define an *Interval* for staking the line.  
Tap the *Page down* button to view the line definition.
  6. Define offsets if required. The center line can be offset by a:
    - *Vertical offset* - applied up or down from the center line
    - *Station offset* - applied backward or forward along the center lineThese offsets are used to calculate the design positions.
  7. To extend the center line, enter the extension distance in the *Extend beyond end point* field. To shorten the center line, enter a negative value in this field.
  8. Tap *Next* to review the defined laser lines. Highlight and delete any lines that do not require staking.
  9. Tap *Next* to go to the *Settings* screen.
  10. Enter values for the *Point details* and *Settings*, or accept the default values and then tap *Next*.
  11. To aid in the auto stakeout of the laser lines you are prompted to aim and measure a position on the right side of the mine. Repeat when prompted for the left side.
  12. Tap *Next* to auto stake the lines.

The Mines software stakes all the points on the left, starting with the first line and finishing on the last. It then stakes all the points on the right side, starting with the last line and finishing on the first.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

**Tip** - If the instrument fails to point in the correct direction, during the *Start delay* period, you can manually point the instrument in the correct direction.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in *Settings*. If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

13. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the process has finished, the *Results* screen shows the number of points staked and the number of points skipped.

## Projecting a line

Use Auto stake *Project line* to stake the intersection point between a mine face and a line.

The line can be defined by:

- Two points:
  - Selected from the map
  - Keyed in
  - Measured
- A line selected from the map

**Tip** - The points can be imported into the job, linked to the current job, or imported into another job and that job linked to the current job. Use the *Jobs / Import* option to import points.

To project a line:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Project line*.
3. Define the *Start point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).
4. Define the *End point* by keying in the point name, or by using one of the options in the [advanced pop-up arrow](#).

**Tips**

- Alternatively, you can use the [Active map](#) to select two points or a line to define the line.
  - Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.
  - Tap the *Page down* button to view the line definition.
5. Define offsets if required. The grade line can be offset by a:
    - *Horizontal offset* - applied left or right of the grade line
    - *Vertical offset* - applied up or down from the grade line
  6. Tap *Next* to go to the [Settings](#) screen.
  7. Enter values for the *Point details*, *Position tolerance*, and *Settings* or accept the default values.
  8. Tap *Next* to auto stake the line.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

**Tip** - If the instrument fails to point in the correct direction, during the [Start delay](#) period, you can manually point the instrument in the correct direction.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in [Settings](#). If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

9. Tap the *Pause* button to temporarily halt the auto stake process.
 

When the end of the line is reached, the *Results* screen shows the number of points staked and the number of points skipped.

## Auto staking blast holes

Use Auto stake blast holes to stake the intersection point between a mine face and a line defined by two points.

Matched pairs of points must be defined using their point names. A point must have a prefix or suffix to identify it as the blast hole collar or toe. The remainder of the point name must be identical for a match pair to be found. For example, if the collar points suffix is C and the toe points suffix is T, then the following points would be identified as matched pairs: 1C-1T, 15C-15T, A1C-A1T, etc.

**Tip** - The points can be imported into the job, linked to the current job, or imported into another job and that job linked to the current job. Use the *Jobs / Import* option to import points.

To auto stake blast holes:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.
 

From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Blast holes*.

3. Set the *Selection method* to either *Prefix* or *Suffix* so it matches the naming convention of the points in your job.
4. Enter the *Collar points prefix/suffix* and the *Toe points prefix/suffix* and then tap *Next*.

**Tips**

- Alternatively, you can use the [Active map](#) to select line(s) to define the blast holes.
  - Tap *Swap* to reverse the direction of the line. This option can be useful to ensure that the line direction is correct.
5. All matching pairs in the job's database with the correct prefix/suffix are listed. Highlight and delete any lines that do not require staking.
  6. Tap *Next* to go to the [Settings](#) screen.
  7. Enter values for the *Point details* and *Settings*, or accept the default values and then tap *Next*.
  8. Tap *Next* to auto stake the blast holes.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

**Tip** - If the instrument fails to point in the correct direction, during the [Start delay](#) period, you can manually point the instrument in the correct direction.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in [Settings](#). If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

9. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the process has finished, the *Results* screen shows the number of points staked and the number of points skipped.

## Auto staking pivot points

Use Auto stake Pivot points to stake out pivot points that have been projected up onto the mine back.

Pivot points must be identified by either a prefix or suffix in their point name.

**Tip** - The points can be imported into the job, linked to the current job, or imported into another job and that job linked to the current job. Use the *Jobs / Import* option to import points.

To auto stake pivot points:

1. Tap *Auto Stakeout*, select a survey style and then start a survey.  
From the Trimble Access menu tap *Settings / Survey styles* to edit an existing style or to define a new style.
2. Tap *Pivot points*.

3. Set the *Selection method* to either *Prefix* or *Suffix* so it matches the naming convention of the points in your job.
4. Enter the *Pivot points prefix/suffix* and then tap *Next*.

**Tip** - Alternatively, you can use the [Active map](#) to select points to define the pivot points. This option is useful when the drive deviates from design and a new center line has to be defined, requiring the pivot points defined by the intersection of the center line with the laser lines to be re-computed. Select the two points that define the center line and a laser line and then select the *Compute intersection* option from the tap and hold menu to compute a point at the intersection with the option to derive the elevation from the center line. Once the computed point is stored you are returned to the map where you can select the next laser line and repeat the process. When all pivot points have been computed you can select them and then, if you select *Pivot points* from the *Auto stakeout* menu, the points automatically appear as pivot points ready for auto staking.

5. All points in the job's database with the correct prefix/suffix are listed. Highlight and delete any points that do not require staking.
6. Tap *Next* to go to the [Settings](#) screen.
7. Enter values for the *Point details* and *Settings*, or accept the default values and then tap *Next*.
8. When prompted, aim the instrument at the mine back and then tap *Measure*. This ensures that the auto staked points will be located on the back.

The instrument turns to the design point, measures a position and then checks this position against the defined tolerances. If it is outside the tolerances it turns to a new position and repeats the process until a position within tolerance is found, or the maximum number of iterations is reached.

When a position is found within tolerance, the *Mark point* event sounds and the laser point flashes for the period defined in the *Mark delay* field in [Settings](#). If a point within tolerance cannot be found, the point is skipped.

**Tip** - Stakeout deltas indicate the direction you need to go to get to the target.

At the end of the *Mark delay* period the instrument auto stakes the next point.

9. Tap the *Pause* button to temporarily halt the auto stake process. Use the *Prev* and *Next* softkeys to skip to the previous or next point.

When the process has finished, the *Results* screen shows the number of points staked and the number of points skipped.

## Settings

Use the *Point details* group to specify the *Start point* and *Point code*.

Use the *Position tolerance* group to specify the *Station* and *Offset* tolerances for a *Center line* and the *Station* and *Grade* tolerances for a *Grade line*. The *Station* tolerance value applies forward and back along the line. The *Offset* tolerance is defined left and right of the line. The *Grade* tolerance is defined up and down from the line and perpendicular to the line.

Use the *Settings* group to specify the *EDM timeout*, *Mark delay*, *Start delay*, the number of *Iterations*, and whether or not the staked points are to be stored.



The *Mark delay* is the length of time, in seconds, that the laser point flashes once the position is found.

The *Start delay* gives you time to walk to the location of the first point to be marked. If the number of iterations is exceeded, or the EDM times out, the point is skipped.

Select the *Measure to define laser line elevation* check box when:

- You want to over-ride the elevation of the points used to define the laser line
- The points defining the laser line have no elevation or have an arbitrary elevation of 0. This can be the case when the laser lines are defined from lines in a DXF file.

If you select the *Measure to define laser line elevation* check box, you are prompted to take a measurement before the autostake process begins. The measured elevation is then used to define the elevation for the line.


**Tip** - You can reduce the EDM timeout to improve performance. If the instrument struggles to get a measurement due to, for example, reflective or dark surfaces, increase the EDM timeout.

## Generating a report

Use the *Report* option to create custom ASCII files on the controller while in the field. Use the predefined formats or create your own custom formats. With custom formats, you can create files of almost any description. Use these files to check data in the field, or to produce reports, which you can transfer from the field to your client or to the office for further processing with the office software.

You can modify a predefined format to meet your specific requirements, or use it as a template to create a completely new custom ASCII export format.

### Creating a report of survey data

1. Open the job that contains the data to export.
2. From the Mines menu, tap *Report*.
3. In the *File format* field, specify the type of file to create.
4. Tap  to select an existing folder or create a new one.
5. Enter a filename.

By default, the *File name* field shows the name of the current job. The filename extension is defined in the XSLT style sheet. Change the file name and extension as required.

6. If more fields are displayed, complete them.

You can use the XSLT style sheets to generate files and reports based on parameters that you define. For example, when generating a Stakeout report, the *Stakeout horizontal tolerance* and the *Stakeout vertical tolerance* fields define acceptable stakeout tolerances. When generating the report you can stipulate the tolerances, then any stakeout delta greater than the defined tolerances appears in color in the generated report.

**Note** - When the selected XSLT style sheet is applied to create the custom export file, the processing is all carried out in the program memory available on the device. If there is not enough memory to enable the creation of the export file, an error message will be displayed and no export file will be created.

The following factors affect whether the report file can be created:

1. The amount of program memory available to the device.
2. The size of the job being exported.
3. The complexity of the style sheet being used to create the export file.
4. The amount of data being written to the export file.

### 3 Generating a report

If it is not possible to create the export file on the controller, download the job as a JobXML file to a computer.

To create the export file from the downloaded JobXML file using the same XSLT style sheet, use the ASCII File Generator utility program (available from [www.trimble.com](http://www.trimble.com)).