

# How to Stake and Set-Out Lines in MAGNET Field

The **Stake Lines** function allows the user to **determine** and set-out positions **exactly** anywhere along a **desired line** between **recorded points** or via a set **azimuth**.

If using an Optical instrument, carry out an **Instrument Setup** and ensure **Occupation** and **Backsight** points have been established and that all necessary **design points** are present within the job.

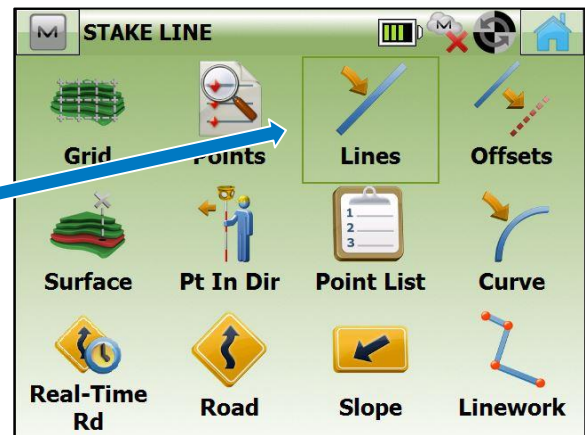


(1)

From the main MAGNET home screen, select the **Stake** menu button.

(2)

From here, select the **Lines** button.

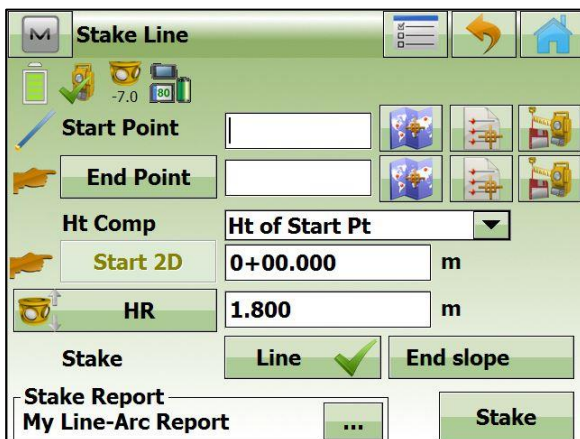


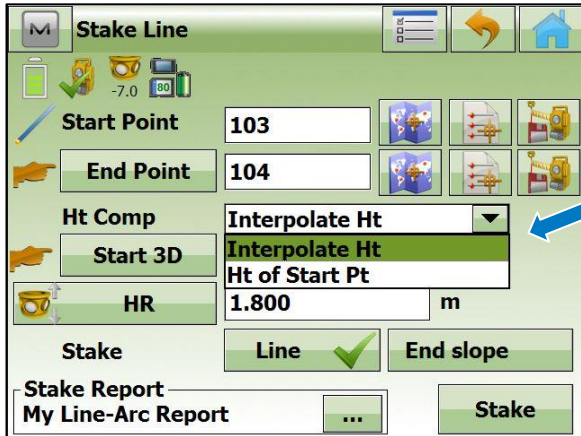
(3)

Enter the desired **Start** and **End Points** of the line via the **Map** or **List** icons.

Alternatively lines can be determined on-the-go by pressing the **Record** buttons.

Pressing the **End Point** button allows the user to define the line via **Azimuth** once the **Start Point** has been selected.





(4)

**Interpolate Ht** computes the height of points to be staked with respect to the grade between the selected Start and End points.

**Ht of Start Pt** computes each staked position with the same height as the selected Start Point.

In all cases be sure to enter the correct **Rod Height**.

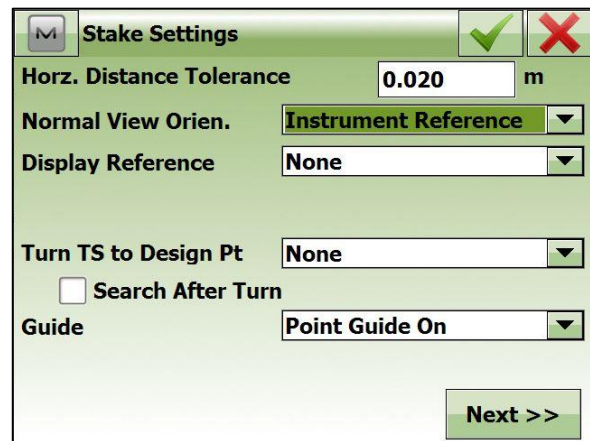
(5)

Within the **Stake Settings** menu, ensure **Normal View Orien.** is set to **Instrument Reference**.



This allows points to be staked with respect to the position of the total station.

**Stake-out tolerance** can be altered at the top of the screen.



(6)

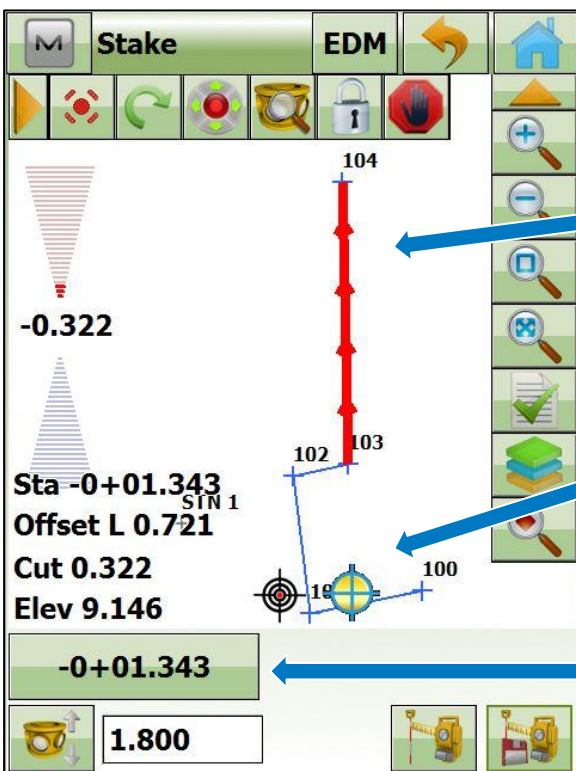
Press **Stake** to begin.

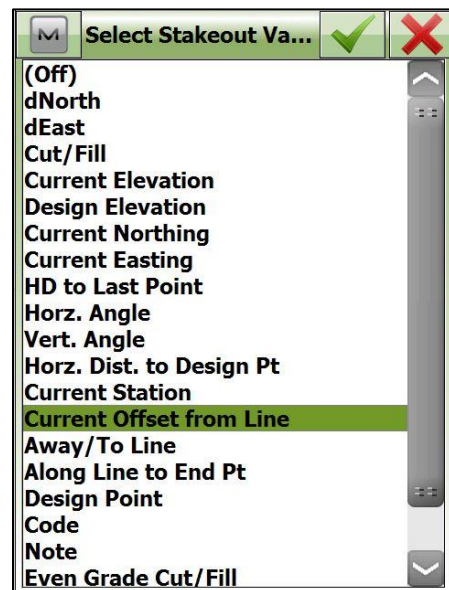
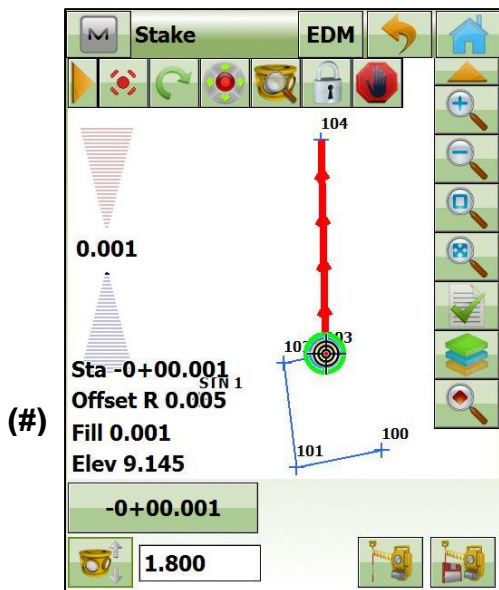
In **Map** view, a Red Line denotes the line to be staked.

The **black** crosshair shows the position of the user and prism.

The **blue and yellow** crosshair will always stay on the bearing between the two points but moves depending on the user's position.

**Chainage** and position relative to the start point of the line is displayed in the box at the bottom left.

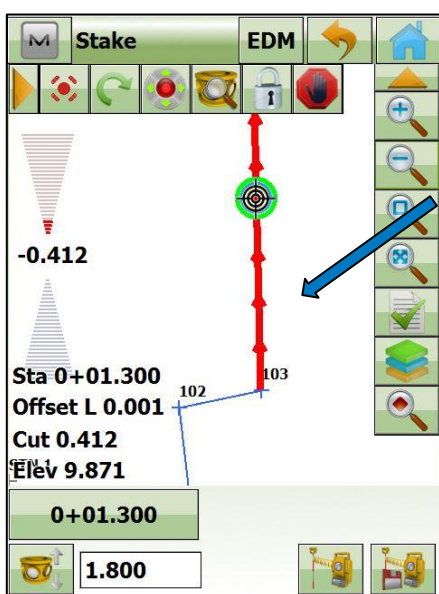




(7)

A **green circle** denotes that the prism position is within tolerance and the point can be set-out. Press the **measure** or **record** buttons to stake the point.

The user can customise the visual display by pressing the point information or empty boxes at the bottom left of the screen (#). Up to four options from the menu can be selected.

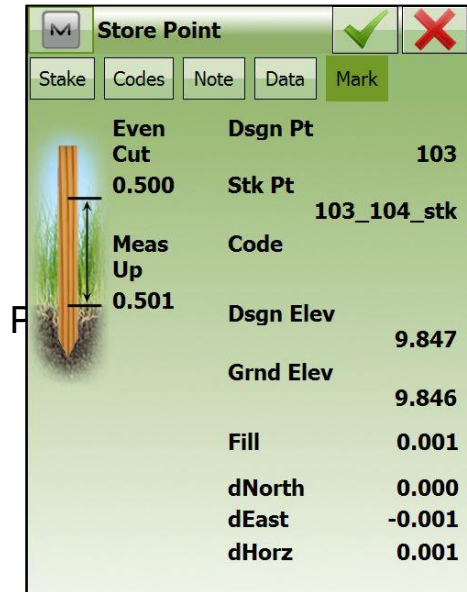
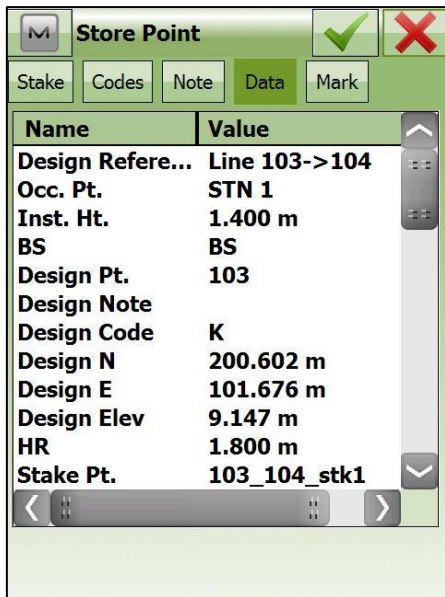


(8)

Any position at any chainage along the bearing of the line can be set-out, regardless of whether the user is between the start and end points. In this example we are 1.300 m from the start point.

A **flag** icon will denote a saved and recorded Staked point within the Map view.





(10)

After recording the point the following tabs display information about the staked point.

Here the user can **edit** the Name, Code and Layer or add notes and photographs if necessary.

Press the **Green Tick** to Store. This will then return the user to the **Stake** screen.