

# Leica FlexLine plus Mining Application Program



Developed in cooperation with the underground mining industry, Leica Geosystems have now released the mining application program to be used onboard the Leica FlexLine TS02/06/09 plus Series instruments.

The software combines the success of the well established FlexLine mining software with the enhanced flexibility of the FlexLine plus Series, like the optional Color- and Touch keyboard with illuminated keys and enlarged fontsize for optimized work in the harsh underground conditions. This program has been developed with data security as being of the utmost importance.

Via a password arrangement, the Surveyor in charge has the task of setting the tolerances for the survey and uploading the necessary data for use underground. These parameters are uploaded into the instrument and only those entrusted with the password can change these parameters.

This program covers the main underground surveying tasks such as carrying out a Peg Survey, setting Line Pegs, setting out Grade lines and performing pickups underground by the Offset method. As well as these mining specific tasks, the menu contains all standard programs. For more information about FlexLine plus, please refer to the Leica FlexLine plus brochures.

- when it has to be **right**

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## Program Options

### Peg Survey

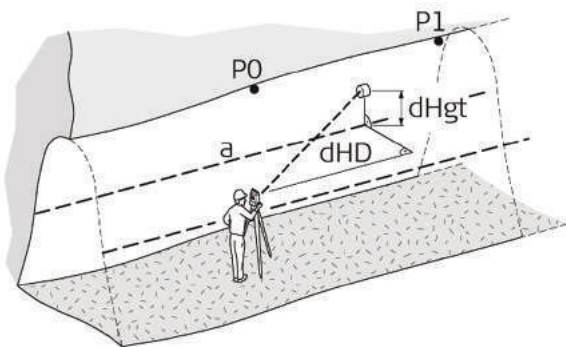
Accurate surveys in mining are very important for both mine planning and also mine safety. The underground drives or tunnels need to be accurately surveyed and controlled in order to gain the maximum productivity from the mining operation.

Peg Survey is the first option in the Mining Application Program and allows the surveyor to carry out a traverse underground to accurately locate the survey stations usually placed in the hanging wall above. Various parameters can be set by the surveyor in charge such as the tolerances for the traverse, number of sets of angles recorded and the uploading of the survey stations to be used.

Once the survey is completed, the program checks that the tolerances set are met or allows for further surveys. The program displays the results and records all data for further downloading and reduction.

### Line Peg

The option to set line pegs is provided and can be called at any time in the program. This option will allow one set of observations to be taken before computing the position for the line pegs. The use of line pegs are very important to allow the miners to excavate the drive/tunnel in the correct direction.

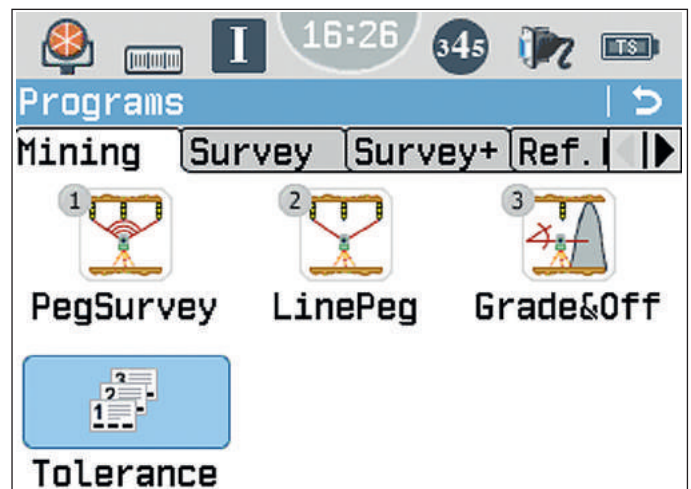
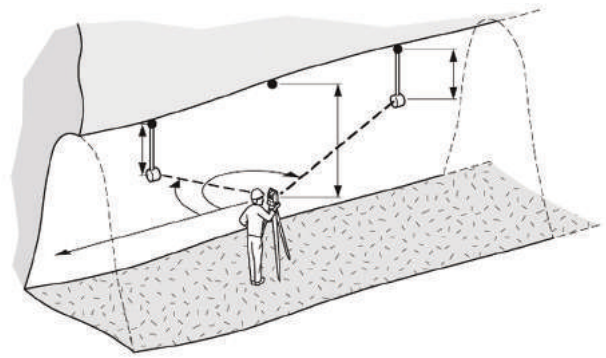


### Offsets

As the removal of material progresses in the Drive/Tunnel, it is necessary to measure the actual excavated dimensions of the Drive/Tunnel. The Offset option of the Mining Application Program allows the survey team to carry out this procedure efficiently and in a manner they are accustomed to.

**Please contact a Leica Geosystems representative to view**

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### Grades

In underground mining accurate height control of the Drive/Tunnel is very important from a production and safety aspect. Surveying services are not always available but the mine production must continue.

By use of the Grades option of the Mining Application Program, the surveyor can set out the actual Grade Line on the walls for use by the mine production team as and when required.

