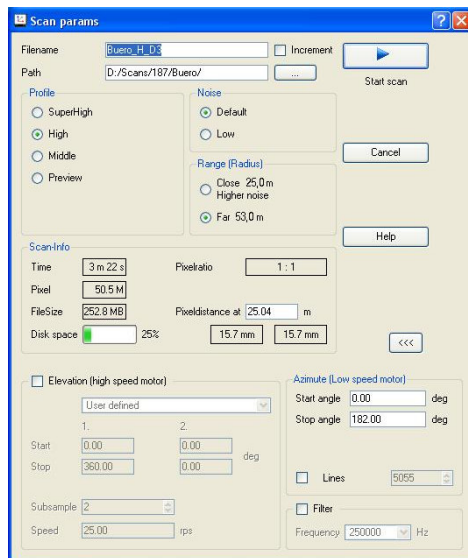




With the new LaserControl Z+F presents a competitive software tool offering numerous functions for 2D and 3D visualisation of laser scans as well as a wide range of measurement functions for immediate evaluation. At the same time the new Z+F LaserControl contains the complete user interface for operating the laser scanner IMAGER 5003.

Here an overview of the most important functions of the Z+F LaserControl:

Operating the hardware



Before running a scan there are different options available to choose from.

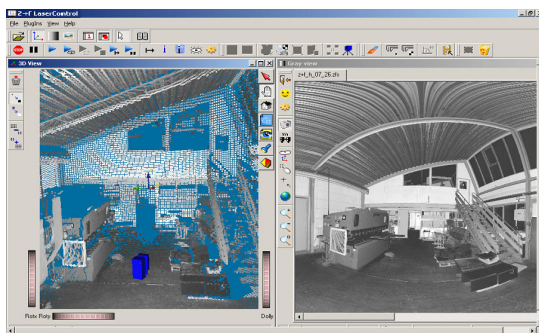
By clicking on the preview button the user obtains a 2D view (grey scale picture) of the 360° scanning area within seconds. By selecting a window area in the preview this can be scanned directly with the required high resolution.

According to requirements the user can choose from 3 resolution levels and two noise settings. The scanning speed and file size resulting from this are displayed before running the scan.

If required the distance between pixels can be displayed (depending on the distance from the laser scanner and the selected resolution).

New are the functions for inspecting the contamination of the glass pane and for testing the calibration of the laser scanner.

Visualisation and control of scanning data



During the scan the generated measured data can be displayed in different control views and directly after the scan as high-resolution 2D grey scale picture or as a 3D point cloud.

The point clouds allow the 3D view of a selected window area or also of the whole documented area. The sub-sample function (omission of points) is used for a faster display of the 3D point clouds.

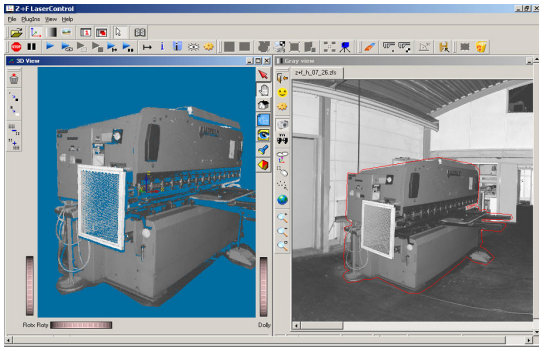
For each documented point the value of range, reflectance and angle can be displayed.

The user has the opportunity to move unrestrictedly within the view and also to generate AVI video files e.g. for animations.

Furthermore, there is the possibility to generate slices through several scans concurrently, which is especially important for producing floor plans.



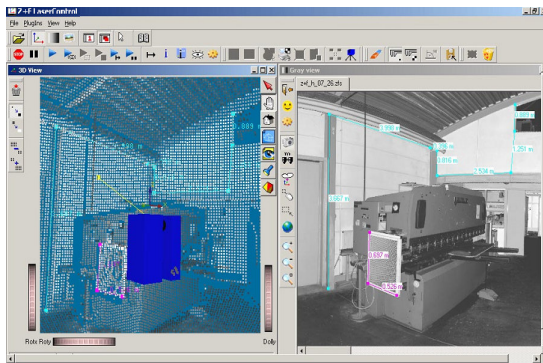
Selection of subareas



When choosing a window area from a scan there are different possibilities of selection available: Apart from the conventional rectangular choice (window) the new Z+F LaserControl also offers polygon, freehand or point selection. At the same time it is possible to select different areas at the same time.

The selected areas can be saved as separate files in different formats.

Numerous measurement functions



Different types of measurements can be carried out in the 2D and 3D windows.

These could be, for example the distance measurement between any different points in a room or the perpendicular distance measurement e.g. for the definition of depth or height of a room.

If the user carries out several measurement processes shortly after each other the measurement chains can be distinguished by their different colours.