New software version AutoGrid® 5.4
With new functions in the visualization software, now also for Windows 11

This new latest AutoGrid® software version offers enhancements and new features for visualization of the results of your strain analysis. In addition, the new software version is now also compatible with Windows 11.

The new software version AG 5.4 contains the following enhancements:

Transfer of interpolated points from visualization to the basic data set in order to be able to calculate real (i.e. not just interpolated) strain results for these points:

- Transfer of interpolated points from the visualization to the basic data set for recalculation of the strain results in the main program. By including all points, the strain results can be calculated accurately even in areas with originally missing points (e.g. due to poor visibility of the grid markings after deformation).

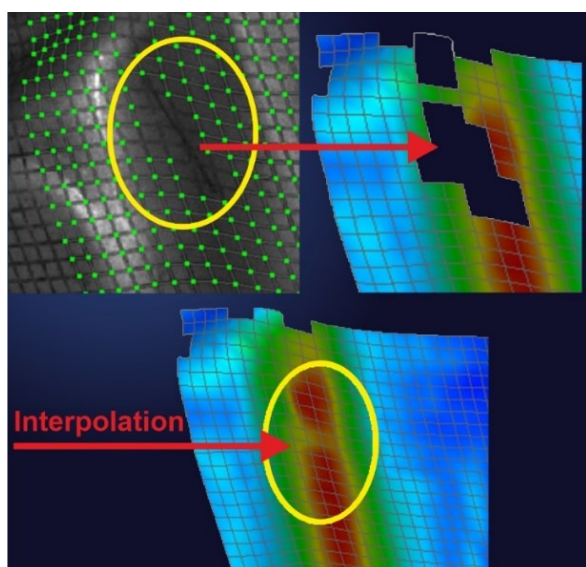Current software function | New in the update: Interpolated points

Fig. 1: Missing measured points, such as here because of a large scratch that prevents point measurement: Interpolation via the holes leads to unsatisfactory results.
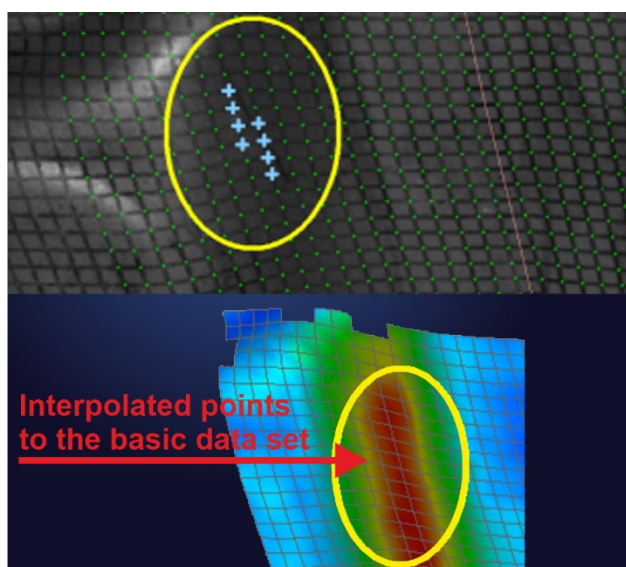
Fig. 2: Transfer of the interpolated points to the basic data set (light blue points in the upper image) and recalculation of the strain results using all points. Now the determined strain results are also correct at those spots where the missing points were previously located.

- After deleting inaccurate measurement points in the visualization, the strain results can be recalculated in the main program using the interpolated points. The results are then correct for these previously interpolated points as well as for their neighbouring points.

Current software function: Result image | New in the update: Result image
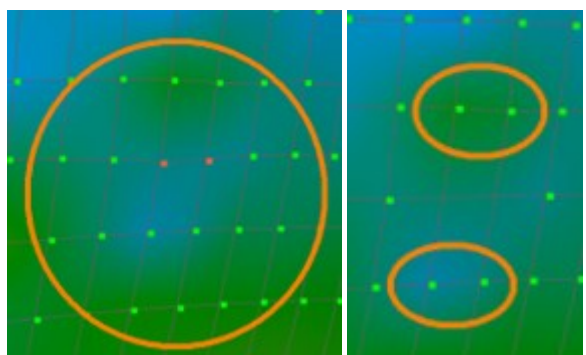

Fig. 3: Inaccurately measured points (marked in red) lead to distorted results at the neighbouring points, which are still distorted even after the inaccurate points have been deleted.
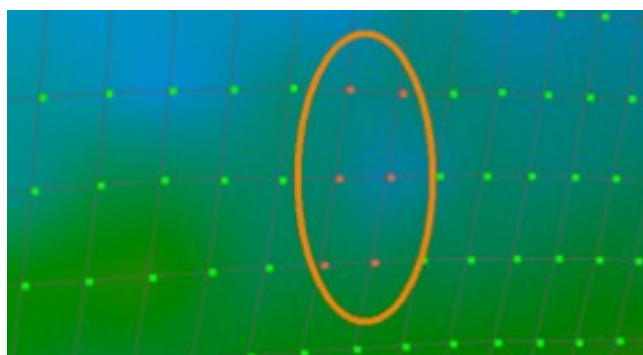
Fig. 4: After deleting the incorrect points, transferring the interpolated points to the basic data set and recalculating the strain results, the results are correct both at the interpolated points and at the neighbouring points.

Usage of result flags:

- The operator can now manually add any number of "flags" to display the currently selected result variable for the respective grid points.
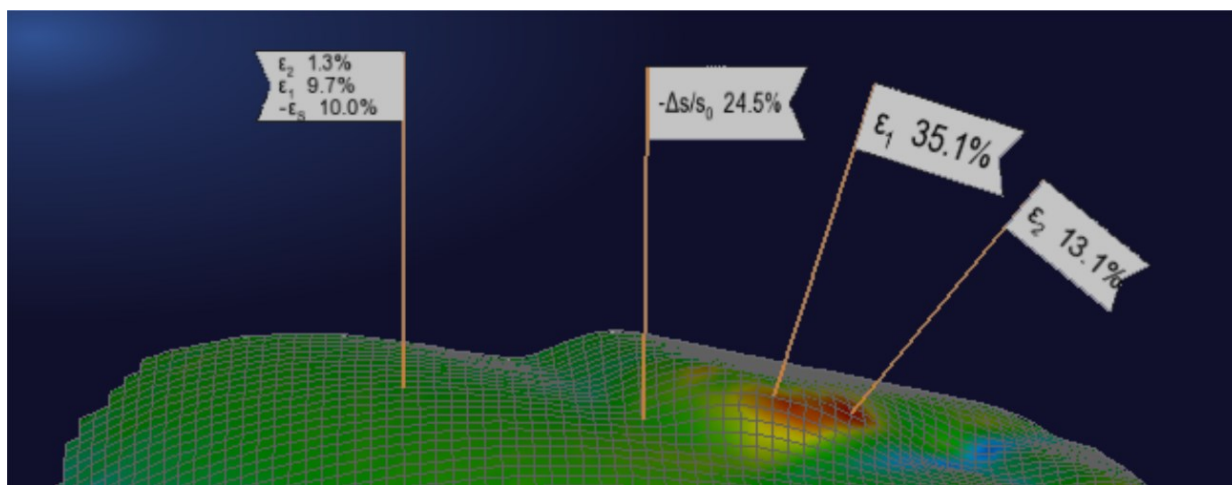

Fig. 5: Result display in many places with flags on which single or multiple results can be displayed.

Bead Correction Factor:

- Possibility of taking into account the so-called 'Bead Correction Factor', BCF for short, which is frequently used in North America in particular. [Stuart Keeler: The Enhanced FLC Effect, Report for 'The Auto/Steel Partnership', January 2003]

Standardized, cross-functional use of entered material data:

- There are several places in the visualization software where material data can be entered: e.g. value pairs for FLCs, data for the theoretical calculation of FLCs or material data for documentation. Once such data has been entered anywhere in the visualization software, it is available to all functions in the visualization, where it may also be used.

We are happy to answer any further questions personally at autogrid@vialux.de.

With kind regards
AutoGrid® Sales & Support