

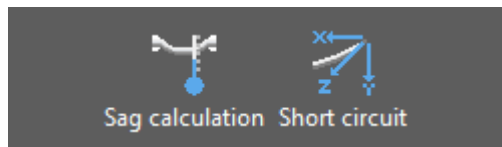
# primtech – Short-Circuit Current - Calculation of Effects

The primtech tool - short-circuit current - calculation of effects (according to IEC 60865-1:2011) - calculates the forces resulting from given short circuit currents. The forces calculated are short-circuit tensile forces, drop forces and additionally occurring pinch forces in conductor bundles. Additionally, the conductor displacement caused by swing-out and the resulting minimum distance (minimum air clearance) are output.



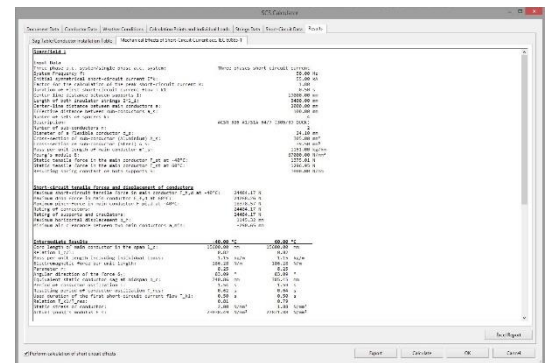
## Sag Optimization

Optionally primtech can carry out sag optimization. The optimum sag is determined in combination with the calculation of short-circuit current effects and sag calculation, where the lowest max forces occur.



## Integrated Calculation

The tool - short-circuit current effects calculation - is integrated in primtech. It allows the evaluation and optimization of the design at any time during the whole substation planning process. To determine the anticipated costs for the budget planning or concepts planning, the first calculations in concept design can be carried out e.g. for the rough dimensioning of substructure or foundations. It is just as easy to determine the impacts of design changes on the tensile forces.



## Output in Excel

The results of the calculation can be output to an Excel table.

## Interim Results

In order to make the calculations transparent, the input parameters, as well as the relevant interim results, are also output to Excel table.

## What if...

Scenarios where diverse "what if..." conditions are investigated, can be carried out in primtech. This assists you during the final checks and in design optimization and well as error prevention, as with all primtech checks.

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