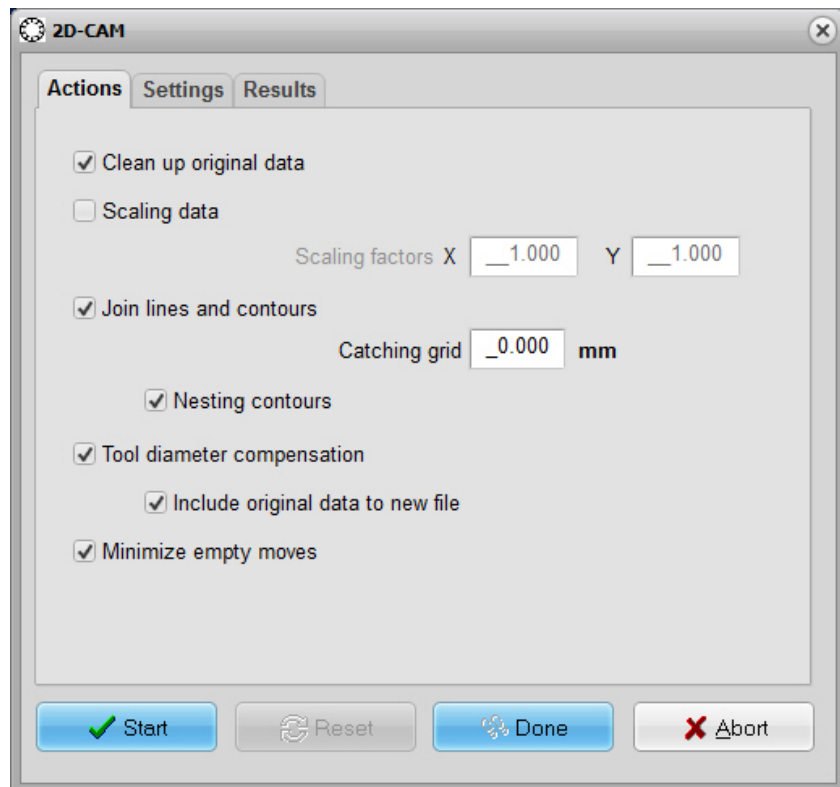


2D CAM Actions



Available functions and settings:

Cleaning up original data

All zero length vectors and double lines are deleted and removed from the drawing. Usually these modifications are not visible. However, they may result in failures concerning the subsequent calculations.

Scaling data

All data and lines are scaled in size prior to the subsequent calculation. This is an essential feature for using the CAM functions as a subsequent consideration of the tool radius for the required target size must always be observed. If scaling is made afterwards via **WinPC-NC** parameter settings, the tool radius offset is also scaled.

Different settings can be made for the X and Y axes.

Join lines and contours

Activating this function means that **WinPC-NC** tries to create closed contours or continuous extended lines out of many individual lines and therefore the individual vectors are resorted and linked.

During the drawing process it may happen that consecutive lines do not exactly match to each other and as a result there are small spacings or contour crossovers. This kind of inexactness can be eliminated by the definition of a catching grid. The sorting function always tries to consider at first all the lines showing equal initial coordinates and end coordinates. Please note, that the fuzzy search via catching grid a tolerance is only made if no exact follow-on line is found.

By using an additional button the CAM function is induced to find and mark enclosed lines and contours, i. e. elements which are completely surrounded by other contours. This is an essential feature for a radius correction later on.

Tool diameter compensation

For compensating diameters or radii of used tools in path contours it is possible to compute a radius correction for closed contours and thus the actual paths can be offset by a special set distance to the inside or outside.

The radii values are set in the next dialog box. By using an additional button it is possible to assume the grey-coloured original lines and tool numbers exceeding 100 for the new graphics data output. Thus the visual control is simplified and former lines are not considered while job processing.

Minimize empty moves

Prior to the output of the calculated data in a new NC file, **WinPCNC** tries to optimize or minimize the empty moves between lines and contours. This saves processing time and helps to increase the plant's efficiency.

First of all the surrounded elements are considered and thereafter the corresponding contours. Thus it can be avoided that workpieces are machined that have previously already been completely milled.
