3 - S1g SEARCH Gap GREY

Description

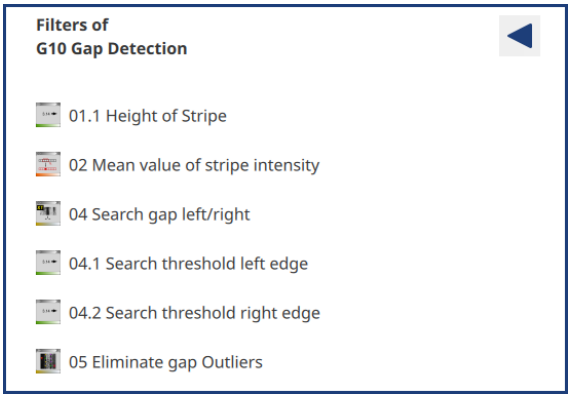
Searches the left and right gap border out of the grey intensity image. The gap is normally visible as a dark vertical band with more or less sharp edges.

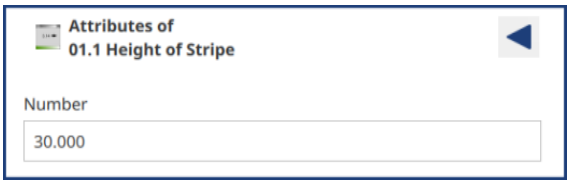
The rectangle of the ROI (**R**egion **O**f **I**nterest) is cut in small horizontal stripes. In each stripe a left and right gap border position is searched. The average over all positions gives the final position for the left and for the right border position.

Icon

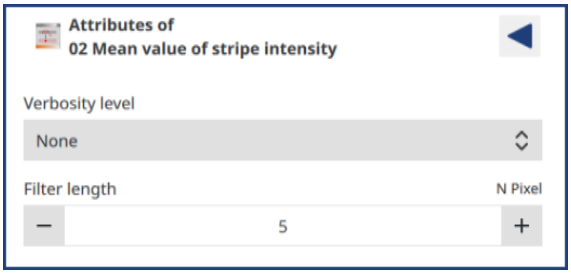
Parameters

G10 Gap detection





Parameter	Comment
Number	Height of horizontal stripes over the grey image ROI. [Pixel]

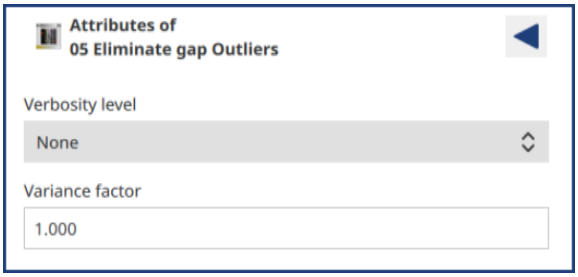


Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Filter length	The brightness values of every stripe are filtered for calculating the gradient. [Pixel]

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.

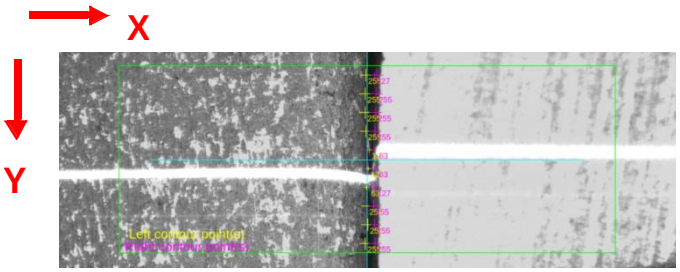
Parameter	Comment
Number	Checking the filtered brightness in a stripe to the left side, starting at the minimum, the search algorithm stops as soon as the value is reached and sets the "Found edge position". The measured value depends on the "Filter length". The higher the filter value the smaller the brightness changes. [Greylevel]

Parameter	Comment
Number	Checking the filtered brightness in a stripe to the right side, starting at the minimum, the search algorithm stops as soon as the value is reached and sets the "Found edge position". The measured value depends on the "Filter length". The higher the filter value the smaller the brightness changes. [Greylevel]



Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Variance factor	Eliminates outliers in the found contour points by comparison with the mean position of all contour points. [Pixel]

Verbosity example:
The defined features are searched in every stripe. At the position where the feature best fits (yellow and magenta crosses/numbers), the gap position is set as average over all found points.



- **Measured values for plotter**

- **Subgraphs interface**

IN bridges **OUT bridges**

image	Img	**value**	Gap pos X left / right grey
	ROI grey		Gap pos Y left / right grey
			Contour left / right
value	ROI grey Y		ImageSize
	ROI grey H		NumberSlices

Graph block diagram