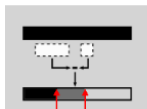# 5 - S2c SEARCH Seam GREY Gradient SP V2

■ Description

Search seam borders left and right by checking intensity changes.

The rectangle of the ROI (**R**egion **O**f **I**nterest) is cut in small horizontal stripes. In each stripe a left and right seam border position is searched. As an additional help the seam rim positions of the before image are used. The average over all positions gives the final position for the left and for the right border position.

■ Icon

5 S2c SEARCH Seam GREY Gradient SP V2

Search seam borders left and right, considering the old seam positions and a 'Start position'

■ Parameters

Filters of
5 S2c SEARCH Seam GREY Gradient SP V2

- 01.1 Expected seam width
- 01.2 Start Position seam
- 01.3 height of Stripe
- 02 Intensity of stripes
- 03 Mean value of stripe
- 05 Gradient
- 06 Mean value of Gradient left
- 07 Mean value of Gradient right
- 08 SelectPeaks
- 09 Eliminate pos Outliers
- 10 Pos seam borders X

**Attributes of
01.1 Expected seam width**

Number

100.000

Parameter	Comment
Number	"Expected" width for the seam when searching the seam rims in the new image. [Pixel]

**Attributes of
01.2 Start Position seam**

Number

300.000

Parameter	Comment
Number	Expected seam center position in the first image of the seam. [Pixel]

**Attributes of
01.3 height of Stripe**

Number

30.000

Parameter	Comment
Number	Number of lines in the image that are compressed to stripes for the seam detection. The higher the value the more lines are taken for the compressing. [Pixel]

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Attributes of
02 Intensity of stripes

Verbosity level

None

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

Attributes of
03 Mean value of stripe

Verbosity level

None

Filter length   N Pixel

3

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Filter length	The noisier the brightness is, the higher this parameter must be selected (1 - 100). This smoothens the brightness in every stripe before further processing. [Pixel]

Attributes of
05 Gradient

Verbosity level

None

Filter radius off seam   N pixel

5

Filter radius on seam   N pixel

5

Gradient type   N pixel

Dark seam

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

Filter radius off seam	The noisier the brightness is, the higher this parameter must be selected (1 - 100). This smoothens the brightness in every stripe before further processing. Value is for the stripe part **outside** the seam. [Pixel]
Filter radius on seam	The noisier the brightness is, the higher this parameter must be selected (1 - 100). This smoothens the brightness in every stripe before further processing. Value is for the stripe part **inside** the seam. [Pixel]
Gradient type	How to check gradients at seam border: **Absolute** = don't care if the seam intensity is higher or smaller than the blanks intensity **Dark seam** = the intensity in the seam is expected to be smaller than the intensity outside on the blanks **Bright seam** = the intensity in the seam is expected to be bigger than the intensity outside on the blanks

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Filter length	The noisier the brightness is, the higher this parameter must be selected (1 - 100). This eliminates too small intensity changes. Value for the left seam rim. [Pixel]

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

Filter length	The noisier the brightness is, the higher this parameter must be selected (1 - 100). This eliminates too small intensity changes. Value for the right seam rim. [Pixel]

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Display stripe	Shows additional graphical information about the selected stripe. 0 no information >= 1 Information about that stripe
Left gradient threshold	Minimum brightness gradient in one stripe that is taken and, in order to detect the seam rim, must be surpassed. Separately for the left side. [Greylevel]
Right gradient threshold	Minimum brightness gradient in one stripe that is taken and, in order to detect the seam rim, must be surpassed. Separately for the right side. [Greylevel]
Max. position distance	Max. allowed distance of the new seam rim position to the position from the before image.

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Variance factor	Allowed distance of the point's position that the position is used. Otherwise it's position is replaced through the 'mean position'.

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

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- **Measured values for plotter**

- **Subgraphs interface**

IN bridges   **OUT bridges**

image	Img	image	ROI preSeam
	ROI grey		
		value	ROI preSeam X
value	ROI grey X		ROI preSeam Y
	ROI grey Y		ROI preSeam W
	ROI grey W		ROI preSeam H
	ROI grey H		ROI preSeam valid
	ROI grey valid		Seam pos left
			Seam pos right

Graph block diagram