

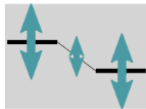


5 - S21 SEARCH Seam LINE width

■ Description

Search seam borders left and right out of the vertical size of the laser line.









■ Icon




5 S21 SEARCH Seam LINE width
Search seam borders left and right

■ Parameters

Filters of 5 S21 SEARCH Seam LINE width

-  04 Track Averaging
-  05 LineWidth
-  06 LineIntensity
-  07 LineAdder
-  08 Width Averaging
-  09 LinesWidthMinimum
-  09.1 min. SeamWidth
-  09.2 max. SeamWidth


Attributes of
04 Track Averaging

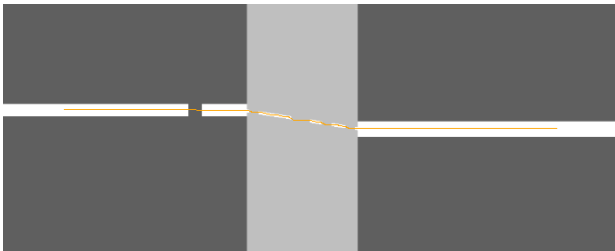
Verbosity level
 None

Filter length
 N Pixel
 4



Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Filter length	Number of pixels in X direction, used for averaging the brightness in order to define the next point of the laser line. [Pixel]

Verbosity example:

The orange line shows the found laser line points from the tracking.






**Attributes of
05 LineWidth**


Verbosity level
 None

Threshold gray value
 — 255 +

Height of the search area. Pixel
 — 15 +

Dark Soot threshold
 — 0 +

Light Soot threshold
 — 20 +

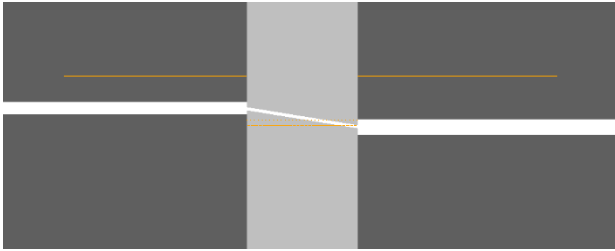
Dark Soot Factor 1/10
 — 30 +


Light Soot Factor 1/10
 — 20 +

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Threshold	Minimum grey scale value for an image pixel that it's defined to belong to the laser line. [Greylevel]
Height of the search area	Upwards and downwards laser line search area (vertical). Height of the search area = 30 means: 30 pixels upwards and also 30 pixels downwards from a straight line between the laser line start points. [Pixel]
Dark Soot threshold	Limit value for dark grime. If the mean value for the brightness, measured in an area 20 - 70 pixels above, respectively 20 - 70 pixels below the straight line, and 50 pixels wide through the start points, does not exceed this value, there is dark grime lying on the steel sheet in this area. [Greylevel]
Light Soot threshold	Limit value for light grime. If the mean value for the brightness, measured in an area 20 - 70 pixels above, respectively 20 - 70 pixels below the straight line, and 50 pixels wide through the start points, does not exceed this value, but is higher than "Dark Soot threshold", there is light grime lying on the steel sheet in this area. [Greylevel]
Dark Soot Factor	Factor for widening up the found line width when having dark grime (in 1/10th).
Light Soot Factor	Factor for widening up the found line width when having light grime (in 1/10th).

Verbosity example:

The orange line shows the calculated 'laser line width'.



 **Attributes of**
06 LineIntensity

Verbosity level

None

Height of the search area. Pixel

-

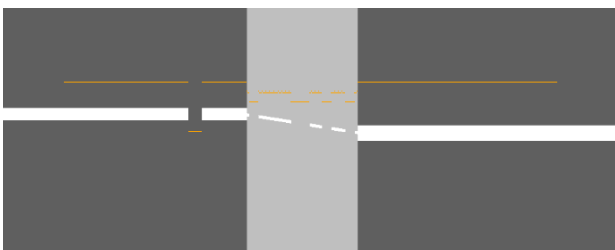
10

+


Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Height of the search area	Upwards and downwards laser line search area (vertical). Height of the search area = 10 means: 10 pixels upwards and also 10 pixels downwards from a straight line between the line start points. [Pixel]

Verbosity example:

The orange line shows the 'laser line' intensity.






**Attributes of
07 LineAdder**

Verbosity level
 None

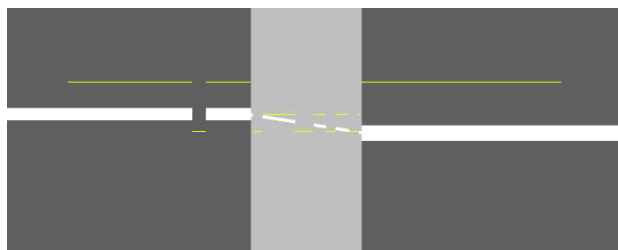
Factor 1
 - 1 +

Factor 2
 - 0 +

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Factor 1	Factor 1 0 = not used 1 = used
Factor 2	Factor 2 0 = not used 1 = used

Verbosity example:

The orange line shows the 'laser line' intensity with factorisation.



Verboesity level
 None

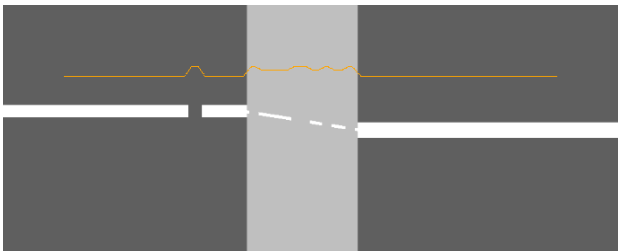
Filter length
 N Pixel

-

 +

Parameter	Comment
Verboesity level	Selection of verboesity level. Larger verboesity levels offer more overlay information.
Filter length	Number of pixels in X direction, used for averaging the calculated laser line width. [Pixel]

Verboesity example:
 The orange line shows the averaged 'laser line width'.

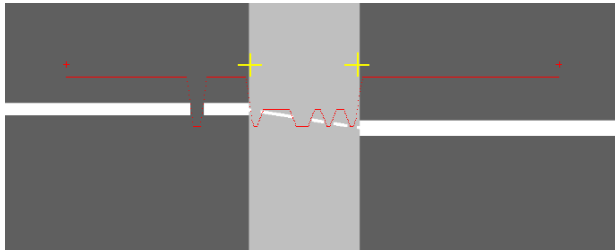


Verboesity level
 None

Parameter	Comment
Verboesity level	Selection of verboesity level. Larger verboesity levels offer more overlay information.

**Verbosity example:**

The red line shows the calculated laser line width minima. The two yellow crosses mark the left/right seam positions out of the laser line width minima.



Attributes of
09.1 min. SeamWidth

Number

Parameter	Comment
Number	Min. expected seam width for 'intensity minimum' search. [Pixel]

Attributes of
09.2 max. SeamWidth

Number

Parameter	Comment
Number	Max. expected seam width for 'intensity minimum' search. [Pixel]






■ Measured values for plotter

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■ Subgraphs interface

IN bridges

OUT bridges

 image	Image ROI line	 image	ROI preSeam
 Line	Line	 value	ROI preSeam X ROI preSeam Y ROI preSeam W ROI preSeam H ROI preSeam valid Seam pos left Seam pos right
 value	ROI line X ROI line Y ROI line W ROI line H ROI line valid		

■ Graph block diagram

