

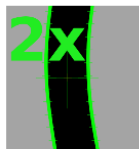
## 3 - S3c CALC Gap position Linear+Circle GREY

### ■ Description

Calculates the **gap position** out from the chosen subgraph (S13 or S1h), supposing that the gap is bowed or vertical linear.

The rectangle of the ROI (**R**egion **O**f Interest) was cut in small horizontal stripes. Now in each stripe the brightness curves are analyzed.

### ■ Icon



3 S3c CALC Gap position Linear+Circle GREY

Calculate gap position, gap width and height difference.

Selection of gap position Circle or Linear

### ■ Parameters

#### Filters of

#### 3 S3c CALC Gap position Linear+Circle GREY



01 Gap correction thickness



01.1 Gap offset left in Pix



01.2 Gap offset right in Pix



01.4 Fix gap correction reference



02 Maxjump gap position Y in pixel



10 ROI width of blank intensity check left/right



11 Plausibility min part present intensity



12 Plausibility max gap intensity


**Attributes of**  
**01 Gap correction thickness**


Weighting
 

-
 
 +

 Percent

Parameter	Comment
Weighting	<p>Normally, the position of the gap is set to be in the middle of the measured gap (value "Weighting" = 50%). With a smaller percentage value the found position is set near the gap side defined as "Reference" in '01.4 Fix gap correction reference', with a bigger percentage value the found position is set near the gap side opposite to the side defined as "Reference" in '01.4 Fix gap correction reference'.</p> <p>Value 0% sets the position on the "reference" gap border, value 100% sets the position on the gap border opposite to the "reference".</p> <p>[Percent]</p>


**Attributes of**  
**01.1 Gap offset left in Pix**


Number

Parameter	Comment
Number	<p>Moves the left found gap position inside the gap.</p> <p>[Pixel]</p>


**Attributes of**  
**01.2 Gap offset right in Pix**


Number

Parameter	Comment
Number	<p>Moves the right found gap position inside the gap.</p> <p>[Pixel]</p>



Attributes of  
01.4 Fix gap correction reference

Number

0.000

Parameter	Comment
Number	Set the reference side for "Weighting" in '01 Gap correction thickness': 0 = Use the <b>thicker blank</b> as reference side. If both have same thickness, use the left side as reference. 1 = Set the left side fix as reference side.

Attributes of  
02 Maxjump gap position Y in pixel

Maximum jump width

30 (100)

AddOn per image

5 (100)

Parameter	Comment
Maximum jump width	Horizontal range around the "expected position" where the gap must be found. The <i>expected position</i> is the found gap position of the before image. If the new gap position value is more than "Maximum jump width" away from the expected position, the value of "expected position" is used as output. [Pixel]
AddOn per image	If the new gap position value is more than "Maximum jump width" away from the "expected position", the value of "Maximum jump width" is increased by "AddOn per image". If the new gap position value is inside the actual range of "Maximum jump width", the value for "Maximum jump width" is reset to the given value in "Maximum jump width". [Pixel]

Attributes of  
10 ROI width of blank intensity check left/right

Number

30.000

Parameter	Comment
Number	The number of pixels in direction to the gap, starting at the left/right border of the grey scale ROI, serving for calculating the left/right reference brightness in the corresponding stripe. [Pixel]


**Attributes of**  
**11 Plausibility min part present intensity**

Number

Parameter	Comment
Number	Minimum mean intensity value for 'part present' check left and right in the corresponding stripe. [Greylevel]


**Attributes of**  
**12 Plausibility max gap intensity**

Number

Parameter	Comment
Number	Maximum allowed intensity value in the gap. [Greylevel]

#### ■ Measured values for plotter

504	0 ... xxx	Ypos cam mm
510	0 ... xxx	Zpos cam mm
558	0 / 1	Plausibility Intensity error
575	0 ... 255	Intensity Part left
576	0 ... 255	Intensity Part right
577	0 ... 255	Intensity Gap
581	-xxx .. +xxx	TCP_x
582	-xxx .. +xxx	TCP_y
583	0 .. xxx	HWROI_x
584	0 .. xxx	HWROI_y



## Subgraphs interface

### IN bridges

### OUT bridges

<b>image</b>	Img	<b>value</b>	Intensity ROI left / right Intensity ROI gap Gap pos X left / right Gap pos X / Y corr Plaus error gapPos Ypos cam mm Zpos cam mm
<b>value</b>	ROI grey X / Y ROI grey W / H Gap pos X left / right Gap pos Y left / right Circle pos left / right Circle pos left / right Is circle		

## Graph block diagram

