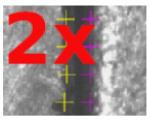
3 - S3b CALC Gap position Linear GREY

Description

Calculates the **gap position** out from the chosen subgraph (S12 or S1g), supposing that the gap is vertically linear.

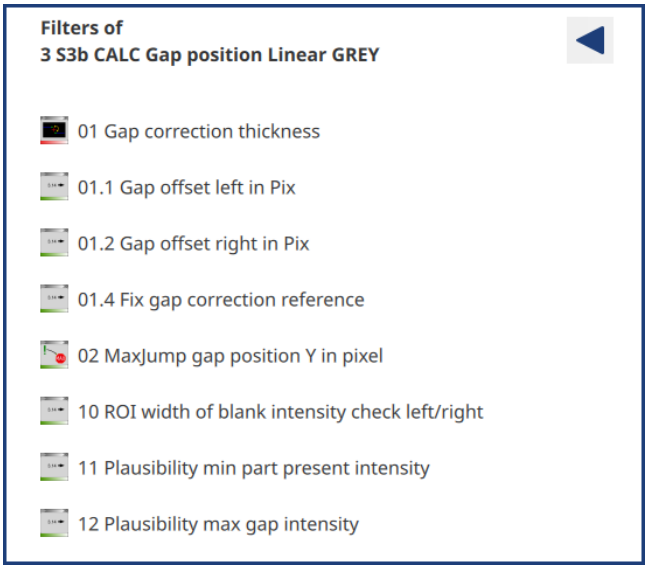
The rectangle of the ROI (**R**egion **O**f **I**nterest) is cut in small horizontal stripes. In each stripe we now analyze the brightness curves.

Icon



3 S3b CALC Gap position Linear GREY
Calculate gap position.

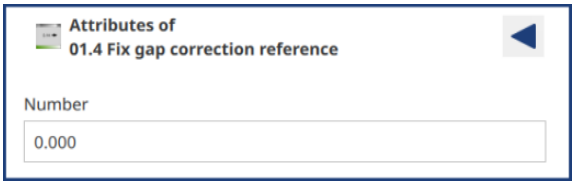
Parameters



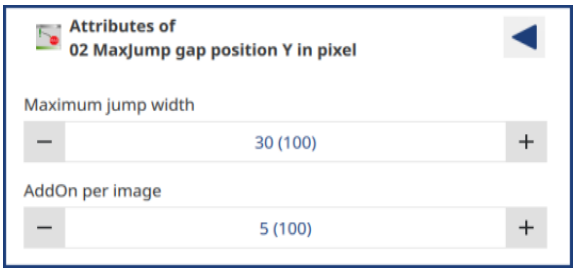
Parameter	Comment
Weighting	Normally, the position of the gap is set to be in the middle of the measured gap (value "Weighting" = 50%). With a smaller percentage value the found position is set near the gap side defined as "Reference" in '01.4 Fix gap correction reference', with a bigger percentage value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

Parameter	Comment
Number	Moves the left found gap position inside the gap. [Pixel]

Parameter	Comment
Number	Moves the right found gap position inside the gap. [Pixel]



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



Parameter	Comment
Maximum jump width	Horizontal range around the "expected position" where the gap must be found. The *expected position* 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]

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 average left/right reference brightness in the corresponding stripe. [Pixel]

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

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

Measured values for plotter

504	-xxx … xxx	Ypos cam mm
510	-xxx … 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

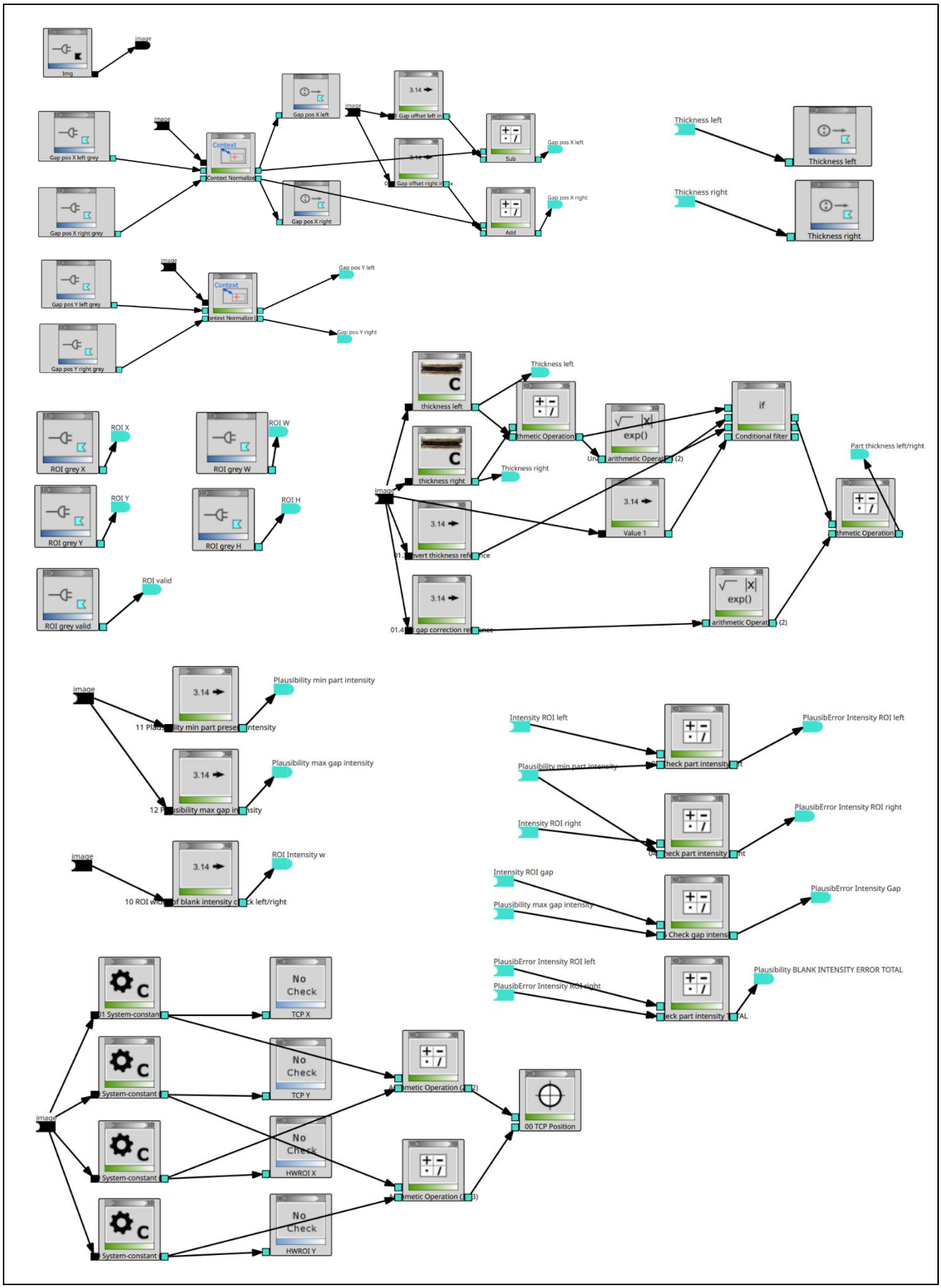
Subgraphs interface

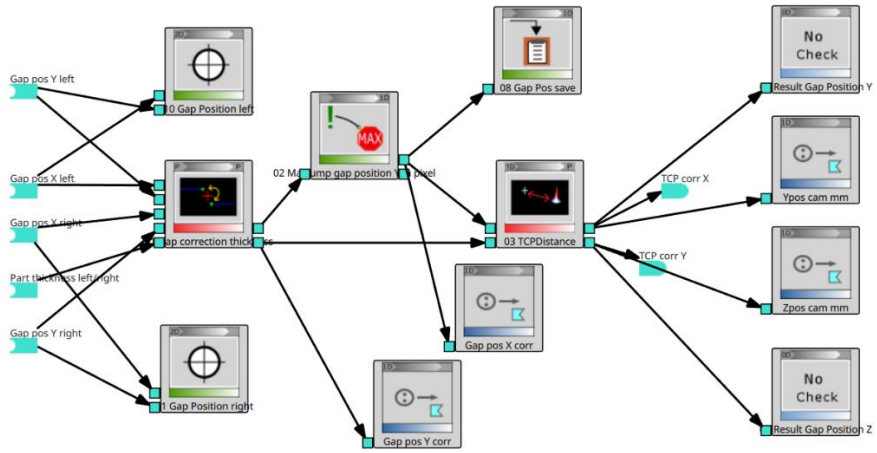
IN bridges

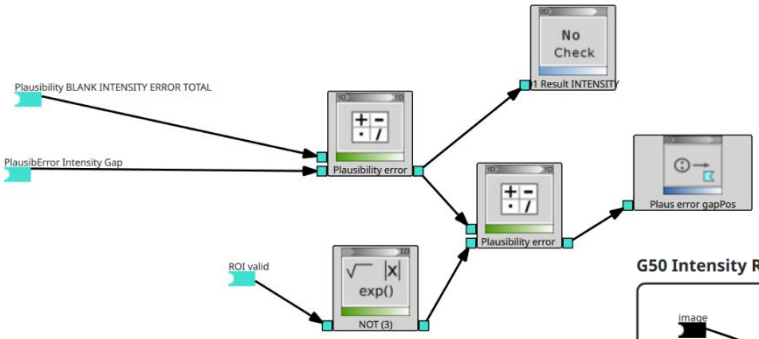
OUT bridges

image	Img	**value**	Gap pos X left / right
			Gap pos Y corr
value	ROI grey X / Y		Thickness left / right
	ROI grey W / H		Intensity ROI left / right
	Gap pos X left / right grey		Intensity ROI gap
	Gap pos Y left / right grey		Plaus error gapPos
			Ypos cam mm
			Zpos cam mm

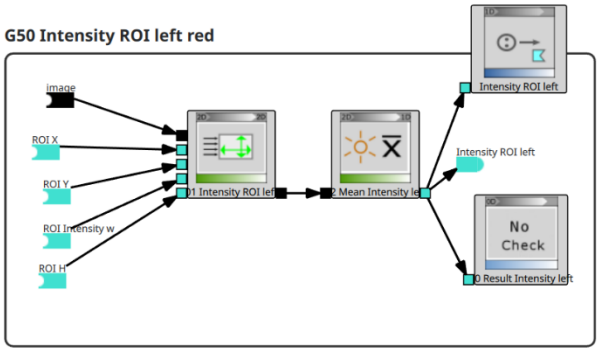
Graph block diagram



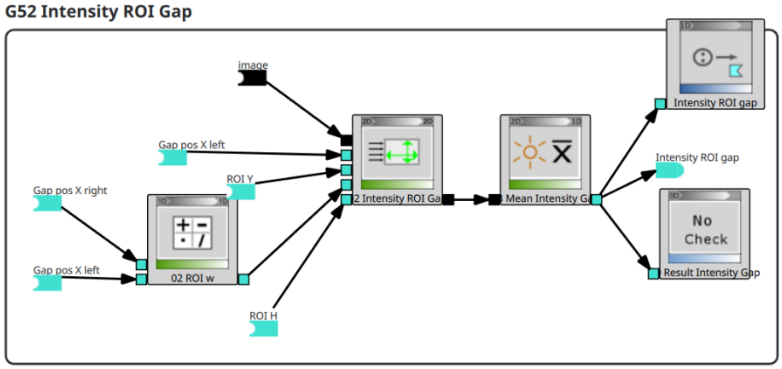




G50 Intensity ROI left red



G52 Intensity ROI Gap



G51 Intensity ROI right red