

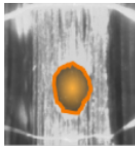


5 - S51 CALC Pore_Blob

■ Description

In the found seam area the pore/blob characteristics will be calculated and classified.

■ Icon




5 S51 CALC Pore_Blob


Calculate and classify the characteristics of the pores/blobs

■ Parameters

Filters of
5 S51 CALC Pore_Blob



 00 Blob Classifier


 01 Binarize


 02 Morphologie

 03 Blob Detection

 05 Main Axis

 06 Bounding Box

 08 Surface


**Attributes of
00 Blob Classifier**

Verboesity level
None

Minimal size mm²
0.200

Maximal size mm²
5.000

Minimal width mm
0.100

Minimal height mm
0.100

Maximal principal component ratio
3.300

Minimal contrast
50.000

Maximal surface
500.000

Parameter	Comment
Verboesity level	Selection of verboesity level. Larger verboesity levels offer more overlay information.
Minimal size	Minimum pore area. All smaller areas are for sure no pore. [mm ²]
Maximal size	Maximum pore area. All bigger areas are for sure no pore. [mm ²]
Minimal width	Min. necessary horizontal dimension for a pore. [mm]
Minimal height	Min. necessary vertical dimension for a pore. [mm]
Maximal principal component ratio	Maximum pore shape. The shape is defined by the length ratio of the main axis to the side axis of a pore. With a circle, the length ratio equals 1:1 and results in a value 1. The longitudinaler the shape of the pore, the higher is this value.
Minimal contrast	Minimum brightness difference in the area of a pore compared with the outside area. The darker a pore is, compared with the weld seam, the higher is the contrast value. [Greylevel]
Maximal surface	Maximum brightness variation inside a pore. The uniform the color of a pore, i.e. the less different grey scale values inside the pore, the smaller this value can be selected. [Greylevel]



**Attributes of
01 Binarize**

Verbosity level

None

Threshold / offset (see thresholding mode)

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Threshold / offset	Binarizing is a dimensioning for the grey scale value of a pore. The higher this value is set, the darker a pore must be, compared to the weld seam. The smaller the value is set, the more pore candidates are extracted from the image. [Greylevel]

**Attributes of
02 Morphologie**

Verbosity level

None



Number of operations

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Number of operations	Parameter for filtering/smoothing the binarized image.

**Attributes of
03 Blob Detection**

Minimal blob size

Parameter	Comment
Minimal blob size	Minimal blob size, which is found. [µm]


**Attributes of
05 Main Axis**




Verbosity level
 None

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


**Attributes of
06 Bounding Box**


Verbosity level
 None

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


**Attributes of
08 Surface**


Verbosity level
 None

Surface feature Enum
 Variance

Parameter	Comment
Verbosity level	Selection of verbosity level. Larger verbosity levels offer more overlay information.
Surface feature	Which value is calculated for "Surface": <ul style="list-style-type: none"> • Variance • Min-max-distance • Gradient X • Gradient Y • Mean intensity



■ Measured values for plotter

720	0 ... xxx	Pore/Blob Size
721	0 ... xxx	Pore/Blob Count

■ Subgraphs interface

IN bridges

OUT bridges

image	ROI seam	value	Pore size
value	ROI grey valid		

■ Graph block diagram

