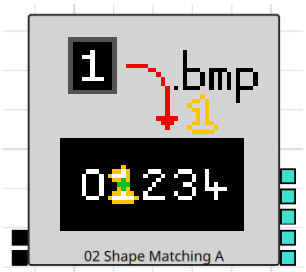
Precitec Macro Documentation

02 Shape Matching

Changelog

Date	Version	Autor	Tested on	Description
2022-05-11	A	Wre	5.16.4	New documentation
2022-06-09	B	Wre	5.16.16	UserLevels Bug fixed

Description



Searches for a Shape based on a Template in the ROI and outputs the detected Position

I1: Image

I2: ROI

O1: Position X in pixel

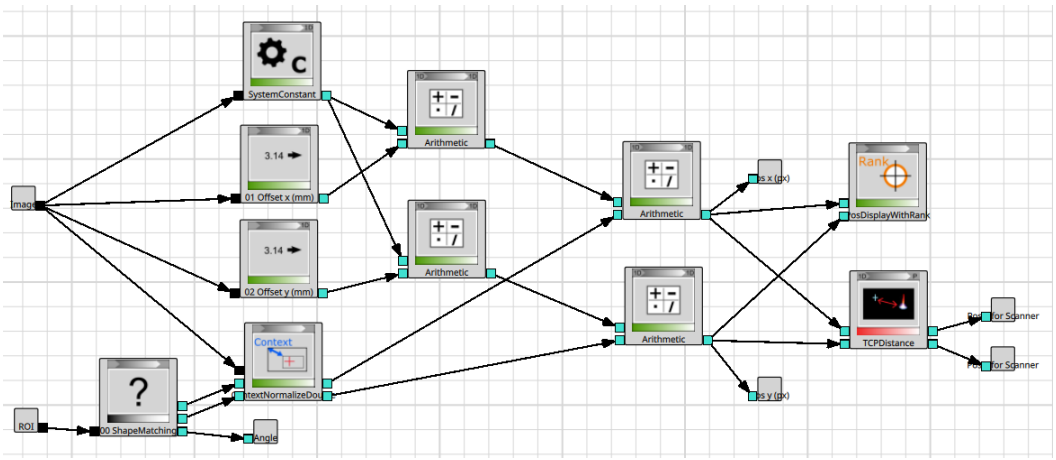
O2: Position Y in pixel

O3: Position X for Scanner

O4: Position Y for Scanner

O5: Angle

- **Macro structure**



Detects a Shape based on a Template inside the ROI (if no ROI desired, input can also be the image). Possibility to add Offsets on the desired Position.

- **Parameter**

NAME	VALUE	Description	UserLevel
00 ShapeMatching → Verbosity	**Low**	Visibility of Position	SuperUser
00 ShapeMatching → Template File Name	**.bmp File on System**	.bmp which will be used to generate shape	SuperUser
00 ShapeMatching → Blur	**3**	Value to round edges of the template	SuperUser
00 ShapeMatching → Contrast	**60**	Brightness change value needed to extract an edge from the template image as a shape	SuperUser
00 ShapeMatching → Pyramid Levels	**3**	Downsampling to improve Algorithm process time	SuperUser
00 ShapeMatching → Angle Start	**0**	Start Angle in degree, by which the shapee will be rotated	SuperUser
00 ShapeMatching → AngleExtent	**1**	Amount of degrees, by which the shape will be rotated starting at the Angle start value	SuperUser

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00 ShapeMatching → Min Score	**0.7**	Minimal Score Value (0->1) needed for a shape to be accepted	SuperUser
00 ShapeMatching → Greediness	**0.9**	Greediness of the Algorithm to find a matching shape	SuperUser
00 ShapeMatching → MaxOverlap	**0.5**	Maximal overlap of 2 shapes	SuperUser
00 ShapeMatching → MaxMatches	**0**	Amount of shapes used which have a high enough Score value (0 → infinte shapes; 1 → only 1 shape with highest score …)	SuperUser
01 Offset x (mm) → Number	**0**	Offset in X direction in mm	Operator
02 Offset y (mm) → Number	**0**	Offset in Y direction in mm	Operator