

Particle Finder Application description

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Introduction

The customer is using a Keyence digital microscope to grab images of specimen where particles must be detected within a circle.

The images are all saved into a folder which is defined by the microscope.

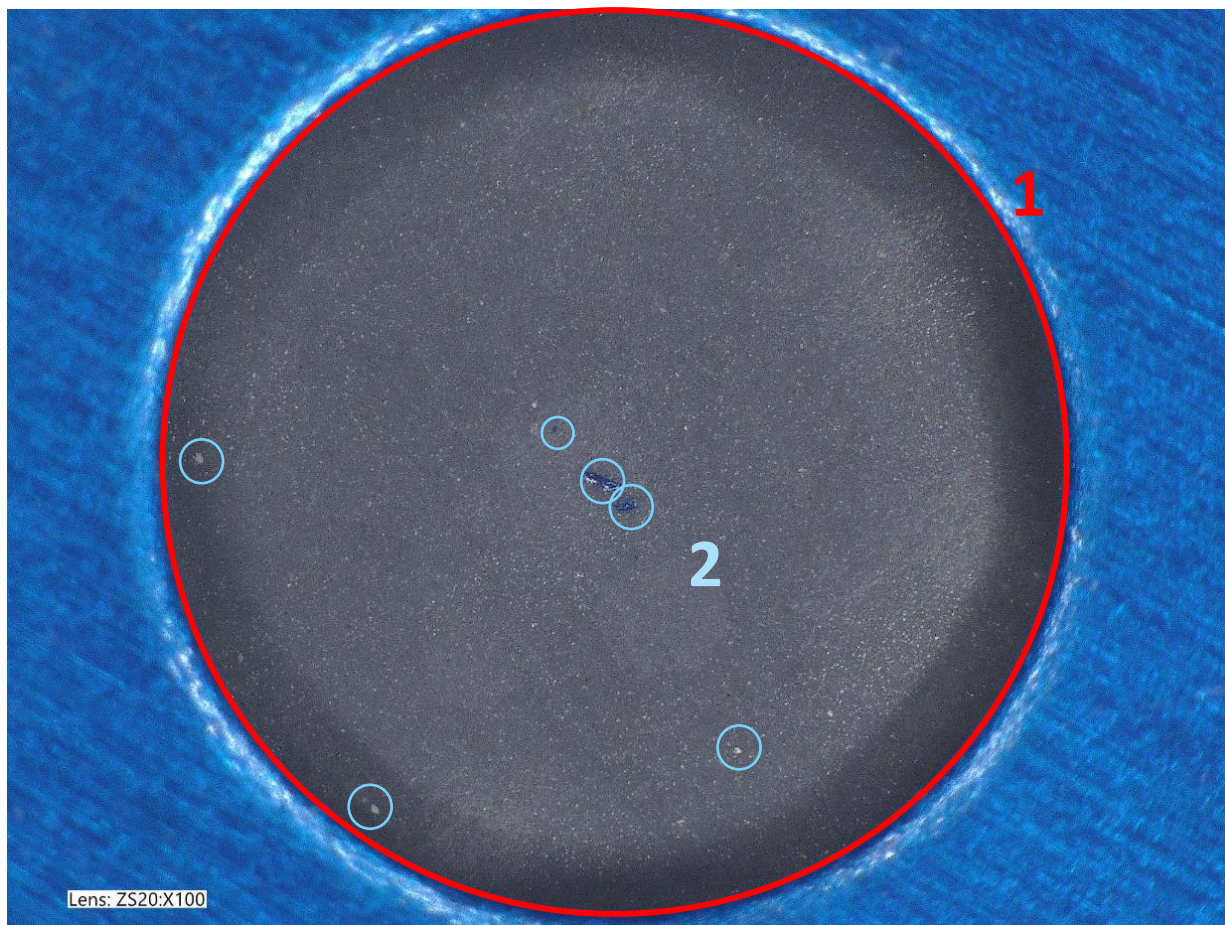
Prozess

Writing recipe

- Start IDC particle finder software
- Open one image
- Define circle (1) for area of interest
- Define criteria for particles (2) to be found based on color range (RGB) and group of pixels.
NOTE! Several particle colors can be present within the area of interest. Multiple criterial must be defined.
- Store recipe

Analyze images

- Start IDC particle finder software
- Open recipe
- Open image folder
- Press «analyze»
- Find particles and who the with a frame or circle on each image
- Calculate the surface area of the area of interest and of each particle
- Sum up surface area of all particles and display them in % of the area of interest
- Output excel or csv with:
 - Image name
 - Amount of particles found per image
 - Surface area of area of interest
 - Surface area of all particles found
 - Percentage between the two areas
 - One line per image



NOTE! In the above example, there are blue and white (slight yellow) particles. For this kind of analysis, two particle types must be defined in the recipe.