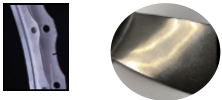


Input Parameters for Aerospace Robotic Surface Inspection

Complex Parts



High mix and low volume

Defects to Identify



Dent Scratch Chip

Acceptable defect size < 0.1 mm

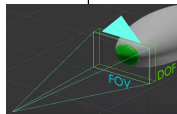
Robotic Camera Selection



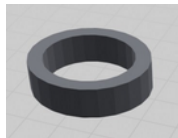
Defect size driven camera resolution selection

Viewpoint Generation

Where should the robot move in order to image a part?



Camera model

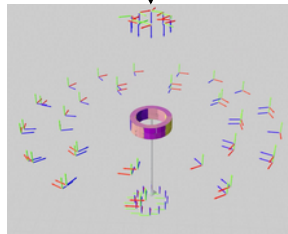


Surface model

Automated Viewpoint Tool

Bayesian optimization

K-means segmentation



Viewpoints satisfying FOV and DOF parameters

Inputs for Inspection Planning

Robot Poses

Intelligent Robotic Imaging

