

# Damage detection on stones

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## 1 Problem statement

In a common stone refinement pipeline, quality assurance is done by humans, causing a non-uniform selection in damaged stones. Furthermore, the most expensive component within a pipeline is human work. To save money and to optimize the pipeline a stone production company would like to automate the process of damage detection and the sorting of identified stones.

This project deals with the first step, the automated detection and localization of damage on stones.

## 2 Dataset

## 3 Solution

The main focus of this project is to train a neural network, such that damaged stones can be identified. In order to achieve that .... (Investigate which model). In terms of implementation setup we will be using Keras/Tensorflow on an Anaconda environment.

## 4 Expected results

Selecting and training a neural network model which is capable of identifying damaged stones with high accuracy and efficiently.