

# MASTER THESIS Hedared Sand & Betong AB

- Better quality and work environment -



## Background

We manufacture concrete blocks for retaining walls in gardens, on industrial sites and along highways. The blocks are assembled in layers which are connected with vertical glass fiber pins. The block dimensions (both internal and external) are critical for a perfect fit. Today we check the dimensions manually.

## Tasks

- Develop and automate the geometry check to ensure that our blocks meet the expectations of our customers (instead of solely relying on the human eye).
- Find a way to analyze which anomalies early in the process that causes deviations later on in the process.
- Review and develop the possibilities of mounting laser scanner, camera etc. to enhance the surface control of our blocks.

## Goals

Expected results of the master thesis:

- Practical use of modern technology (laser scanning or imaging) to find geometric deviations.
- Developing and formulating solutions to reduce the rejection of blocks that do not meet market expectations.
- Identify further focus areas and work

## Means

Office, computer and software will be arranged by university and Hedared Sand & Betong AB.

## Conduction

This thesis needs two students. The time period: December 2020 to March 2021.

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