

## General Information

- **Project Title:** Development of a Multifunctional Façade and Exterior Finishing Robot for The Construction Industry Council (CIC) in Hong Kong
- **Project Acronym:** CIC Consultancy Project
- **Sponsor/Client:** Construction Industry Council Hong Kong (CIC)
- **Budget:** ca. 200.000 €
- **Duration:** 2017 - 2018

## Abstract

The consultancy project commissioned by the Construction Industry Council (CIC) in Hong Kong evaluates the current on site construction operation and identifies the existing bottlenecks that can be enhanced by implementing robotics and automation. This project highlights the activities that signify these objectives, which include five key activities: literature review, industry survey, on site case study, co creation workshops and potential pilot project. As a result, a range of robotic applications that are tailor made for Hong Kong public housing industry are recommended and hierarchically categorized.

## Key Facts

- The proposed multifunctional façade and exterior finishing robot aims to inspire the construction industry to initiate and explore innovative robotic solutions
- The proposed main functions are exterior painting, concrete wall grinding and water tightness inspection



Figure 1: The visualisation shows the multifunctional modular façade-processing robot for finishing works in high-rise housing construction in Hong Kong



Figure 2: A 1:2 semi functional prototype of multifunctional façade processing robot was built and tested in laboratory as a proof of concept