

# ABB ROBOTSTUDIO - SORTING MACHINE

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## 1 Introduction

This assignment for subject VRM (Programming robots and manipulators) focuses on controlling multiple robots using the simulation tool RobotStudio ABB. The task was to create sorting production line according to described basic RobotStudio functionalities such as commands in RAPID editor.

## 2 Description

In project are used environment items like tables or barriers that could have been used in real workspace. The main controlled objects consists of two robots ABB IRB 1200-5-90, conveyor in between of them, items for sorting on right table and finalizing box on left table. The main idea of project is to make option which items from right table should be set into transportation form that is also set on conveyor by first robot arm. After these operations conveyor moves linearly towards second robot arm where items are stopped by movement sensor. Finally items are moved from conveyor into crate and sealed with cover. Whole situation also visualised on Fig. 1.

## 3 Conclusion

This project is especially suitable for beginners with RobotStudio software. Users will learn writing basic commands in Rapid editor, moving and placing objects and targets, working with paths, setting up station logic of controller and other necessary operation on base level of abilities in this software.

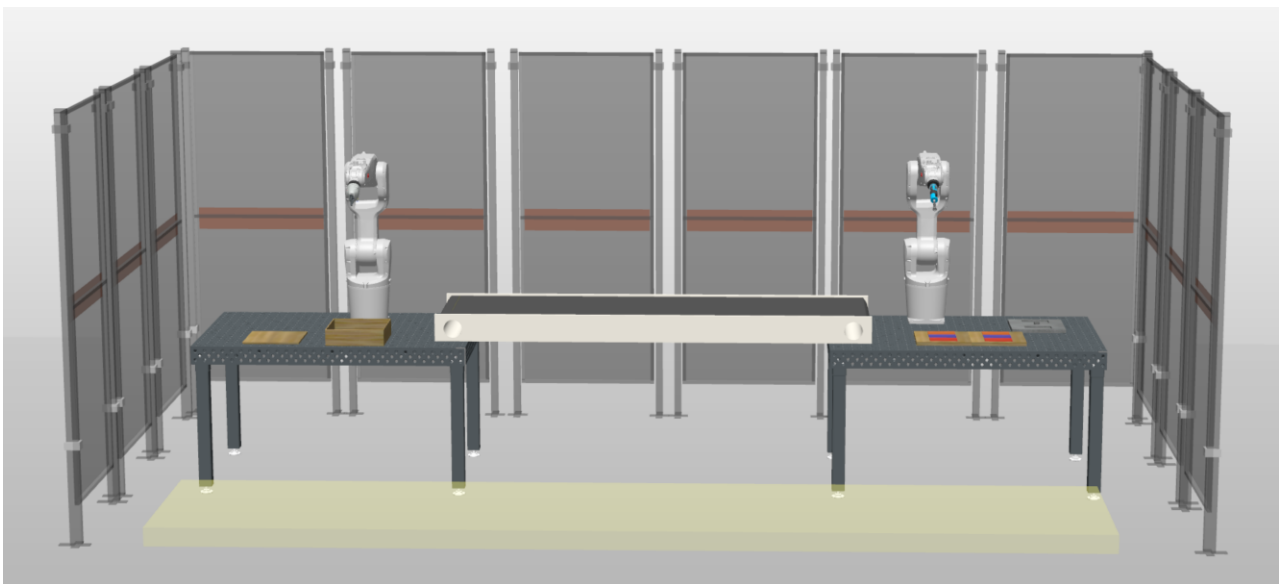


Figure 1: Sorting machine workspace