

# Industrial Automation Project 3/4

## Vertical Revolving Handling Device

Status: Available

Group Members:

Sponsor(s): School of Mechatronic Systems Engineering, SFU

Supervisor(s): Amr Marzouk, Ph.D., P.Eng., Lecturer, Mechatronic Systems Engineering  
Taha Al-Khudairi, M.A.Sc., P.Eng., Lab. Manager, Mechatronics Systems Engineering

### Project Description

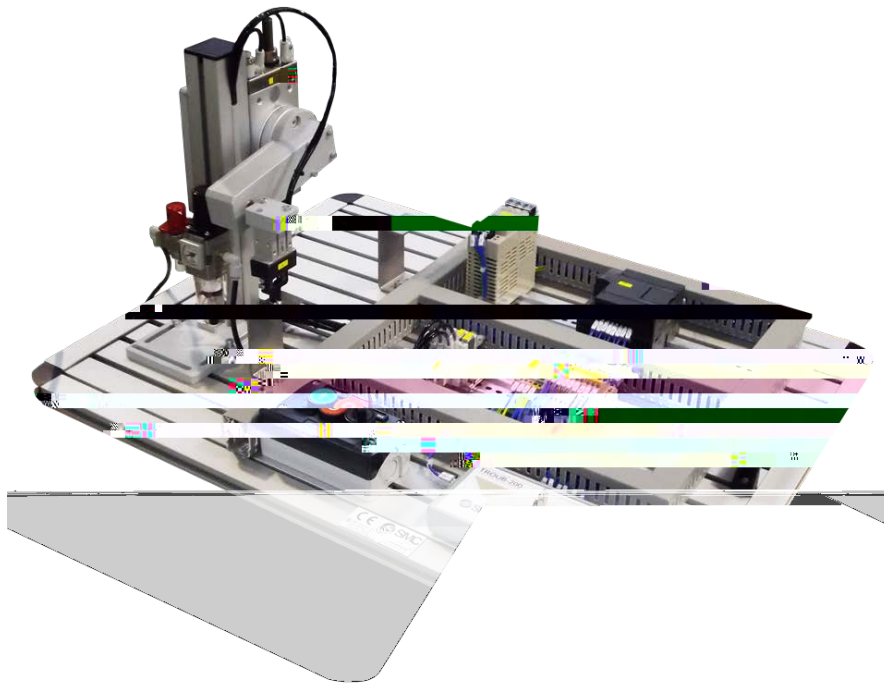
IMPORTANT: Students taking this project will need to apply for the Siemens Mechatronic Systems Certification Program (SMSCP). The program is a collaboration between SFU's School of Mechatronic Systems Engineering and Siemens™.

Successful completion of two training courses on Project management and Technical Design will result in a certificate of participation from SFU Mechatronics. The courses will be conducted during weekly meetings with the project supervisors.

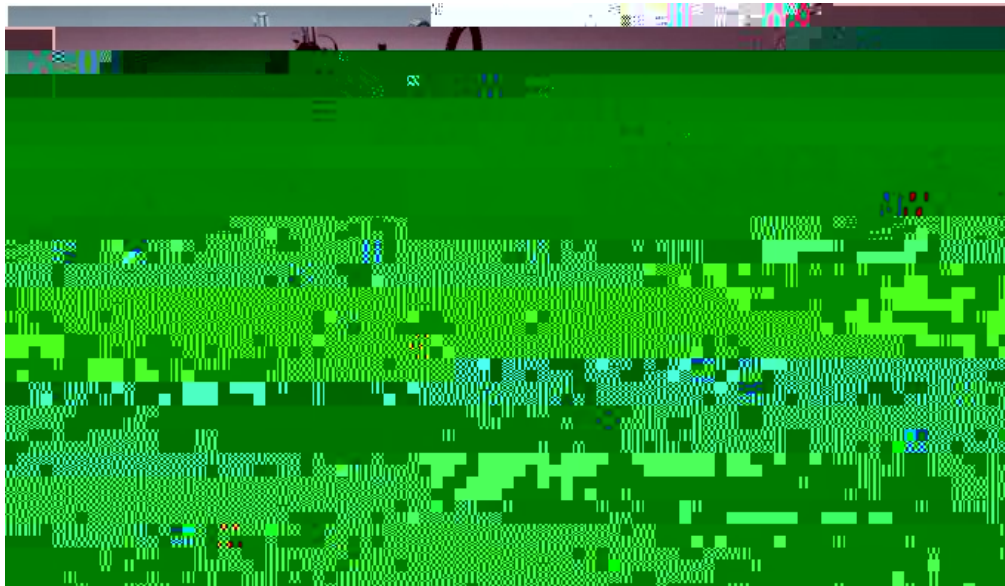
Additional fees will be required to enrol in SMSCP (\$1250/student; Siemens exam fee of \$250/person is extra). For more information regarding prerequisites, certifications and other details, please contact the SMSCP program coordinator Dr. Amr Marzouk [amm10@sfu.ca](mailto:amm10@sfu.ca)

### Background

Since the beginning of the first industrial revolution in 1700s, new technologies have been constantly developed to improve processes and production. The vision for Industry 4.0 (i.e. the fourth industrial revolution) includes establishing machine to machine (m2m) with eventual



*Figure 1: An example assembly of MAP-203 - Vertical Revolving Handling Device <sup>1</sup>*



*Figure 2: FESTO MPS Automated Production System<sup>2</sup>*

---

<sup>1</sup> <https://www.smctraining.com/en/webpage/indexpage/414>

<sup>2</sup> <https://ip.festedidactic.com/InfoPortal/MPS/Overview/EN/index.html>