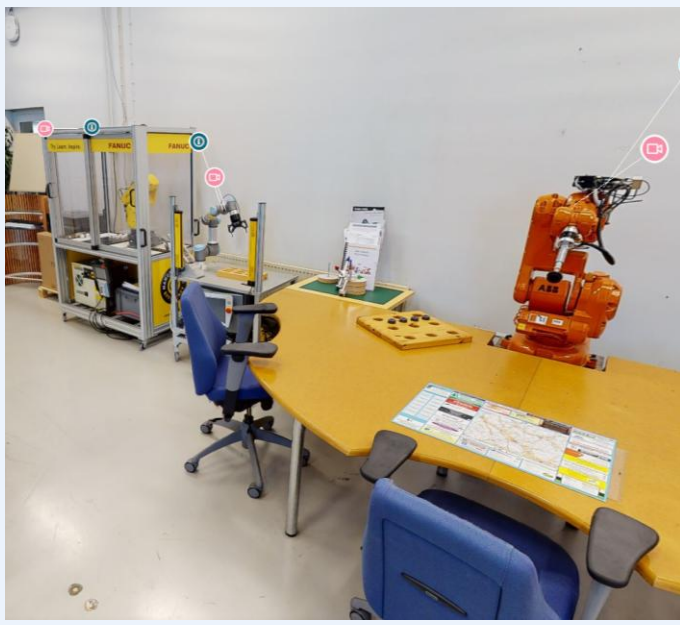
Advanced Makerspaces for PiLot production by micro-Enterprises

Centria Robot-assisted manufacturing

Robots of All Sizes: From small to massive

Introduction

Robots can be utilized in many areas of industry. They are beneficial in process automation, ensuring accuracy and repeatability, as well as optimizing production speed. In addition, they enable data collection and analytics, which can improve production line monitoring, predictive maintenance, and resource management. Robots can also be applied in various precision-demanding manufacturing processes such as printed electronics, 3D printing, and rapid diagnostics or in processing materials harmful to humans.



Compact robots 3-35kg

How Does it Work?

The movements of an industrial robot are programmed to follow the desired motion paths. Various tools can be attached to the robot, such as grippers, welding torches, screwdrivers, cutting heads, painting and spraying nozzles, quality inspection tools, and 3D printing heads, allowing the same robot to be utilized in a wide range of manufacturing, pre-treatment and assembly processes.

Heavy-duty robots up to 200kg

Applications

- Grippers for material handling
- Welding torches for automated welding
- Screwdrivers for assembly tasks
- Cutting heads for machining and trimming
- Painting and coating nozzles for surface finishing and additive printing
- Quality inspection tools for process monitoring and control
- 3D printing heads for additive manufacturing

Learn more:
https://centria.fi/robo3d-lab

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