



Student Learning Module: “My personalized trolley chip”

The Omega Group will design and manufacture a trolley chip assembly station. The parts will be designed from an international team of design companies from different European countries. After the design is finalized, the parts will be printed with a 3D printer in each company. Then the printed parts will be assembled together with the purchased parts and the PLC-program will be written, implemented and tested.

The idea of the trolley chip assembly station is, that the customer can create with an app on his smart phone his personalized version of a shopping cart trolley chip. The chip will be assembled out of two components, the bottom part and the insert. The customer can select the bottom part in different colors and the insert with different colors, designs or logos.

The chip will then be assembled based on the selection the customer made in the app. With this model the Omega Group will simulate an assembly on demand process. The customer is linked with his smart phone over the internet to the assembly station in the factory and can manipulate and start the assembly process. This is a part of industry 4.0.

Different shopping cart trolley chips:

