Car Manafacturing and AI

If you step into a car factory, you might notice the sheer number of robots playing a key role on the production line. Highly intelligent robots have been programmed to perform tasks that were previously completed by humans. The robots complete the same task over and over with precision timing and accuracy.

Car manufacturers have invested millions of pounds in creating and developing the most intelligent robots that can complete the most complex of tasks. See the next box below to learn how robots help on the production line of a car company.

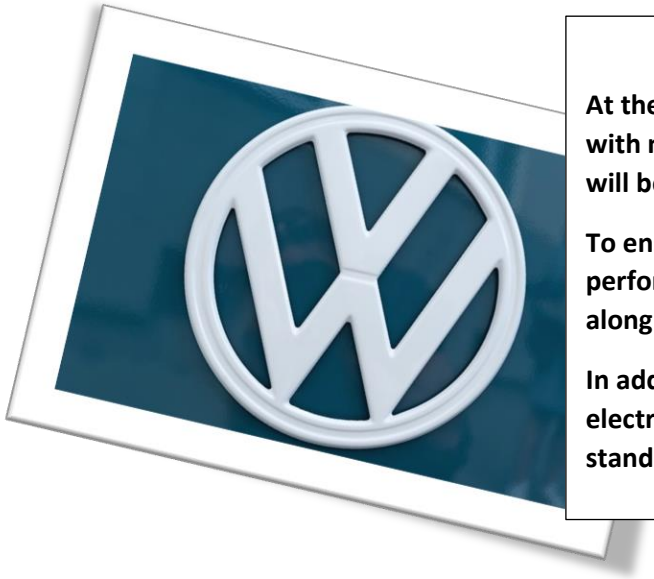
There are three key advantages manufacturers turn to robots:

(1) Quality – Car robots reduce variability of the product. There is a guarantee that each job performed by a robot will be finished with the highest quality and replication.

(2) Increase capacity – Production at a high quality is constant allowing higher output (i.e. more can be produced)

(3) Safety – protects workers from dangers jobs (e.g. exposure to dangerous fumes)

SSE & Automation



Case Study: The factory of the future, VW

At the Zwickau VW plant, a total of 1,700 production robots will be used to help with manufacturing Volkswagen cars. The entire cockpit (where the driver sits) will be installed using a robot allowing faster and more accurate installation.

To ensure all parts of the production line have the relevant tools needed to perform the task, driverless transport systems deliver tools to various stations along the line.

In addition, at the end of the production line, a robot will complete an electronic quality check, ensuring the car produced hits the highest of standards.

Robotic manufacturing!

Scan the QR code to view robots in action on a car production line.

Scan me!

Questions to think about

(1) What are some of the possible negative impacts of having robots involved in the manufacturing process?

(2) Why do you think car companies are investing so much in producing the most intelligent robots?

(3) Can you think of ways in which car companies can further use AI in the manufacturing process.