OT7.3 & 7.4 – Purpose and use of Robots

# 5 Reasons why robots are sometimes preferred over humans

1. They don't get sick
2. They don't sue companies
3. They are more accurate
4. They don’t take leave
5. They can work 24/7

# Examples of tasks robots do that people don’t

## Dirty

Welding, Grinding, Moulding, Casting

## Repetitive

Pick up an object from a conveyer belt and place it in a box

## Dangerous

Tasks in extreme heat or cold, clearing landmines, mopping up toxic leaks, bomb defusing or detonation

## Impossible

Working in extreme depths under water, exploring live volcanoes, being the Mars Explorer (travelling to far away planets)

# Jobs not suitable for robots

Jobs that are not suited for robots are jobs that require a personal touch, or creativity such as painting. This is because a robot cannot imagine, due to limitations with programming and computing at this time. Another type of job that robots are likely not to be suited for at the moment are jobs that require a lot of interaction with people such as jobs at the help desk, doctors, nurses, or teaching. This is because robots have limits in what they can perceive and understand unlike people, and of course, most people feel more comfortable talking to a person rather than a robot. Even more types of jobs that robots are not suited for are jobs in the media, politics, and lawyering. (Kelly, 2012)

# Assembly RobotMacintosh HD:Users:38559:Desktop:Servoweld diagram.jpg

This robot is a welding robot, which welds two pieces of metal together. (Obviously!).

This robot is stationary but moves in several axis.

<https://www.youtube.com/watch?v=HUU3HdxOqZs>

You must get a quote for the price for this robot.

# Medical Science RobotMacintosh HD:Users:38559:Desktop:robotic-surgery-layout.jpg

This robot is a remotely operated robotic surgeon, which has various sensors for getting a better understanding on the patient. It has the ability to move in microscopic amounts to make surgery in small spaces easier.

This robot is stationary and has several moving arms.

+1 for immersive, 3D, interactive surgery experience.

https://www.youtube.com/watch?v=VJ\_3GJNz4fg

# Macintosh HD:Users:38559:Documents:Year 10 2014:IST:Year 10 Semester 2:Robotics:OT 7.x:7.3 & 7.4:rover1_detail_500.jpgExploration Robot

This robot, known as the Mars Exploration Rover is a mobile robot, which conducts scientific experiments on the surface of Mars and as in the name, explores Mars.

http://video.nationalgeographic.com/video/news/mars-curiosity-rover-vin?source=relatedvideo