

<https://www.youtube.com/watch?v=HX6M4QunVmA>

The Robot Revolution – The New Way of Manufacturing

00:00 – 09:11

I Watch the video and, after the introduction, take notes on the following aspects.

1 00:48-03:47	Robots and Cobots – Take notes on
	- the leading continents in the production of robots?
	<i>Asia/Australia are by far the leading producers.</i>
	- the way robots now know what to do?
	<i>Machine learning enables robots to learn by themselves → "a millionfold improvement" e.g. they can recognize objects now, they do dangerous things</i>
	- how a cobot differs from a robot?
	<ul style="list-style-type: none"> • <i>They work alongside employees, "with people".</i> • <i>This is safer than normal robots,</i> • <i>The cooperation is more productive</i>
- the most efficient way of working?	
<ul style="list-style-type: none"> • <i>Humans cooperating with machines ("human-machine groups") are most efficient.</i> • <i>They reduce human idle-time by 85%.</i> 	
2 03:48-04:44	The robot restaurant
What do robots do there?	
<i>They make pancakes, mix cocktails, cook, make and serve ice-cream.</i>	
Why might they be useful?	
<i>When the population gets older in Japan, fewer people can do the work.</i>	

4 04:45-0:11	China: Shenzhen and Pearl River Delta (Michael Zeng from Rapoo)
	<p data-bbox="392 309 874 342">Why are robotics important here?</p> <ul data-bbox="443 383 1238 456" style="list-style-type: none"> • <i>Salaries have risen (more than doubled since 2008).</i> • <i>Automation by robotics can reduce the workforce.</i> <p data-bbox="392 497 1070 530">How does M. Zeng happily describe the future?</p> <p data-bbox="392 571 943 604"><i>His company will be more competitive.</i></p> <p data-bbox="392 645 914 678">What is said about the job situation?</p> <ul data-bbox="443 719 1369 987" style="list-style-type: none"> • <i>people can still easily get jobs because China is growing very fast</i> • <i>service sector (human) is growing fastest</i> • <i>workers do not resist because they have no choice</i> • <i>automation will progress fast towards full automation</i> • <i>one logistics company has almost no humans left (also drone deliveries)</i>
5 08:36-09:11	What outlook on the “robotic future” is given at the end of the video?
	<ul data-bbox="443 1104 1385 1254" style="list-style-type: none"> • <i>It is a moment of choice/opportunity for both society and individuals.</i> • <i>The next ten years could be the best or one of the worst times.</i> • <i>“We have more power than ever before.”</i>

Please add a personal comment.

Individual answers