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**Ex. 2**

1. Manufacture system designed to extend the capacity of machines is called **autonation**.
2. Automated manufacture arose out of division of **labor, power transfer** and **the mechanization of the factory** of the factory.
3. The division of labor is, the reduction of a manufacturing or service process into its smallest **independent** steps.
4. Another step necessary in the development of automation was **mechanization** .
5. As a result of the development of power transfer specialized machines were **motorized** and their production efficiency was improved.
6. The development of **power** technology also gave rise to the factory system of production.
7. The transfer machine is a device used to move a **work piece** from one specialized machine tool to another.
8. Industrial robots were originally designed only to perform **simple** tasks.
9. The goal of the **assembly-line** system was to make automobiles available to people who previously could not afford them.

**Ex. 3**

1. Automation is a system of manufacture designed to reduce the capacity of machines to perform certain tasks formerly done by humans. **(True)**
2. In the fields of communications, aviation, and astronautics automation is used in a very limited scale. **(False)**

**Text doesn’t content this statement**

1. Automated control systems are used to perform various operations much faster or better than could be done by humans. **(True)**
2. Power transfer and the mechanization of the factory were the main obstacles in the development of automation. **(False)**

**On the contrary power transfer and the mechanization were major steps in development of automation**

1. The division of labor developed in the first half of the 19th century and was first discussed by the French economist Adam Smith. **(False)**

**The division of labor developed in the latter half of the 18th century and was first discussed by the British economist Adam Smith in his book *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776)**

1. Mechanization was the next step necessary in the development of automation. **(True)**
2. The development of power technology gave rise to the factory system of production. **(True)**
3. The transfer machine is a device used to move workers from one place to another. **(False)**

**The transfer machine is a device used to move a work piece from one specialized machine tool to another**

1. In the 1920s the auto industry combined [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187) concepts into an integrated system of production. **(True)**
2. The goal of the assembly-line system in auto industry was to make automobiles more expensive and luxurious. **(False)**

**The goal of this assembly-line system was to make automobiles available to people who previously could not afford them.**

**Ex.4**

1. An automated production line consists of a series of workstations connected by a transfer system to move parts between the stations.

**Автоматизированная линия продукции состоит из нескольких рабочих станций, соединенных между собой линией передачи (конвейера), которая используется для перемещения частей продукции между станциями.**

1. Modern automated lines are controlled by programmable logic controllers.

**Современные автоматизированные линии продукции контролируются программируемыми логическими контроллерами.**

1. Automated production lines are utilized in many industries, most notably automotive.

**Автоматизированные линии продукции используются на многих промышленных предприятиях, особенно в машиностроении**

1. If the part is mass-produced, an automated transfer line is often the most economical method of production.

**Если часть промышленности – это массовый выпуск, то автоматизированные линии передачи очень часто являются наиболее экономичными методами выпуска продукции**

1. Transfer lines date back to about 1924.

**Линии передачи датируются примерно 1924 годом**

1. Press working operations involve the cutting and forming of parts from sheet metal.

**Операции прессования состоят из резки и формирования изделий из листов металла**

1. An automated system is designed to accomplish some useful action, and that action requires power.

**Автоматизированная система создана для выполнения разных полезных действий, но эти действия требуют затрат на энергию**

**Ex.5**

1. Электричество является наиболее широко используемым источником энергии в современных автоматизированных системах.

**Electricity is most widly use energy source in modern automated syste s**

1. Автоматизированные системы выполняют в основном два вида операций: 1) обработка;  2) перемещение и расположение.

**Automated systems are basically execute two types of operation: treatment and movement and location.**

1. Автоматизация это система производства, предназначенная для  увеличения производительности машин и механизмов.

**Automation is a system of manufacturing, designed to increase machine performance and mechanisms.**

1. Связь, авиация и космонавтика являются отраслями, наиболее широко использующими автоматизацию.

**In the fields of communications, aviation, and astronautics are industries that widely used automation**

1. Разделение труда, передача энергии и механизация производства  ускорили процесс развития автоматизации.

**The division if labor, power transfer and mechanization were accelerated the development process of automation.**

1. Следующим шагом, необходимым в развитии автоматизации, стала механизация

**Mechanization was the next step necessary in the development of automation**

1. Развитие технологии передачи энергии, способствовало развитию автоматизации.

The development of power technology also gave rise to development of automation

1. Промышленные роботы, изначально были разработаны для выполнения простых задач в опасных для человекаокружающих средах.

**Industrial robots, originally designed to perform simple tasks in environments dangerous to human workers.**