

## **Тема занятия: «Известные личности в отрасли сварочного производства»**

**Цель занятия:** выучить новый лексический материал по теме «Известные личности в отрасли сварочного производства»; совершенствовать навыки чтения и перевода текста профессионального направления; систематизировать знания, ответив на контрольные вопросы по теме занятия.

Уважаемые студенты! Ознакомьтесь с материалами практического занятия на тему «Известные личности в отрасли сварочного производства». Конспект занятия выполняйте **в рабочей тетради письменно, обязательно указывая дату занятия, тему занятия, номер упражнения.** Ответы предоставить преподавателю на проверку **до 15. 06. 2023 г.** в электронном виде (**фотоотчёт**) на e-mail [mikagol2605@mail.ru](mailto:mikagol2605@mail.ru). Телефон преподавателя для консультации и возникающих вопросов: +79591415816.

С уважением, Голодюк Марина Викторовна.

1. **Запишите** новую лексику в словарь, выучите новую лексику.
2. Прочитайте и **устно** переведите текст « Notable personalities in the welding industry. Nikolai Benardos».
3. **Напишите** сообщение об одном из известных деятелей в отрасли сварочного производства.

**Notable personalities in the welding industry.**

**Nikolai Benardos**

### **Vocabulary :**

Inventor – изобретатель

electric arc welding – электродуговая сварка

spot and seam contact welding – точечная и шовная контактная сварка

carbon (non-consumable) electrode – угольный (неплавящийся) электрод

«*Electrohephaestus*» - «*Электрогефест*»

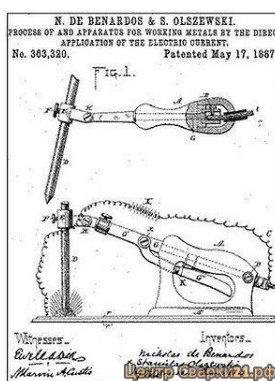
auxiliary production – вспомогательное производство

Nikolai Nikolaevich Benardos (June 26 [July 8] 1842 [1], Benardosovka - September 8 [21], 1905, Fastov) is a Russian engineer, inventor of electric arc welding, spot and seam contact welding (picture 1).



*Picture 1. Nikolai Nikolaevich Benardos*

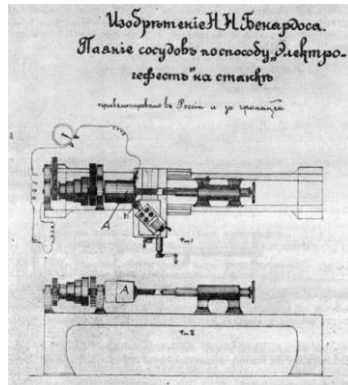
Benardos invented arc welding of metals with a carbon (non-consumable) electrode. His "apparatus" was named "Electrohephaestus" (picture 2).



*Picture 2. "Electrohephaestus"*

The invention was awarded the gold medal of the Paris Electrotechnical Exhibition, becoming its main exhibit.

In 1888, steam locomotive wheels were first welded using the Benardos method, and later it began to be used mainly for repair work. Meanwhile, in the West, the discovery of the Russian engineer was taken more seriously and began to be actively used not only in auxiliary production, but also in the manufacture of complex metal structures. For example, at the Loyd-Loyd plant, pipes and tanks were made from sheet iron using the Benardos method. The Schwelm Müller factories (Germany) produced metal barrels and various vessels. In total, about a hundred enterprises on the planet used this technology, a fifth of which were located in England.



*Picture 3. Device for welding on alternating current, substantiated the idea of welding in a gas jet and an inclined electrode*

The author continued to improve the invented technology and in 1892 proposed to produce electric welding with metal electrodes. Benardos created a device for welding on alternating current, substantiated the idea of welding in a gas jet and an inclined electrode, and also used an electromagnet to fix welded parts (picture 3). He was the first to use gumboils and a closed arc. At the IV All-Russian Electrical Exhibition, which opened in 1892 in the capital, over 30 inventions of the talented engineer were presented, which were presented in a separate exposition. In May of the same year, the inventor was awarded the gold medal of the Russian Technical Society, and a year later Benardos was elected a full member.

Benardos' authorship belongs to the method of copper plating of river vessels, a rotary propeller and an electric boat. He worked on a project of a steamer capable of navigating aground.

Among the achievements of Benardos were military inventions, but these devices never found practical use.

Along with large-scale projects, the engineer was seriously fond of local inventions, which he attached considerable importance to. He created an ice cream maker, a digital padlock, a digging machine, a tin can, and more.

**Напишите сообщение об одном из известных деятелей в отрасли сварочного производства.**