

## THE HISTORY OF WELDING IN RUSSIA

### 21.1. Vocabulary

*Ex. 1. Match the words with their Russian equivalents.*

1. ancient	a. делать открытие
2. found	b. награда
3. blacksmith 	c. основывать
4. believe	d. доспехи
5. deed	e. кузнец
6. award	f. поступок
7. founder	g. благородный
8. armour	h. верить
9. be in demand	i. основатель
10. honourable	j. быть востребованным
11. discover	k. древний

*Ex. 2. Match the words with their definitions.*

1. valuable	a. having great worth or importance.
2. make a contribution	b. a powerful effect or influence on something.
3. refuse	c. the act of coming or going back to a place where you were before.
4. impact	d. to give or provide something, such as money, time, or effort, to help achieve a goal or support a cause.
5. introduce	e. to decline or say no to something that is offered or requested.
6. make a breakthrough	f. to present an employment opportunity to someone.
7. return	g. to achieve a significant advance or discovery in a particular field.
8. scientist	h. a person who conducts scientific research and experiments to gain knowledge about the world.
9. offer a job	i. to make someone known to another person by name or title.

*Ex. 3. Complete the sentences with the given words.*

**honorable, refused, impact, make a breakthrough, Blacksmith, blacksmith, scientist, founder**

He became a renowned \_\_\_\_\_(1) after studying welding techniques at the university.

The \_\_\_\_\_(2) of the \_\_\_\_\_(3) Association was honored for his contributions to welding technology.

The invention of the arc welding machine had a significant \_\_\_\_\_(4) on the industry.

The \_\_\_\_\_(5) refused to use modern welding equipment and preferred traditional methods.

The welder was able to \_\_\_\_\_(6) in his career by mastering TIG welding techniques.

It is seen as an \_\_\_\_\_(7) profession to be a skilled welder in this community.

Despite his lack of experience, he \_\_\_\_\_(8) to give up learning different welding techniques.

## **21.2. Reading**

*Ex. 1. Read the text.*

### **Welding in Russia**

Welding in Russia has a rich and fascinating history. It began in the late 19th century when Russian engineers explored ways to join metals. Early methods included forge welding, where heat and hammering were used to bond metal pieces. By the early 20th century, advancements were made, and electric arc welding was introduced. This new method used an electric arc to melt metals, providing a more efficient and stronger bond.

During the Soviet era, welding technology saw significant improvements due to the country's rapid industrialization. The need for robust

infrastructure, such as bridges and buildings, pushed engineers to develop new welding techniques. One notable figure in this development was Nikolay Slavyanov, who made significant contributions to electric arc welding and created specialized equipment to enhance the process.

Welding became crucial during World War II, as it was essential for constructing tanks, ships, and aircraft. Soviet welders gained international recognition for their skills and innovations. Post-war, the emphasis on heavy industry and space exploration further advanced welding technology. Some of the techniques developed during this time are still in use today.

Today, Russia continues to be a leader in welding technology, with modern methods that contribute to various industries, including oil and gas, construction, and manufacturing. The country's long history in welding is a testament to its engineering prowess and commitment to technological advancement.

*Ex. 2. Answer the questions.*

1. When did welding begin in Russia?
2. What were the early methods of joining metals used in Russia?
3. How did welding technology improve during the Soviet era?
4. Who was a notable figure in the development of welding techniques in Russia?
5. Why did welding become crucial during World War II in Russia?
6. How did the emphasis on heavy industry and space exploration impact welding technology in post-war Russia?
7. In which industries does modern welding technology in Russia contribute?

### **21.3. Communication**

*Ex. 1. Make sentences using the following words.*

1. used/in/Russia
2. skills/known/welders

3. role/crucial/industries
4. history/Russia/fascinating
5. innovations/come/Russia
6. techniques/highly/respected
7. contributed/growth/economy
8. work/ethic/strong
9. demand/skilled/high
10. continues/popular/profession