УДК691.32(091)

## TECHNOLOGIES IN ANCIENT ROME AND THEIR IMPACT ON THE MODERN WORLD

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Ancient Rome is one of the most important civilizations in the history of mankind. He had a huge impact on the development of culture, law, architecture, politics, technology and many other aspects of our lives. The Roman Empire existed for more than 1,000 years and left us many valuable legacies. Ancient Rome was famous for its numerous inventions and technologies that had a significant impact on the modern world. It was their inventions and technologies that gave rise to many modern devices and ideas. And now let's consider look some of them.

The Romans were the first to build large cities using their ingenious engineering, architecture and culture. At that time, Roman cities already had public toilets and baths, sewage systems and fountains, but none of these things would have been able to function without aqueducts. It was this invention that made it possible to transport water over long distances and provide cities with clean drinking water. This important invention became the basis for the development of water supply infrastructure in modern cities. These large-scale structures stretched hundreds of kilometers to the east and supplied water to dozens of Roman cities. However, aqueducts were not invented by the Romans, but appeared earlier in Egypt and Syria. But it was in the Roman Empire that aqueducts reached their greatest development. The most popular artificial material is concrete. The window from which each of us looks at the world stands on a concrete foundation, high-rise buildings, platinum, nuclear power plants and many other structures. 4.5 billion concrete products are produced per year. Simple and cheap material contributes to the rapid growth of cities, and thanks to it, engineers can turn their ideas into reality. But the demand for this material appeared relatively recently, or rather in the middle of the eighteenth century, thanks to Ancient Rome. Concrete was not invented in Ancient Rome but it was the recipe of Roman concrete that scientists all over the planet became interested in. That is why people can see thousands of buildings built fifteen hundred years ago, which preserved and perform their functions even now. For example, the city of Pantheon, which is located in the center of Rome, will soon turn 1900 years since its construction, and there are a lot of such structures: The Colosseum built in 80 AD, the Amphitheater of Pula built in 68 AD, and so on. The compressive strength of Roman concrete is comparable to that of modern concrete.

In ancient Rome, roads played an important role in the functioning of the state. They were used not only for movement, but also as a link between different parts of the empire. Rome's roads were known for their durability and quality, which allowed the empire to effectively manage its territories. The Romans laid 80.5 thousand kilometers of fortified stone roads throughout Europe and Asia. Roman roads were built skillfully and wisely. They were lined with stone and had special water drainage systems, which gave them strength and durability. Each road had its own caretaker who monitored its condition and carried out regular maintenance.

One of the most famous roads in ancient Rome was the Appian Way, built in the III century BC. This road connected Rome with the southern lands and became an image of the power and greatness of the Roman Empire. The Appian Way was an important trade route through which trade was conducted between the cities. Today, the roads of Ancient Rome remain one of the most revered engineering structures of antiquity. Their strength and durability are an example for modern engineers, and their story continues to inspire and impress people around the world.

Thanks to the inventions of the ancient Romans, their civilization flourished. Their ability to build roads, aqueducts, arches and amphitheaters made their empire one of the most powerful in the world. Ancient Roman inventions and innovations did not collapse with the Roman Empire. Their technologies and engineering achievements became the foundation for future civilizations, and their contribution to the development of architecture, engineering and civil engineering remains a great legacy for all mankind.

Their legacy continued to inspire future generations to create new technologies and achievements. People from all over the world continue to explore and admire ancient Rome technologies.