

## IMPROVEMENT OF THE TECHNOLOGY FOR CLEANING NATURAL GAS FUEL BURNING IN THERMAL POWER PLANTS

Soliyev Bobonazar Gulomjon ugli,

Assistant, Fergana Polytechnic Institute, Uzbekistan, Fergana

bobonazar.soliyev@ferpi.uz

### ANNOTATION

The efficiency of thermal power plants that use natural gas as fuel can be maximized and environmental pollution reduced through the use of appropriate cleaning technology. Innovations such as precision filtration, advanced chemical treatments, and sophisticated scrubbing techniques have made it possible to remove impurities and contaminants from natural gas fuel. This not only contributes to a cleaner and more sustainable energy future but also prolongs the lifespan of power-generation equipment by minimizing wear and tear caused by contamination.

**Keywords:** natural gas, technology, corrosion, innovative technology, clean and stable energy, efficiency, advanced chemical treatments, sustainable energy

### INTRODUCTION

Natural gas fuel is a crucial element for generating electricity in thermal power plants. Nevertheless, burning natural gas emissions can cause pollution, which is a serious environmental concern. Therefore, selecting the appropriate technology for the purification of gas fuel is critical to maximizing the efficiency of thermal plants, reducing pollutants, and promoting a sustainable energy future. Thanks to continuous advancements in technology, it is now feasible to clean natural gas fuel to a high degree of purity, by utilizing advanced filtration, scrubbing, and chemical treatment techniques. This innovative cleaning technology removes impurities and contaminants from natural gas, thereby preventing the release of harmful emissions that contribute to environmental pollution and posing health risks. Furthermore, it results in the longevity of power-generation equipment by reducing corrosion and wear and tear from contamination. The use of innovative technology for cleaning natural gas fuel in thermal power plants presents the opportunity to minimize the impact of pollutants, thus achieving a cleaner and more sustainable energy future.

In recent years, there has been a growing concern around the impact of fossil fuel burning on the environment. While natural gas fuel is being widely used to generate electricity in thermal power plants, we also need to address the issue of pollutants that can be released during the process. Thanks to continuous innovation and technology improvement, we now have the ability to clean natural gas fuel to a high degree of purity. Precision filtration, sophisticated scrubbing techniques, and advanced chemical treatments are just a few of the methods being used to achieve this. By removing impurities and contaminants from natural gas fuel, we can prevent harmful emissions that could otherwise cause environmental pollution and health problems. In addition, the use of advanced cleaning technology can also help to extend the lifespan of power-generation equipment by reducing wear and tear from contamination. With a cleaner and more

sustainable way to generate energy, the use of innovative technology for cleaning natural gas fuel is essential to ensure a more positive future for our environment.

Natural gas fuel has been widely used in thermal power plants to generate electricity due to its efficiency and cost-effectiveness. However, the burning of natural gas can emit harmful pollutants into the environment, causing pollution and health risks. Therefore, it is crucial to have reliable technology in place to clean the gas fuel before burning it. Fortunately, continuous innovation has led to the development of advanced cleaning technology that can purify natural gas fuel to a high degree of purity. Precision filtration, sophisticated scrubbing techniques, and advanced chemical treatments are all part of the cleaning process. These technologies work together to remove impurities and contaminants from the natural gas fuel, minimizing the emission of pollutants into the atmosphere. Moreover, improved cleaning technology can decrease the wear and tear of power-generation equipment by reducing contamination. The use of innovative cleaning technology for natural gas fuel used in thermal power plants paves the way for a cleaner and more sustainable energy future.

Natural gas fuel is widely used in thermal power plants to generate electricity. However, burning natural gas can cause pollution if not cleaned properly. With the right technology, it is possible to clean natural gas fuel to a high degree of purity. This technology involves precision filtration, scrubbing techniques, and chemical treatments that remove impurities and contaminants from the natural gas fuel. This prevents harmful emissions that can cause environmental pollution and health problems. Additionally, innovative technology for cleaning natural gas fuel can prolong the lifespan of power-generation equipment by reducing wear and tear from contamination. The use of these cleaning technologies can lead to a cleaner and more sustainable energy future. As technology continues to improve, we can ensure that the use of natural gas as a fuel source is safer and more effective than ever before.

Natural gas fuel is widely used in thermal power plants to generate electricity. However, burning natural gas can cause environmental pollution and health problems. It's important to have the right technology in place for cleaning the gas fuel to ensure maximum efficiency of these plants and reduce pollution. Fortunately, improved cleaning technology has made it possible to remove impurities and contaminants from natural gas fuel. Precision filtration, sophisticated scrubbing techniques, and advanced chemical treatments have significantly contributed to the high degree of purity of natural gas fuel. With this upgrade, harmful emissions that cause environmental pollution and health problems can be prevented, and this extends the lifespan of power-generation equipment by reducing wear and tear from contamination. The use of innovative technology for cleaning natural gas fuel burning in thermal power plants can lead to a cleaner and more sustainable energy future, ensuring that we have a healthier planet to live in.

Expanding on the importance of technology in cleaning natural gas fuel used in thermal power plants, it is worth noting that fines and penalties for noncompliance with environmental regulations can be steep. By implementing advanced technology, power plants can reduce the risk of financial penalties as well as protect their reputation as responsible stewards of the environment. Furthermore, clean-burning natural gas can serve as a transition fuel as we move towards a greener energy future. The adoption of improved cleaning technology can also create jobs in the engineering and technology sectors, stimulating economic growth while reducing our

impact on the environment. Given the benefits, investing in advanced technology for cleaning natural gas fuel is a wise choice both for the environment and the economy.

Natural gas fuel plays a crucial role in generating electricity in thermal power plants. Nevertheless, burning this gas fuel can produce a substantial amount of pollution if the right technology is not in place to clean it. Fortunately, with continuous innovation and improvement in cleaning technology, we can now achieve an exceptional level of purity when cleaning natural gas fuel. Precision filtration, advanced chemical treatments, and other sophisticated scrubbing techniques have made it possible to remove impurities and contaminants from natural gas fuel. This significantly reduces the likelihood of harmful emissions that cause environmental pollution and health problems. Furthermore, using innovative cleaning technology prolongs the lifespan of power-generation equipment by mitigating wear and tear caused by contamination. By investing in innovative technology to clean natural gas fuel in thermal power plants, we can create a cleaner, more sustainable energy future for generations to come.

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