

Application and strategy of new coal chemical technology

Hongze Wu*

Shanxi Jiexiu Emergency Management Integrated Administrative Law Enforcement Team, Jinzhong, 03200
Shanxi, China

*Corresponding Author

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Abstract: With the rapid development of social industry, new chemical technology has continued to innovate, which greatly promotes the efficiency of social energy. However, due to the continuous deepening of social dependence on energy, the problem of energy shortage still affects social production and development. Coal chemical industry is a new energy production transformation technology. The wide application of this technology has a great help to solve the problem of energy shortage and has a significant impact on modern production and development. This article aims to discuss the application and strategy of new types of coal chemical technology in my country, analyze the characteristics of new beauty and chemical technology, and finally make new suggestions in combination with social strategic development.

1. Introduction

The rapid innovation of modern science and technology has an inestimable impact on the production of enterprises and the development of the entire industry, which can effectively improve the efficiency and production capacity of social energy. Modern people's living standards have been greatly improved compared to the past, and the demand for social energy has become higher and higher. The supply of modern energy has occupied a very important position in the development of modern society. At the same time, it will be more direct. The influence of my country's energy development status. For a long time, coal energy is one of the energy dominated by the current energy of my country's energy. What kind of technology is used to improve the utilization rate of my country's coal is one of the current technical figures. By optimizing existing coal chemical technology, technical innovation can be achieved with the optimization of the energy structure, and the efficiency and quality of energy utilization can be improved. The development of new science and technology will promote the development of energy technology and transformation in my country, so as to take the road of green development as soon as possible to reduce energy loss and achieve efficient use and transformation of coal energy. At present, my country's new type of coal chemical technology has developed very rapidly. It has applied more advanced science and technology to the transformation of glory and chemical industry to improve the efficiency of energy utilization. However, as many new technologies are still in the gradual promotion and application, it is of great significance and role in strengthening the inquiry and research on my country's new beauty and chemical technology.

2. The development of coal chemical technology in my country is not mature enough

Coal chemical technology innovation is the main driving force to promote the development of the coal industry. It plays a very important role in optimizing the structure of the coal industry chain and has high value for the development of the regional coal economy. However, it should be noted that vigorously expanding the coal industry chain does not directly mean that it can solve the energy shortage problem to a certain extent, not to mention that the development projects belong to the emerging sunrise industry, its high technical content, but also need to invest more money and manpower to research, and the balance of input and output will also affect the final result. Therefore, there are many risks. Therefore, the development of coal chemicals needs to bear a lot of reality

development. The new type of coal chemical technology has a large demand for talents and is one of the highly dense modern chemical industries[1]. At present, the newly -built new coal chemical technology research centers in many places in my country are still in its infancy in the research of coal chemical technology research. If you want to truly realize the widespread application of coal chemical technology, there are still many roads to go, and more excellent technical talents need to be recruited. At the same time, we need to conduct deeper research on technology to achieve technological innovation. Realizing from technology development to technology applications and production, the development and implementation of any link will have an inestimable impact on the application of coal chemical technology[2]. However, from the current point of view, most researchers in my country are mainly engaged in the production of coal chemical technology production. Talent and technical issues.[3].Most of the large -scale modern coal chemical technology is the first extensive large -scale application in the field of industrialization. Therefore, there are still many risks to face. details as follows.

First, although my country's new coal workers have achieved some innovative development, they are still lacking in terms of technical practice applications. They still need to perform long -term practice and testing, and then accumulate more experience.

Second, although my country's new coal chemical technology innovation has achieved greater results, the technology in the treatment of coal chemical waste is not mature enough, so it has caused a certain pollution to the natural ecological environment. Therefore There is also a quite long road to go.

Third, further verification of coal chemical technology and economic benefits currently requires further verification, and this is because the technology needs to invest a lot of funds and technologies in the development process. Therefore, in the short term Comprehensive assessment of benefits.

Fourth, the early stages, middle, and later stages of coal chemical technology innovation need to invest in huge amounts of funds for research and production and maintenance, and huge fund investment makes many companies dare not really try to participate in technical research. Therefore, many, many Enterprises are worried about the investment in this aspect, and eventually discouraged.

Based on the above, in the new historical development situation, if my country wants to accelerate the research of coal chemical technology innovation, it must strengthen support for technology, funds, and talents, and strengthen the efficiency of the utilization of coal energy. Gasing is a major key basic industrial technology for realizing green environmental protection. It is an important prerequisite for my country to vigorously develop coal machine chemicals in the future. At the same time, it is also an important cornerstone of green power generation technology. The application of large -scale gasification technology plays a very important role in promoting the transformation and development of the coal chemical industry. However, in terms of the extension of the coal chemical industry chain, it is still accompanied by greater risk of technological development.

3. My country's new type of coal chemical technology innovation application

3.1 Curdine manufacturing process

At present, my country's oil is greatly affected by changes in international oil prices. In recent years, the price has been rising all the way because of the complex international struggle relationship. All synthesis costs. This has a lot of adverse effects on the development of my country's oil and gas industry[4]. Many technical research experts believe that from the perspective of current situations and driving, if technical research and innovation on this aspect will not be strengthened, the various production chains of coal and petroleum production chain will inevitably affect my country's coal and petroleum in China and oil. Long -term development of the energy industry. Regarding this view, it can be seen from the changes in coal, petroleum prices, and trend. The transformation technology of coal methanol has been widely used by the vast number of energy

chemical enterprises due to the low cost of transformation. This technology has attracted the attention of the majority of enterprises.

However, it should be noted that the manufacturing technology of coal -to -methanol must be relatively high in terms of technical requirements, and its entire production operation process is relatively complicated, at the same time. It is also necessary to use a variety of chemical raw materials for production, which can be achieved after a variety of different reactions.

First, coal needs to be transformed and synthesized to obtain coal -made methanol. You need to go through these steps: gasification, carbon monoxide transformation, low temperature methanol washing, and then after methanol synthesis, can you extract methanol from it, and finally re -process and transform methanol products to obtain acetic acid, di methar ether, and ethylene raw materials. These raw materials are one of the raw materials that cannot be missing in the industrial production process.

3.2 Coal -made natural gas technology

With the rapid development of urbanization and economy in China, the process of social industrialization has become faster and faster. With the continuous development of cities, a large number of people have poured in, leading to a continuous increase in the demand for various energy sources by urban populations. In this situation, it undoubtedly brings heavy pressure to many cities, causing some cities to fall into an energy crisis. This is a major problem that the energy supply and demand of the vast cities in China must face at present. The application of coal to natural gas technology has played a certain role in solving the problem of urban energy shortage. The rapid development and expansion of this industry have adapted to the needs of urban development. It plays a significant role in further promoting the efficiency of urban energy economic utilization in China. Although the coal to natural conversion method may seem very simple, it has high requirements for professional technology. In the process of producing coal to natural gas, the method is to convert coal gasification and carbon monoxide sulfur resistant conversion into low-temperature methanol washing, then undergo gas purification treatment to obtain gas, which is then injected into a methanation reactor to ultimately produce natural gas [5]. Adopting this conversion method not only achieves high production conversion efficiency, but also effectively reduces energy waste. This method of gas production has become a commonly used method and has been applied to a certain extent.

3.3 Coal oil technology

Coal oil technology is a new type of conversion technology that solves the shortage of transportation oil energy. It mainly uses coal as the most important production material. If you want to make coal into oil, first of all, you need to make coal production into a coal slurry. Then Through a certain pressure technology treatment, the coal plasma is injected into the technology application conversion equipment. After certain refining, it will be made of gas, and then a certain low -temperature methanol washing device is removed from the acid gas. Essence Coal oil technology corresponds to a certain role in the problem of petroleum shortage. This technology is a very environmentally friendly oil -making technology. The development of coal -to -oil technology plays a certain role in improving the problem of oil shortage in my country. This technology has less production pollution. At the same time, oil -making technology is advanced, easy to operate, and high application.

3.4 Coal synthetic ammonia ingredients

At present, my country's social science and technology production has been greatly improved, and the level of coal -made synthetic ammonia technology has also been greatly improved. From the perspective of my country's agricultural development, the application of coal -made synthetic ammonia technology to the field of chemical fertilizers has played a promoter role in improving the production and development of the fertilizer industry. my country's agricultural production and development are inseparable from the full support of the fertilizer industry. In view of the needs of a variety of interest factors, some fertilizer companies have vigorously introduced the technology to

reduce the production costs of various technologies by using coal chemical transformation and synthetic ammonia, and improve the production benefits of enterprises[6].

As coal is the main raw material for production. In the process of preparation, it is first extracted by low temperature methanol washing technology, and then ammonia can be produced. After a series of chemical processes, ammonia is produced. In this process of production, it can greatly reduce the erosion of various equipment and instruments, which is conducive to reducing the cost of various production, can improve the economic benefits of ammonia production, and improve the production efficiency and capacity of enterprises.

3.5 Coal -to -olefin technology

Coal olefin technology is a representative of new types of innovative technology. This technology uses coal as the main production raw material. After a certain technical treatment and production, methanol is finally synthesized, and then methanol is used to synthesize ethylene. At present, there are two different production processes. One is to synthesize natural gas bases to methanol, and then make ethylene through a certain different reaction; Finally, propylene is made.

3.6 Other aspects in the field of coal chemical industry

Low-temperature methanol washing technology is one of the most representative new innovative technologies of coal chemical industry, which has been applied to a certain extent, and this technology not only has a very strong conversion ability, but also has relatively high production efficiency and value. In addition to being used in a number of different fields, the technology applied in the production of ethylene glycol oxalate vinegar also has a certain production operations, this technology was originally used to make industrial raw materials. However, with the continuous development of social production, low-temperature methanol washing technology has been applied to other production fields, such as the production of ethylene glycol, etc., which is very convenient to operate, and the synthetic manufacturing is also compared. Moreover, some production raw materials used in this technology are cheap and easy to obtain. The application of this technology to the coal chemical production can help to reduce the costs needed by enterprises in the production process, and can greatly reduce the production burden of enterprises.

4. Analysis of the strategic analysis of the new type of coal chemical technology innovation

In a relatively ideal environment, the state uses a lot of clean resources through a large number of clean resources, which can help alleviate many problems such as climate pollution and warming. At present, countries around the world have paid great attention to how to improve energy use efficiency. Only the development of new energy and efficient use of renewable resources can alleviate many problems such as energy shortage and environmental pollution. However, the current research of renewable resources in my country is difficult to make comprehensive applications. Therefore, there are still certain limitations in promoting new technologies. For example, the development of new energy technology development is relatively slow, and it is difficult to build vigorously. Therefore, it is only pinned on the development of renewable resources and new energy technology. At present, my country has at least 20 billion tons of raw coal reserves, and this number ranks second in the world. Therefore, in the context of social development, energy shortage, climate pollution intensified, and global warming, strengthening the research on coal chemical technology is of great significance and value. This is because coal has high utilization value, and its energy status as the main body of my country is unshakable. Therefore, my country has many choices in the choice of emerging coalization technology innovation strategies. However, due to the development and innovation of coal chemical technology technology, my country is generally lagging behind, and it is difficult for the traditional coal chemical conversion technology to change the shortcomings of energy. Therefore, it is necessary to boldly introduce and develop new technologies. Based on my country's energy development strategic plan and goals, the following three measures should be formulated.

3.2 System hardware platform

First, in the future, the country should vigorously develop non -petrochemical energy and its technology, steadily and orderly promote the development of low -carbon energy and green economic paths, and promote the sustainable production and development of society in my country.

Second, we should always adhere to the energy -saving economy as the cornerstone of social development, adhere to energy conservation as an important core of economic production, promote social production, vigorously introduce advanced coal chemical technology, support more outstanding enterprises, solve the problem of enterprise production and investment problems , Actively create a good investment and environment.

Third, we should further strengthen the application of new technologies and energy technology to improve the energy technology innovation strength and ability of the enterprise. Take the initiative to participate in international competition, and improve the technology and competitiveness of my country's energy companies.

5. Conclusion

Coal resources are widely distributed in the world. It ranks first in various fossil energy sources. Coal has a great impact on the development of modern industrial society. At the same time, it is also one of the most important chemical raw materials. At present, my country's socio -economic development is very rapid, and the demand for coal in the entire society is increasing. However, due to the combustion process of coal combustion, a large amount of pollutants and toxic materials will be produced. The large -scale effects caused by a series of consequences are very serious, and strengthening the research of coal chemical technology has greatly helped to solve these problems. It can use clean energy to reduce the impact on the external environment and climate. As we all know, my country's new type of coal chemical technology innovation has been greatly improved, which has a great impact on the production and energy usage methods of society. In the process of formulating my country's new coal chemical technology innovation strategy, my country should be examined in this regard The development advantages and shortcomings, and the formulation of a complete technological development plan in combination with the actual situation, promote progress and technological innovation in this area, deepen technological reform, and improve my country's coal chemical technology innovation and research and development capabilities.

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