

The development trend of plastic products and plastic molds

1.the plastic industry

Since the reform and opening up, the plastics processing industry in China quickly to an annual average of 10 per cent of the speed of development, compared with the average GDP growth point to 3-5 percentage points higher. Now, the plastic products in China has to enter into the level of developed countries in the world, the annual output of plastic products ranked second in the world, and formed a complete industrial classification system.

With the expanding applications of plastics, production of plastic products in the world in the next 10 years the rate of 3% per year increase in total capacity of plastic products in the world in 2010 will reach 1.86 million tons. China's growing demand for plastic products will continue to the production of plastic products in the annual rate of 10% of the increase, it is estimated that the total capacitance of plastic products in our country try to be close to 40 million tons in 2010.

The key to the future development of China's plastics industry in the plastics industry, transportation and engineering, packaging, plastic products, construction plastics, agricultural plastic products and plastic water-saving products, such as.

1.1 plastic products industry, transportation and engineering

Engineering plastics is in the plastics industry's fastest-growing category. With China's rapid economic development, its scope of application and the number is increasing. Within this range of products including plastic tic engineering industries in electronics, electrical equipment and information for traffic and transport, as well as plastic. In 2005, the total demand of engineering plastic products in China about 45,000 tons in 2010, demand for automotive plastics will reach 10,000 tons.

1.2 of plastics for packaging

The plastic has excellent characteristics, packaging is the largest area, the plastic will be used in the field of packaging. Statistics show that the plastic in the packaging of each country is also 35%. In 2003, the plastics used in packaging in China output to

46,500 tons, accounting for 28.1% of the total plastic products, the output value reached 68 billion yuan, an increase of 14.2 percent compared with 2001. It is estimated that the packaging plastic products in China, average annual growth rate in 2010 is 12%.

1.3 for the construction of plastic products

Plastic materials is the emerging fourth generation of new building materials, including plastic pipes, plastic doors and windows, building waterproofing materials, insulation materials, decorative materials, use in construction projects is very broad, municipal engineering, villages and construction of small towns and industrial construction. Plastic building materials not only can replace traditional building materials such as wood, steel, etc., but there are also many advantages, such as energy and materials, protection of ecological environment, improve the living environment, improve building functionality and quality, reduce construction weight, ease of construction. The construction industry is a pillar industry of national economy, China's construction industry will have a greater development in the next 5-15 years.

1.4 plastic products used in agriculture and plastic water-saving devices

Results as a widely used agricultural ground cover film and the rapid diffusion of the coating film, the high efficiency of agricultural water-saving irrigation projects, as well as the scale of the development of related industries such as fisheries, animal husbandry and forestry, agriculture has become the second largest plastics consumer field, is second only to the packaging industry. Agricultural plastics huge market potential for the development of the plastics industry to provide a broader space for development. Ground cover film in the country's total area of 1.7 million in China, then add the ammonia film, silage film, forage membrane, membrane in the wound, the plastic planting seedling container, shade nets, fishing nets, the materials used in agricultural products to store and keep it fresh pesticide equipment, foam plastic board, agricultural plastic products, about 30,000 tons in the country. With the sustained and rapid development of China's socio-economic, freshwater resources,

more and more the lack of plastic water-saving devices will have a huge space for development.

1.5 of plastic products used in the goods and medicines

With the continuous improvement of people's living standards, the number of products in plastic products for everyday life will continue to increase, the products of daily use there is still a huge potential market. The technical content of medical plastic products in the plastics industry and the highest value-added products, and now is based on an average annual growth rate of 15%. The output value of medical plastic products in China, only 2% to 3% of the output value of the medical plastic products in the world account, the average per capita consumption is 5% less than in developed countries. Therefore, the market prospect is extremely broad in medical plastic products in China.

2.the mold industry

Due to strong market demand to attract mold industry in both prosperity and rapid development of a broad market, production and sales. In the past three years, the average annual growth rate of China's mold industry is 21%. The production value of more than 45 billion yuan in 2003, about equal to more than \$ 500 million, accounting for a third in the world. Industry experts predict, plastic mold in China will continue in the next 10 years the average annual growth rate of more than 15 percent growth, or even longer. At the same time, the export of mold there are broad prospects for development.

For the next period of time, the demand for molds in four professional: the automotive industry, appliance industry, electronics and communications industry and building materials industry. As for the automotive industry, vehicle production in China more than four million U.S. dollars, basic types of vehicles has reached more than 170 kinds of new types of vehicles and converted vehicles will be up to 430 kinds, about 80% of mold types of vehicles, to change the need replacement, a model of car will need tens of thousands of mold, worth 100 million yuan; mostly in the sector of household appliances, color TV, refrigerators, washing machines, air

conditioners, microwave ovens, video recorders, video cameras, VCD and DVD, and other accessories made of plastic and rubber products the combination, so it need quite a lot of mold.

The plastics processing industry and mold manufacturing industry as a sunrise industry, the processing and manufacturing technologies that will change each new day. With the continuous development and application of modified plastics, nanometer plastics and special engineering plastics, as well as the rapid development of IT, high-precision, high complexity, high uniformity and low consumption of high production, plastics processing industry and Mould Manufacturing the industry will become one of the industries most developing countries in the 21st century.

3.plastic injection mold, push-back mechanisms

This utility model is a push-back mechanism of injection molds, including a retractor fixed on the front of the mold, and the second retractor fixed to the back of the mold and the positioning block fixed to the ejection system. Clamping conditions, the first retractor end through the back of the back of the mold before the mold and the ejection system, followed by backward extension. Second retractor end of mobile With the back of the mold, the other end of the free end is located on the positioning block. When the mold, first separated from the free end of the retractor and the second retractor free end of the contact and cooperation in the times before, the front and back mold combination, while promoting the second retractor rotating push the positioning block and the ejection system, so that they forward and backward, and then slide the block and back mold to move to the specified location. This utility can effectively avoid the damage caused by the sliding block and disruption of the thimble and mold in the mold of the impact.

4.plastic mold

This utility model is related to a plastic mold. It includes the former auxiliary board and the back of the auxiliary plate is symmetrical each other. The former auxiliary board and the back of the auxiliary board connected together to form an auxiliary channel and pouring mouth. The auxiliary channel and the pouring port is

interconnected. Sectional dimension of words, pouring mouth and the junction of the auxiliary channel is relatively large, and another cross-section is relatively small. Mouth curved into a sharp corner in the pouring end of this section is smaller and the final product connected to the inner surface.

5.China's plastics machinery industry

After 50 years of development, the history of China's plastics machinery industry go growth, from scratch, from small to large, from obscurity to world-famous. The injection molding machine plastic injection molding machinery industry in China products, the development of injection molding machine has been the world's plastics machinery industry praised. At present, the development of injection molding machines in China's seven major bright spot.

The output of the injection molding machine in the industry ranked first in three categories of plastic machinery, injection molding machines, extruders and blow molding machines, they accounted for more than 80% of the total output of plastic machinery, which, injection molding machine is also accounted for the three types of output of more than 50%.

In 2006, the output of the injection molding machine ranked first in the world, 91,480 units of the World annual production of injection molding machines, injection molding machine production of 57,600 units in mainland China, this production accounted for 62.97% of the world's annual production of injection molding machine, which, in Chinese Ningbo's annual production of injection molding machine about 1/3 of the world, it is the world's largest production base of the injection molding machine.

It is one-third of the European total annual production of injection molding machine in the world, Japan is in second place.

The injection molding machine in China has become the first export of machinery products. In 2006, China's exports of injection molding machines accounted for plastics machinery exports accounted for 54% of the value of total exports. It is the main force of the plastics machinery exports.

The pace of development of the injection molding machine in the industry. In the new century, China's plastics machinery industry average growth rate of over 20%, far ahead of the pace of development of the injection molding machine in the industry.

The technological level of the injection molding machine, the smaller the difference in developed countries, due to the accelerated pace of technological innovation, and further enhance the capability of independent innovation, compared with developed countries, most of the injection molding machine in China has reached the end of the 1980s products level. A small number of products have been close to the level of the 1990s, some products have a leading position in the world.

The injection molding machine industry to achieve a breakthrough in China's famous brand-name "zero". September 11, 2007, China's plastics machinery industry for the first time won the "Chinese famous brand products brand" four awards, three awards are the product of the injection molding machine.