

## What is SHR Series High-speed mixer?

### 1.Purpose of SHR Series High-speed mixer.

With the development of plastic processing industry in China, mixer gets the further development to adapt the need of plastic forming process. Because the rotation speed of stirring blades is improved significantly, low-speed mixer is placed by high-speed mixer gradually. The high-speed is adopted in many sectors. SHR Series High-speed mixer is the first ideal equipment to improve the performance of materials being mixed, to achieve the kinetic equilibrium to reach the requirements of uniformity. It also an essential equipment to process all kinds of plastic products. Resin and plastic materials are raw materials for many products, and the SHR Series High-speed mixer is basic equipment to produce those materials. Apart from in plastic sector, the SHR Series High-speed mixer also is used in chemical and industrial sector, medical sector, food, sector, architectural materials industry, and electrical carbon industry etc. In these sectors, raw materials need to be dried and mixed by SHR Series High-speed mixer then press and push them to form a shape or by the deeply processing to make them get commodities. The quality of raw material depends on a high-quality mixer, and the quality of raw material decides the quality of commodities.

### 2.The working principle of SHR Series High-speed mixer.

The empty cavity of mixing chamber should be passed into the thermal medium firstly, and use resistance to heat to increase temperature, then all raw materials being measured by recipe are put into mixing chamber. When the stirring paddle does the high-speed revolution, raw materials near the stirring paddle will rotate following the stirring paddle because they are influenced by friction and push action of paddle. High-speed revolution generates the centrifugal force, so the materials are thrown to inside of mixing chamber again and again. Pushed by the following materials, when materials touching with wall rise a certain height along the inside wall of mixing chamber, the gravity of material drives them go back to the centre of mixing chamber. And then they are thrown by stirring blades. And such action will be repeated again and again. Because there is a guide plate in mixing chamber, and it can break the regular pattern of movement, so the direction of motion is disorganized. Mixing operation of several materials' flow makes raw materials generate friction, touch, push and press, so the friction heat will be generated. In addition, sometimes the mixing of raw materials need to be provided heat from outside of mixing chamber to heat materials. All of mixing materials will get uniform mixing because of those conditions.

### 3.The mixing effect of SHR Series High-speed mixer

The mixing effect of SHR high-speed mixer not only depends on its rotate speed, but also it is related to size of gap between barrel and paddle's head of high-speed mixer and the height and length of barrel. You should feed moderate materials one time to make sure get the great mixing effect. If you feed more materials, it will influence the mixing effect and increase the mixing time because there isn't enough room for materials. The power consumption will increase too. If feed less materials, mixing effect will also weaken and mixing time will be increased because there is too less materials to form resistance. So the amount of feeding materials are related with composition and nature of raw materials, structure of machine, operating mode and operating conditions.

The mixing effect is related to rotate speed of main shaft and the number of paddles. The quicker the rotation speed is, the

stronger the shearing action is, the better the crushing effect is. So the mixing effect and production capacity will be improved. But the rotation speed of main shaft shouldn't too quick to avoid the temperature of materials rising quickly. So you should choose the reasonable temperature to make sure mix materials within short time and materials can't stick on the wall of mixer during mixing.

#### **4.The maintenance and repair of SHR Series High-speed mixer.**

Maintenance regulations should be made when you use high-speed mixer. In addition to general maintenance rules, the following rules should be noticed too:

- 1.1 It is the best maintenance that you use machine according to operating steps.
- 1.2 Materials are fed after the machine drives formally, and you should feed materials slowly in order.
- 1.3 You should prepare Seal ring, coupling, rubber ring, V-shaped belt and rolling bearing, that, you can change them in time. Because those parts easy to be out of order.
- 1.4 You need check parts being tightened especially V-shaped. Machine should be clean and remove dust.

#### **5.Summary**

We need to create high-quality SHR Series High-speed mixer to make contribution to the development of rubber and plastic industry. China becomes export superpower gradually. From spare parts to large mechanical and electrical equipment, from hardware to mineral raw material, from mother and baby products to home appliances, and from filament to cloth and furniture, we export everything to all over the world. We must guarantee the quality and quantity of products if we want to keep the advantage of export. Every company in China should make contribution to plastic industry in the world.

If this page still not solve your questions, we can talk about your questions and discuss it, just tell me!  
Just call me if you want: 008617691068515, my name is Lexi.