

50L Double Planetary Mixer



A double planetary mixer is a type of industrial mixing equipment used in various industries, including pharmaceuticals, chemicals, adhesives, and coatings. It is designed to blend, mix, and disperse materials with high viscosity or thixotropic properties.

The double planetary mixer consists of two planetary blades or mixing agitators that rotate on their own axes while revolving around a central axis. The central axis is usually fixed, while the planetary blades rotate at different speeds and directions. The combination of these movements creates a unique mixing action, ensuring efficient and thorough mixing of the materials.

Here are some key features and functions of a double planetary mixer:

1. **Mixing Principle:** The planetary blades rotate around their own axes while orbiting the central axis, providing a thorough mixing action. The dual rotation and revolution of the blades allow for effective blending of both low and high-viscosity materials.
2. **High Viscosity Mixing:** Double planetary mixers are particularly effective for mixing materials with high viscosity or those that tend to thicken or solidify during processing. The shearing and kneading action of the blades helps break down agglomerates and disperse ingredients evenly.
3. **Versatility:** These mixers can handle a wide range of viscosities, from thick pastes to highly fluid mixtures. They are suitable for processing various products, such as creams, gels, dough, resins, polymers, and composites.
4. **Uniform Mixing:** The double planetary mixing action ensures consistent distribution of ingredients throughout the mixture, minimizing the risk of unmixed pockets or uneven blending. This helps achieve product uniformity and quality.
5. **Scalability:** Double planetary mixers are available in different sizes and capacities, allowing for scaling up or down based on production requirements. This makes them suitable for small-scale laboratory work as well as large-scale industrial production.

6. Optional Features: Some double planetary mixers may offer additional features, such as vacuum capability for degassing or deaerating the mixture, heating or cooling jackets for temperature control, and various discharge options for easy removal of the mixed product.

Double planetary mixers are known for their robust construction, versatility, and ability to handle challenging mixing applications. They are widely used in industries where precise control over the mixing process and high-quality end products are essential.

Technical Parameters

Item	Parameter
Voltage	380 V 50 Hz (3 phases)
Tank design volume	60 L
Tank work volume	50 L
Mixer motor power	4Kw
Dispenser motor power	5.5KW
Revolution speed	0~65 rpm Adjustable
Mixing rotary speed	0~100 rpm Adjustable
Scraper speed	0~65 rpm Adjustable
Dispenser rotary speed	1450rpm Adjustable
Vacuum degree	– 0.09 Mpa
Hydraulic Lifting stroke	600 mm
Hydraulic Lifting power	0.75Kw
Vacuum	Reserve vacuum interface with 370KW oil ring vacuum pump
Dimension	Host : 1860x800x1970mm