High Viscosity Coaxial Vacuum Mixer is a high efficiency mixer specially designed for mixing high viscosity fluids. It consists of a combination of two coaxial mixers: slow speed mixer and high speed disperser. Through the joint action of these two mixers, supplemented by vacuuming and heating or cooling, this equipment can quickly achieve good mixing effect.

With years of experience in mixer design and fluid mixing conditions, SeFluid has designed this series of high viscosity coaxial vacuum mixer specifically for the cosmetic, adhesive, resin and fine chemical industries. It has the advantages of high efficiency, low cost, easy maintenance and long service life. After years of use, this series of products has won universal praise from customers.

Working Principle of High Viscosity Coaxial Vacuum Mixer

First, the working head with the sealing tank cover can be raised quickly by the hydraulic system. After filling the mobile tank with raw material, the working head then rapidly moves down into the tank. A ring of snap fasteners around the reactor is responsible for tighting the reactor cover on the working head of the high concentration coaxial mixer to the tank and achieving a seal.

During the mixing process of high viscosity materials, air may also comes into the liquid and forms bubbles which are difficult to remove. This problem may affect the mixing effect and the quality of the finished products. Therefore, there is a vacuum pipeline on the high viscosity coaxial vacuum mixer tank cover connected to a high efficiency vacuum pump. When the vacuum pump is working, most of the air will be removed from the reactor, thus avoiding the formation of air bubbles or floating foam during the mixing process.

Afterwards, the fast dispersion and low speed anchor mixer are will work in sequence. The disperser blade rotate at a very high speed. During the process, the high speed disperser blade will shear and strongly disperse the solid material into the surrounding liquid. Followed by the anchor mixer with high torque driven by a gearbox to mix the high viscosity material evenly. In the mixing process, the scrapers around the anchor mixer can scrape any medium attached to the inner wall of tank. Furthermore, heating or cooling is necessary for mixing of many raw material types. Therefore, there is a jacket on the tank that can be connected with hot oil or cooling water to achieve heating or cooling function. On the high viscosity coaxial vacuum mixer tank cover, there are also some pipe inlets for addition adds and a viewing window to observe the mixing status inside the reactor at any time.



Features of SeFluid's High Viscosity Coaxial Vacuum Mixer Series

- Mixing and dispersing at the same time, slow and fast speed combination, speed can be adjusted, so as to achieve the best mixing effect.
- Integrated hydraulic lifting system to fit different types of reactors and quick batch changeover; wider range of operating conditions than vacuum mixing machines with fixed workhead.
- Highly efficient vacuum system to avoid foam generation.
- Simultaneous heating or cooling and temperature monitoring during the mixing process
- Integrated sealed coaxial system for higher efficiency and better mixing than dualaxis workheads

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Technical Epecifications

