SME-B Vacuum Emulsifying Mixer

Definition of Vacuum Emulsifier

It means that when the materials are under the vacuum condition, it makes use of the high shear emulsifier to distribute one or several phases to another continuous phase rapidly and evenly. The materials will be processed in the narrow space between stator and rotor by strong energy of motion produced by the mechanical effect. By the operation of hydraulic shearing, centrifugal extruding, impacting, breaking and turbulence for over 100 thousand times per minute, the materials will be dispersed and emulsified instantly and evenly. After reciprocating circulation at high frequency, the fine finished products of stable and high quality without bubbles will be achieved.

Main Composition

The vacuum emulsifying mixer is mainly composed of water pot, oil pot, emulsifying pot, vacuum system, lifting system (optional), electric control system (PLC is optional), operation platform, etc.

Usage and Application Field

The product is mainly applied in such industries as daily chemical care products, biopharmaceutical industry, food industry, paint and ink, nanometer materials, petrochemical industry, printing and dyeing auxiliaries, pulp & paper, pesticide, fertilizer, plastic & rubber, electrics and electronics, fine chemical industry, etc. The emulsifying effect is more prominent for materials of high base viscosity and high solid content.

Performances and features

♦ The vacuum emulsifiers produced by our company include many varieties. The homogenizing systems include upper homogenization, lower homogenization, internal and external circulating homogenization. The mixing systems include single-way mixing, double-way mixing and helical ribbon mixing. The lifting systems include single-cylinder lifting and double-cylinder lifting. Various high quality products can be customized according to customer requirements.

♦ The triple mixing adopts the imported frequency converter for speed adjustment, which can meet different technological demands.

♦ The homogenizing structure made through German technology adopts the imported double-end mechanical seal effect. The maximum emulsifying rotation speed can reach 4,200rpm and the highest shearing fineness can reach 0.2-5um.

♦ The vacuum deforming can make the materials meet the requirement of being aseptic. The vacuum material sucking is adopted, and especially for the powder materials, vacuum sucking can avoid dust.

♦ The emulsifying pot lid can adopt lifting system, easy to clean and the cleaning effect is more obvious, the emulsifying pot can adopt tilt discharge.

♦ The pot body is welded by imported three-layer stainless steel plate. The tank body and the pipes adopt mirror polishing, which fully conforms to GMP requirements.

♦ According to technological requirements, the tank body can heat or cool the materials. The heating modes mainly include steam heating or electric heating.

♦ To ensure the control of the whole machine is more stable, the electric appliances adopt imported configurations, so as to fully meet the international standards.

Features:

- stable, compact, good quality
- Suitable: cream, paste, ointment, lotion, gel, conditioner, milk, sauce, etc
- Model: SME
- Capacity: 10~5000L
- Vacuum: -0.095Mpa
- Fineness: 2μm
- Contact part: SS304/316L (three jackets, contact amterial parts adopt SS316L, the other two layers adopt SS304-2B)
- Homogenizer speed: 0~3000/3500rpm.
- Scraper speed: 0~80rpm.
- Lifting: hydraulic lifting system…
- Heating: by steam/electrically.
- Operation: automatically (PLC)/manually.
- Class: GMP (optional).