

The SeFluid powder-liquid mixer is a special machine for efficient mixing of powdered solids with liquids. The machine generates its own vacuum and introduces the powder directly into the liquid stream. The powder is instantly and uniformly wetted when it first touches the liquid and is quickly dispersed. This machine series has the advantages of large capacity, high mixing efficiency, effective avoidance of agglomeration and reduction of dust pollution.

Equipment Introduction

In the work of material mixing, most of the mixing is the mixing of powder and liquid. And the combination of powder and liquid, will involve the mixing efficiency and agglomeration of the problem. As in the case of flour into water, if the fineness of the powder is very high, in the process of combining and mixing with the liquid, it will inevitably produce lumps. In traditional mixing processes, complex equipment and a lot of extra work and time are required to prevent this. Now, a single SeFluid high shear powder-liquid mixer can perform all process steps: dust-free and loss-free suction tube feeding, rapid powder addition, dosing, wetting and complete agglomeration-free dispersion mixing. Not only is the powder wetted, but it can also be dispersed into the liquid under vacuum to prevent large amounts of air from entering. Avoid agglomeration, better reaction effect, higher material utilization and better product quality. The equipment has a high degree of modular integration, which saves a lot of piping and process steps while minimizing production costs.



How it works?

The special rotor rotates at high speed to generate vacuum, and the powder is evenly sucked into the working chamber by the suction pipe and evenly distributed in the fast flowing liquid stream, in which the powder is instantly and completely wetted without agglomerating lumps. Since the powder is evenly wetted by the liquid stream at the beginning, there is no powder that is not completely wetted, and no crusts are formed on the surface of the liquid stream, the stirring shaft and the vessel wall. In contrast, conventional processes tend to form hard crusts. This shows that the quality of the product can be greatly improved by using the PLM system. The main reason for the reduction of dust is that the vacuum is generated by the liquid stream and all the powder is introduced into the liquid stream without any residue, so that all the necessary environmental protection auxiliaries of the conventional process are no longer needed.

Features

- Online powder absorption to avoid dust pollution, so that the solid-liquid efficient dispersion, emulsification, dissolution work becomes simple and easy.
- Excellent material selection, lower noise, smoother operation, ensure the high quality of the whole machine.
- No pollution to materials, modular combination, is the ideal choice for pharmaceutical, food, cosmetics high clean requirements.
- Reasonable structure, easy to clean and disassemble.
- Pressure working condition is applicable to normal pressure.

Technical Specification

| MODEL | Motor Power (kw) | Rotation Speed (rpm) | Flow Rate (m ³ /h) | Outlet Pressure (bar) | Powder Suction (kg/h) |
|---------|------------------|----------------------|-------------------------------|-----------------------|-----------------------|
| SPLH120 | 5.5/7.5 | 2900 | 0-10 | 1.5 | 0-500 |
| SPLH140 | 11/15 | 2900 | 0-20 | 2 | 0-1000 |
| SPLH165 | 22/30 | 2900 | 0-30 | 2.5 | 0-2000 |
| SPLH200 | 37/45 | 2900 | 0-50 | 3 | 0-3000 |
| SPLH260 | 55/75 | 2900 | 0-70 | 4 | 0-4000 |