



SeFluid high shear homogenizer series is a type of very efficient mixing equipment. Compared with the ordinary impeller type mixer, it can improve the mixing efficiency by more than 90%. At the same time, it has a better mixing effect.

The SeFluid high shear homogenizer is a precision combination of rotor and stator, which generates strong shearing force in high-speed rotation to achieve the purpose of mixing, crushing and emulsifying. Efficient on-line dispersing equipment, installed on pipelines, can continuously process materials and eliminate the quality difference between batches. The basic structure consists of a pump cavity and a pairs of fixed rotors. Its characteristics are large

processing capacity, continuous production online, narrow particle size distribution range, high uniformity, energy saving and high efficiency, low noise, and stable operation. It can be used for industrial production and pilot product emulsification, homogenization and dispersion. Furthermore, it can be connected to the pipeline integrated system.

SeFluid high shear homogenizer series can distribute one or more material phases efficiently, quickly and evenly to another continuous phase. In general, the raw material phases are mutually insoluble. Because of the high tangent speed and the high-frequency mechanical effect of the high-speed rotation of the rotor, the materials in the narrow gap between the stator and the rotor are subject to strong mechanical and hydraulic shear, centrifugal extrusion, liquid friction, and impact.

Therefore, the immiscible solid phase, liquid phase and gas phase can be uniformly and finely dispersed and emulsified instantaneously under the combined action of corresponding mature processes and appropriate amounts of additives, and finally obtain stable and high-quality products through high-frequency cycling.

Advantages

- Large processing capacity, suitable for industrialized online continuous production
- Narrow particle size distribution and high uniformity
- Save energy and time, high efficiency
- Low noise and smooth operation
- Eliminate differences quality between batches
- Free of dead corner, 100% dispersed shear
- With self pumping ability
- Simple to use and easy to maintain
- Can be integrated into automated pipeline system

Specification Options

- Material: SUS304, SUS316L
- Standard: DIN, SMS, ISO
- Surface Treatment: Polishing $Ra \leq 0.8 \mu m$, Appearance Sandblasting
- Auxiliary Seal: EPDM, VMQ, FKM, PTFE
- Machinery Sealed: C-SIC, SIC-SIC, TC-TC
- Connection Way: Clamp, Thread, Flange
- Temperature Range: $-10^{\circ}C \sim +140^{\circ}C$

Applications



Mixed dissolution:

Soluble solid or liquid and liquid are dissolved together in a molecular or colloidal state; Crystalline powder, salt, sugar, ether sulfate, abrasive, hydrocolloid, CMC thixotropic agent, rubber, natural and synthetic resin

Dispersed suspension:

Incompatible solids and liquids form smaller particle size mixtures or suspensions; Catalysts, matting agents, pigments, graphite, paints, alumina, compound fertilizers, inks, fillers, herbicides, fungicides

Emulsification:

The non-phase solution is not separated from the liquid
Cream; ice cream, animal oil, vegetable oil, protein, silicone oil or light oil, mineral oil, paraffin and wax emulsion, rosin

Homogenization:

Make emulsification and suspension particle size smaller and more evenly distributed; Cream, condiments, juice, jam, seasoning, cheese, fat milk toothpaste, printing ink, enamel

Slurry:

Cell tissue, organic tissue, animal and plant tissue

Chemical reaction:

Nanomaterials, accelerated aeration, accelerated synthesis

Extraction:

Eddy current extraction

Depolymerization:

Nano powder, agglomerated powder

Technical Specifications

Model	Motor Power (kw)	Speed Range (r/min)	Flow Rate (m ³ /h)	Flow Head (m)
SRS60	1.5	2800	0-1.5	10
SRS100	2.2	2800	0-3	10
SRS120	4	2800	0-4	10
SRS140	5.5	2800	0-5	10
SRS165	7.5	2800	0-8	10
SRS180	11	2800	0-12	10
SRS185	15	2800	0-18	10

Model	Motor Power (kw)	Speed Range (r/min)	Flow Rate (L/h)	Flow Head (m)
SRS200	22	2800	0-25	10
SRS210	30	2800	0-35	10
SRS230	45	2800	0-50	10
SRS245	55	2800	0-75	10
SRS260	75	2800	0-90	10
SRS275	90	2800	0-110	10
SRS280	132	2800	0-130	10