ULTRACENIZER Pilot-Scale

High Pressure Homogenizer

35L/hr Max. flow rate 60,000 psi

Min. sample volume



About UltraGenizer

More

The UltraGenizer series high-pressure microfluidics homogenizers are a new generation equipped with diamond interaction chambers. These highly flexible pilot-scale devices feature a simple and elegant design. With a single pump system, the pressure can be adjusted flexibly from 0 to 60,000 psi.

Using ultra-high pressure microfluidics technology, materials can be homogenized to a stable and uniform nanometer level, achieving particle size reduction, transparency, increased stability, active substance delivery, and improved texture and taste. They meet the high-end nano-homogenization needs of the pharmaceutical, biotechnology, cosmetics, food, and special nano-material industries.

Features

Efficient More uniform particle size distribution

Flexible Flow range: 12~35 L/hr, suitable for medium-scale production Continuous

Stable Working pressure up to 60,000 psi ensures stable homogenization

Intelligent PLC real-time monitoring of flow, temperature, and pressure

Safe Hygienic stainless steel and pharmaceutical-grade surface treatment

Economical Affordable price for genuine microfluidics technology

Quiet Operating noise below 60 dB does not affect personnel

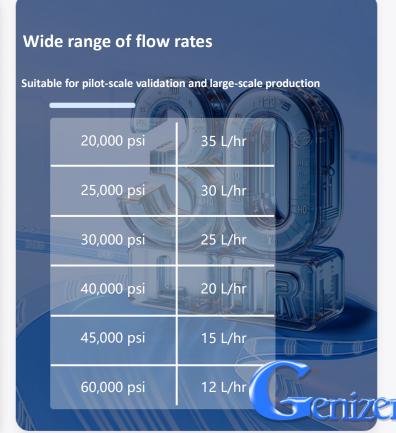
Application

New energy

Active ingredient encapsulation and product homogenization Cosmetics Pharmaceuticals Nanoemulsions, liposomes, nanoparticles, fat emulsions Medical aesthetics Injectable collagen, dermal fillers Food Modification of biomolecules, nutrient lipid encapsulation Vaccine adjuvants, cell disruption Biotechnology Fine chemicals CMP polishing slurries, nanoxide dispersion

Hydrogen fuel cell catalysts, graphene

Effortlessly expand linear amplification Use liposome extruders in conjunction for scaled-up production. Users are allowed to combine matching extruders as needed, enabling integrated homogenization and extrusion molding operations in continuous production processes, thereby providing greater capacity and higher production efficiency.



Core components of micro-jet technology Diamond interaction chamber The diamond interaction chamber is a new generation ultra-high-press te homogenization chamber that uses intense specifically active emulsify materials, reducing a ricle size and ensuring uniform dispersion it made diamond and pharmaceutically active steel, suitable for applications specificals ensuring uniform, dispersion it made diamond and pharmaceutically and ensuring uniform dispersion it made diamond and pharmaceutically and ensurement of the property of the pro

disruption.





The application of diamond interaction chamber technology enables UltraGenizer to generate extremely high shear forces, resulting in significant particle size reduction and uniform distribution.

The core component, the diamond interaction chamber, features fixed geometric micro-channels without moving parts. This design ensures that UltraGenizer delivers consistent high-shear processing, whether handling small samples or large volumes, thereby achieving uniform and consistent particle refinement effects.

Pressure display	Touchscreen digital display (PSI/Bar/Mpa switchable)		sa fue
Weight	~260 kg (573 lbs)		_
Feed temperatu	re Max. 70°C		
Feed viscosity	Below 2000cp	40CM	
Power	380V/430V	UttoCoenteer	
Boost pump	Direct drive motor + casca		35CM
		⊢ 130CM —	

Configurable items Core part Chamber 1PC Inlet Stainless steel reservoir 300ml Outlet Luer hose Inlet check valve Non-powder inlet check valve N/A

Advanced Configurations Multiple models of chambers, cooling parts available Multi-specification stainless steel reservoir and luer syringes Multi-specification luer syringes, stainless steel elbows Powder inlet check valve

Outlet check valve available

High shear force Millions of shears per second, compared with other traditional homogenizing equipment has an unparalleled shear rate, so that the particle size refinement distribution is more uniform, homogenizing effect is outstanding! Closed Rotor Rotor-Stator Homogenizer 700,000 UltraGenizer 1,500,000

