

微射流均质机

HIGH PRESSURE
MICROFLUIDIZATION HOMOGENIZER



产品优势 Product Advantage

- ▶ 模块化高压设计，可实现 24 小时连续工作
- ▶ PLC 全自动控制，符合 GAMP 规范
- ▶ 控制系统符合 FDA 21 CFR Part 11
- ▶ 无菌设计，符合 cGMP，自动 CIP/SIP，可满足无菌制剂生产
- ▶ 可处理高粘度，可耐受有机溶剂，优良的耐化学性能
- ▶ 防爆设计，可在气体易爆环境 (I / II 区) 中使用

- ▶ Modular high-pressure design, can achieve 24-hour continuous operation
- ▶ PLC automatic control, in accordance with GAMP specifications
- ▶ Control system complies with FDA 21 CFR Part 11
- ▶ Sterile process design, in line with cGMP, automatic CIP / SIP, can meet the production of sterile preparations
- ▶ Applicable for high viscosity medium, resistant to organic solvents and excellent chemical resistance
- ▶ Explosion-proof design for usage in explosive environment(I / II)

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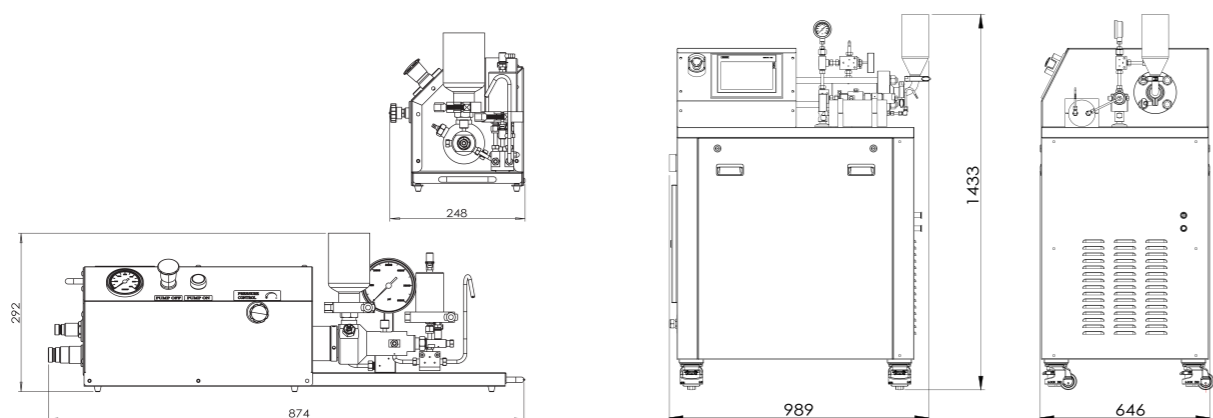
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技术参数

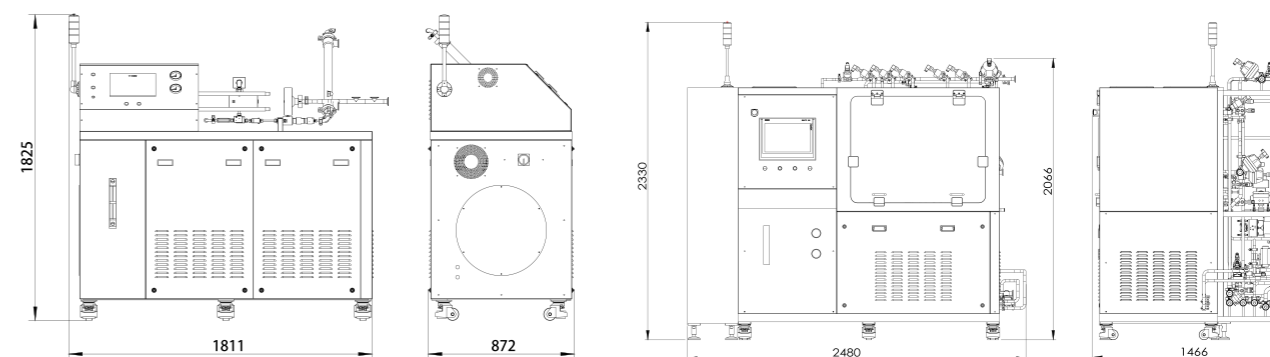
TECHNICAL PARAMETERS



	实验型 Nano LAB TYPE : Nano	Mini – 中试型 MINI TYPE
处理压力 Pressure Range	可达 (Up to) 45,000psi	可达 (Up to) 30,000psi
处理量 Capacity	50ml/min	330ml/min
最小处理量 Minimum Capacity	10ml	50ml
重量 Weight	80kg	约250kg



	生产型 2000系列 Commercial production 2000 type	无菌生产型 2000 Aseptic type
处理压力 Pressure Range	可达 (Up to) 30,000psi	可达 (Up to) 30,000psi
处理量 Capacity	可达 (Up to) 200L/h	可达 (Up to) 120L/h
重量 Weight	约955kg	约1300kg



应用与原理

APPLICATION AND PRINCIPLE

主要应用 Main Application

▶ 制药行业

- ◉ 载药型乳液的均质
- ◉ 脂质体的微粒化制备
- ◉ 纳米混悬液的分散

▶ 新材料行业

- ◉ 石墨烯导电添加剂的分散

▶ 食品行业

▶ 电子浆料行业

▶ 化妆品行业

- ◉ 脂质纳米粒的均质

▶ Pharmaceutical Industry

- ◉ Homogenization of drug-loaded emulsion
- ◉ Nano particle preparation of liposome
- ◉ Dispersion of Nano suspension

▶ New Materials Industry

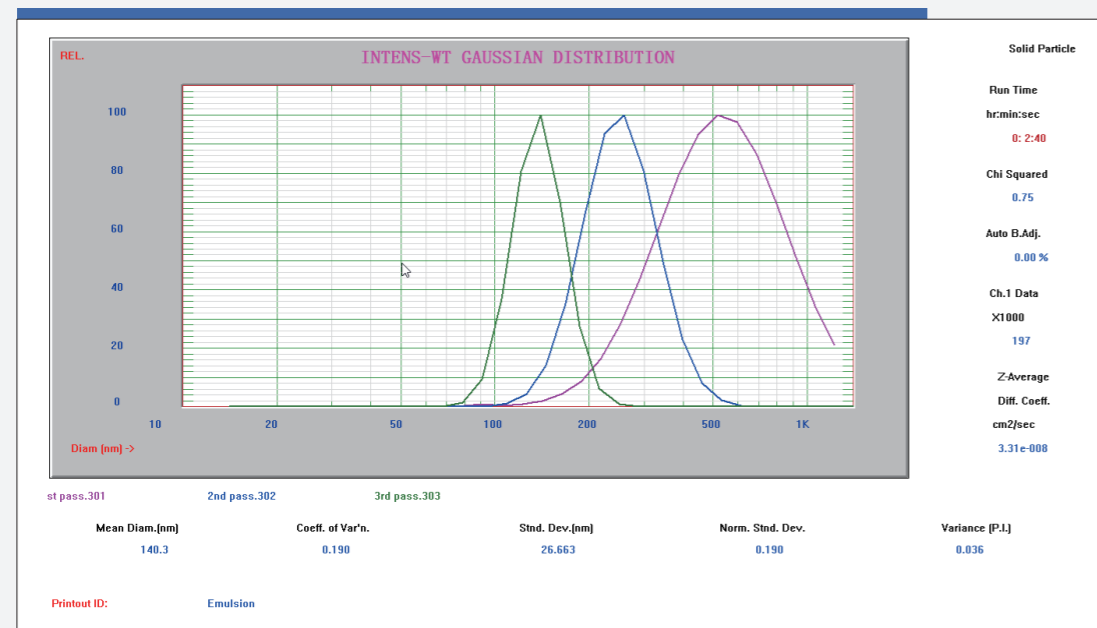
- ◉ Dispersion of graphene conductive additives

▶ Food Industry

▶ Electronic Paste Industry

▶ Cosmetics Industry

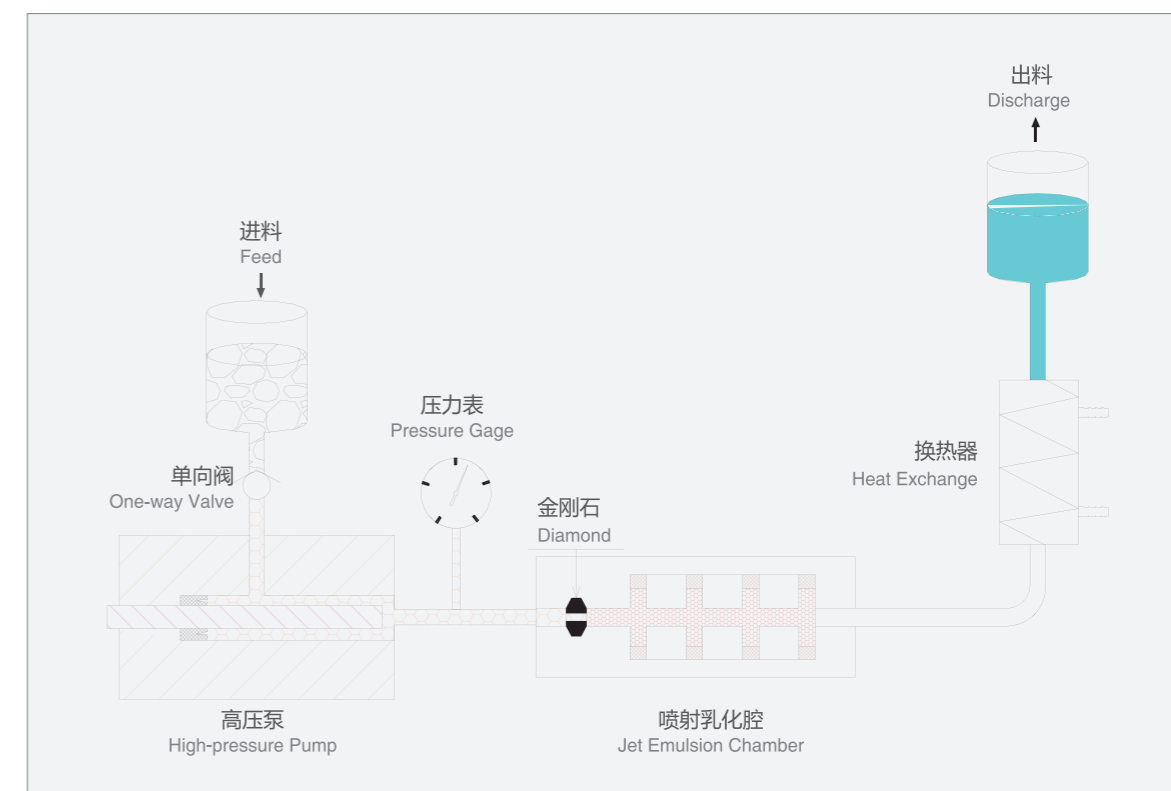
- ◉ Homogenization of liposome granules



工作原理 Working Principle

物料流经单向阀后，在高压腔泵里加压，通过微米级的喷嘴，以亚音速撞击在乳化腔上，同时通过强烈的空穴、剪切效应，得到足够小而均一的粒径分布。

The material flow through a one way valve, was pressured in the high pressure chamber. when pass the micron nozzle, the material will subsonic impact the chamber, with a shearing effect at the same time, then get a narrow range of micron particle.



自控系统 CONTROL SYSTEM



- ▶ 采用触摸屏 PLC 控制，一键式操作，工艺流程图直接明了，全自动配液及物料传输，简洁方便、人性化
- ▶ 配有全自动 CIP 在线清洗系统、SIP 在线灭菌系统，系统可自动在线 SIP、CIP，降低生产成本和劳动强度
- ▶ 自动实时监测、记录、打印各类相关数据
- ▶ 电子签名
- ▶ 审计追踪

- ▶ Touch-screen PLC control, one-button operation. Straightforward process flow chart. Automatic liquid distribution and material transfer--simple, convenient and user-friendly.
- ▶ Online CIP/SIP system, can reduce production cost and relieve labor intensity
- ▶ Automatically monitor, record, and print all relevant data in real time
- ▶ Electronic signature
- ▶ Audit tracking

验证服务 Verification Service

诺泽科技有专业的验证服务团队，负责制药用水设备、配液工艺系统、洁净管道系统及高压气体的验证工作。

验证生命周期从制定 URS 为起点，经过设计确认、建造阶段、安装确认、运行确认、最终通过性能确认来证实 URS 是否完成。

验证是建立一个书面的证据，保证符合客户预先的质量特性。

Noozle Technology has a specialized verification service team established to verify pharmaceutical water equipment, solution preparation process system, clean piping system, and high-pressure gas.

The life cycle of verification starts from the formulation of URS; after design qualification, construction, installation qualification and transportation qualification, the performance qualification is performed to check whether URS is completed.

Verification means to establish written evidence that assures the compliance with the quality characteristics pre-defined by customer.

