

YC-BASIC Series Homogenizer

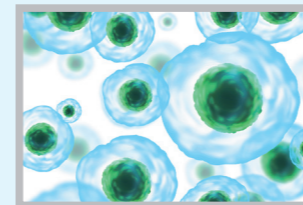
Laboratory Type High Pressure Homogenizer

YC-BASIC series high pressure homogenizer is for laboratory research — meets various experimental needs.

- Comply with GMP and FDA hygiene standards.
- High crushing rate, one-time crushing rate can exceed 95%.
- High hygienic level, and can meet the requirements of food and drug production.



Applications:



Cell disruption

- E. coli
- Yeast
- Algae



Food / beverage

- Dairy products
- Fat substitutes
- Flavours



Pharmaceutical

- Injection
- Nutrients
- Ointment



Cosmetics

- Liposome emulsions
- Skin care cream
- Lipstick

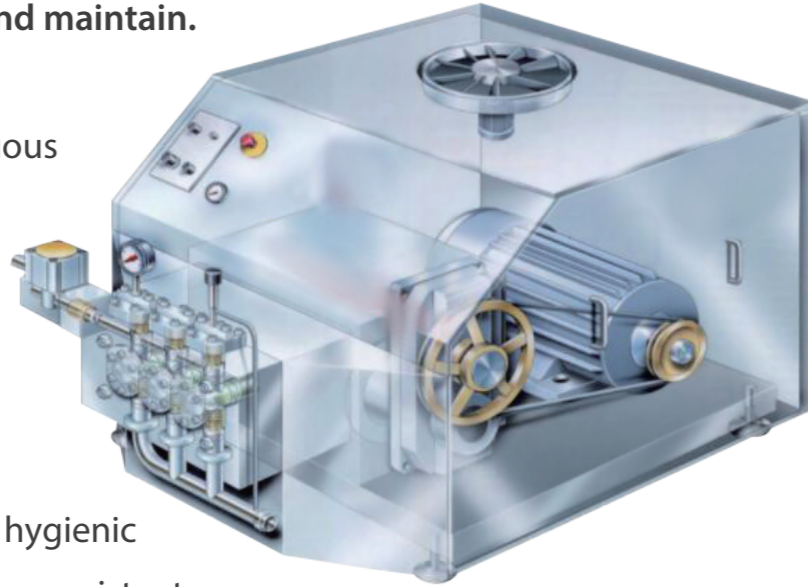


Chemical / Material

- Graphene
- Nanocellulose
- Lithium battery

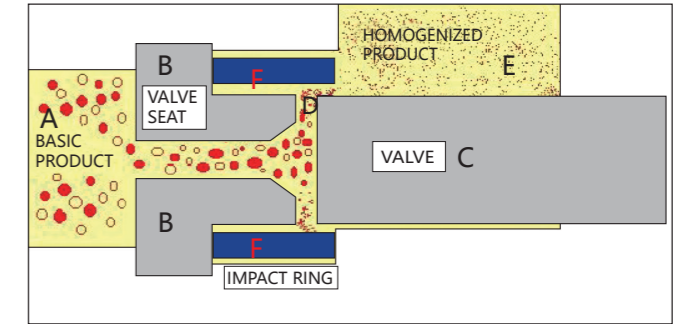
Technical Features:

- **Modular structure, easy to operate and maintain.**
- **Automated operation**
 - Automatic sample injection, continuous operation, no venting required.
- **Safety control**
 - Automatically cut off the controller circuit.
- **Equipment material**
 - Adopt 316L stainless steel with high hygienic level, high-temperature resistant, wear-resistant and anti-corrosion.
 - The core components are made of special ceramics, which are durable and have a long service life.
- **Temperature controllable**
 - The inlet and outlet of the cooling joint are connected to the constant temperature bath, which effectively controls the temperature rise of the homogeneous material.
- **Triple overvoltage safety protection system:**
 - Equipped with BOS inverter for overload start protection.
 - Equipment adopts Italian GEFTRAN, when pressure exceeds 10% of sensor range value, the sensor will send the signal of the unit, and then the machine stops for self-protection.
 - Equipped with safety valve for pressure relief system.



Working principle:

Under the reciprocating motion of the plunger, the material is transported to a valve group with adjustable size, and is subjected to extremely strong compression. When passing through the current limiting slit, the material hits the valve at a very fast speed, resulting in cavitation effect, impact effect and shear effect, so that the aggregated material is evenly dispersed.



Technical parameters

Model	YC-NANO10	YC-BASIC15	YC-BASIC30
Material	316L stainless steel The core components are made of special ceramics		
Flow rate	10L/h	8~15L/h	20~30L/h
Design pressure	2000bar	1500bar	1000bar
Pressure gauge	0~2000bar digital display, accuracy 1bar		
Minimum throughput	15mL	25mL	50mL
Material consumption	0mL(no residue)		
Feed pellet size	< 500μm		
Product process viscosity	< 2000cPs		
Power	1.5kW, 220V/50Hz	1.5kW, 220V/50Hz	2.2kW, 380V/50Hz