

# Hand Driven Sanitary High Pressure Pump

Sanitary transfer of small sample of fluid with Pressure

## Unique Benefits

Always Discount for Public Research

- **Low-cost** high pressure pump
- **Portable** design deliver the light weight and small dimensions
- **Easy** Hand driven without compressed gas
- **Autoclavable** of whole unit
- **Strong:** Ultra-high pressure up to 2,000bar  
Adjustable 3 Stage: 1st Stage: 500bar; 2nd Stage: 1,200bar; 3rd Stage: 2,000bar
- **CE** compliant



HandPump™ is a portable hand driven sanitary high pressure pump. It provides up to 30,000 psi high pressure without the compressed gas or electric motor. It can be used for formulation testing of fat emulsion, liposome, nanosuspension, microemulsion, lipid microsphere, nanoemulsions, dairy products, infusion solutions, cell disruption, juice homogeneity, fine chemical engineering, dye and etc. The HandPump™ provides options of the Y-type Diamond interaction chamber, cavitation nozzle, impact valve or membrane extruder.

## Specifications

Catalog No.	HP-2000	HP-1000	HP-800	HP-500	HP-300
Flow rate	20mL/min	30mL/min	50mL/min	100mL/min	100mL/min
Min. Sample	1mL	2.5mL	2.5mL	4mL	4mL
Max. Pressure	2000bar	1000bar	800bar	500bar	300bar
Multi-Stages (Adjustable)	2000bar 1000bar 500bar	1000bar 600bar 300bar	800bar 500bar 200bar	500bar 300bar 150bar	300bar 200bar 100bar
Dimensions	25cm × 40cm × 20cm				
Weight	15 kg (32 lbs)				
Max. Temp.	80 °C (176 °F)				
Cleaning	Flush to clean; Whole unit autoclavable				



Phone: +1(323) 825-1851  
Fax : +1(323) 978-4693  
Email: Nano@Genizer.com  
[http://www.genizer.com/nanopump\\_p0025.html](http://www.genizer.com/nanopump_p0025.html)

Discount available for public research. Genizer.com reserves the right to change specifications without notice. © 2009 by Genizer. All rights reserved. English Version 041016.

# HandPump™

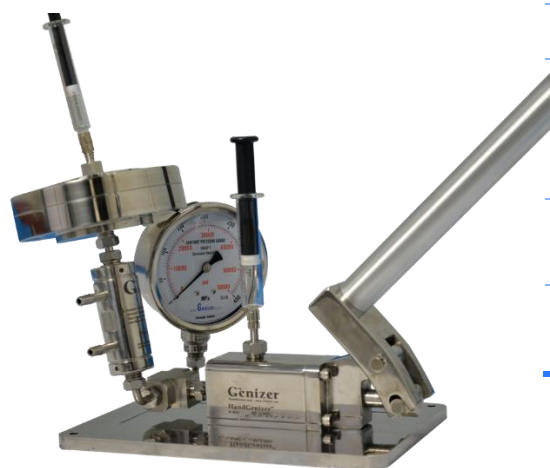
## Hand Driven High Pressure Pump



HandPump with Chamber



HandPump with Liposome Extruder



HandPump with Chamber&Extruder

### Standard Features

Parts	Handpump; Stainless Pressure gauge; Syringe inlet and outlet; 1 extra seal; 1 set tool
Hand Drive	Multi-Stages Handle
Pressure Gauge	35,000 psi G35000 High Pressure Gauge
Inlet type	Luer or 1/2" Triclamp or High Pressure Tubing
Outlet type	Luer or 1/2" Triclamp or High Pressure Tubing
Inlet Reservoir	20ml Syringe
Outlet Reservoir	20ml Syringe
Product material	316L stainless steel, Tungsten Carbide, Viton, Teflon, UHMWPE
Material standard	Pharmaceutical Grade, FDA & GMP approvable
Warranty	1 year against any manufacturing defects

### Available Option

Parts	High Pressure Extruders, Homogenizing valves, Heat Exchanger
Cooling System	Sanitary Heat Exchanger
Detector	Pressure gauge, Pressure and Temp. transducer
Outlet type	Tri-Clamp or Luer
Inlet Reservoir	10ml, 20ml, 50ml, 100ml, 200ml, 500ml Syringe, Tank or Online
Outlet Reservoir	10ml, 20ml, 50ml, 100ml, 200ml, 500ml Syringe, Tank or Online
Cylinder	Titanium High pressure Cylinder (Resistant to strong acid and base)