



Subject to modifications.

PandaPLUS Lab Homogenizer 1000

Technical data | Laboratory homogenizer

This small table-top unit, designed for continuous operation at high pressure, is the perfect equipment for high pressure processing of nanoparticles and cell disruption, as well as dairy products, fruit juices, food additives and ingredients, cosmetic and chemical products.

Thanks to special material selection and liquid end design, it is suitable for abrasive and viscous products and offers reliable use of high pressure energy for new production process development and optimized product formulation.

Tests can be run even with small sample volumes, and the results can be scaled up on industrial homogenizers.

The compact design of PandaPLUS Lab Homogenizer offers an easy installation, use and maintenance. In its standard configuration, it features a touch panel for easy control of all machine functions and it is suitable for CIP and SIP.

Main options

- Electropolished version (Ra 0.5 μm)
- Variable capacity (50% - 100%) with frequency converter
- In line product cooler
- Jacketed feeding hopper with pneumatic pusher for viscous product
- Aseptic execution
- FDA approved gaskets and cGMP documentation
- Spare parts package

Technical data

Number of plungers	1
Net weight	105 kg
Gross weight	135 kg
Dimensions (mm)	W 510 x H 440 x L 760
Minimum sample volume*	60 ml
Internal volume	20 ml
Feeding hopper volume	0,4 l
Noise level	$\leq 69 \text{ dB(A)} \pm 2$

* Minimum sample volume can vary according to products.

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Liquid end

- High grade and high performance Super Duplex stainless steel and special high wear resistant material
- Solid ceramic pumping plunger
- No lubrication water required due to special packing design
- Suction ball valve (PVB) in ceramic, with replaceable suction valve seat in hardened stainless steel (tungsten carbide as option)
- High precision pressure transducer with 4-20 mA signal

Homogenizing valve

- Manual pressure adjustment by hand-wheel
- Reversible wear parts in tungsten carbide, ceramic as option
- Second stage supplied as standard

Power end

- AC motor drive, suitable for variable speed drive
- Camshaft drive system and maintenance-free grease lubrication
- Maintenance-free timing belt drive

Casing

- Made in ABS, completely removable for maintenance and cleaning
- High quality stainless steel base frame
- Adjustable anti-vibration rubber feet

Control panel

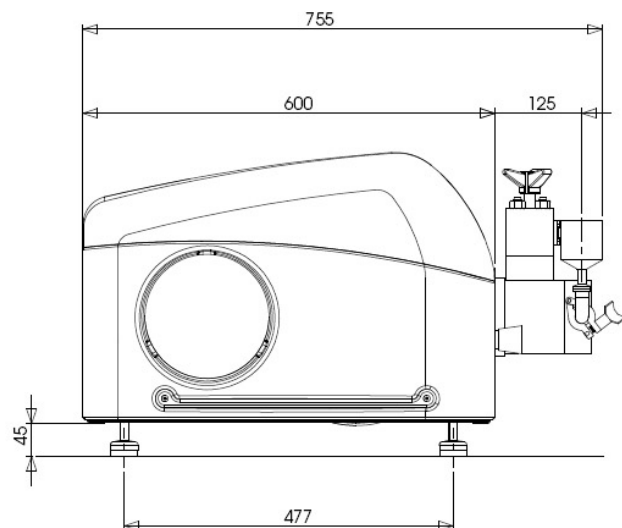
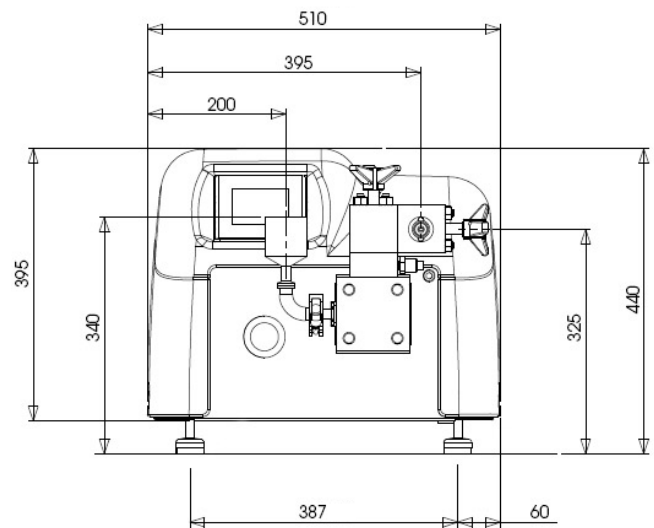
- Touch screen display for machine control
- Start/stop drive control
- Emergency pushbutton
- Pressure trend diagram visualization
- Built-in safety protection against overpressure

Product inlet/outlet

- Feeding hopper (0,4 l) as standard
- 1/2" Tri-Clamp™
- Tri-Clamp™ connections supplied for inline installation
- No feeding pump is needed (for product viscosity up to 1.000 cP)
- SS feeding hopper (2 l) supplied as option

Dimensional drawings

Overall dimensions (mm)



Flow rate (l/h)	Pressure (bar)	Electrical supply (Hz)
20	1000	50
24	1000	60

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