



## PandaPLUS 2000

From the world leader  
in high pressure  
homogenization:  
absolute quality  
and reliability  
with advanced  
technical solutions  
for any laboratory need.

This small table-top laboratory unit, designed for continuous operation at high pressure, is the perfect equipment for high pressure processing of nanoparticles, nanodispersions, nanoemulsions, and for cell disruption. In addition, it can be successfully used for processing dairy products, fruit juices, liquid food, food additives and ingredients as well as cosmetic and chemical products. Tests can be run even with small sample volumes, and the results are comparable with those achieved on bigger size machines.

### COMPRESSION BLOCK

- High grade and high performance Super Duplex stainless steel
- Designed to ensure maximum stress resistance to maximise performance and reliability at high operating pressure
- Solid ceramic pumping piston
- 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

- Reversible wear parts in tungsten carbide, ceramic as option
- Manual pressure adjustment by hand-wheel
- Second stage homogenizing valve group supplied as standard
- Allow front/upwards/downwards outlet to match most convenient layout

### PRODUCT INLET/OUTLET

- Tri-Clamp™ connections supplied for inline installation
- No feeding pump is needed (for product viscosity up to 1000 cP)

### POWER END

- Three phase motor, suitable for variable speed drive
- Camshaft drive system and maintenance-free grease lubrication

### CASING

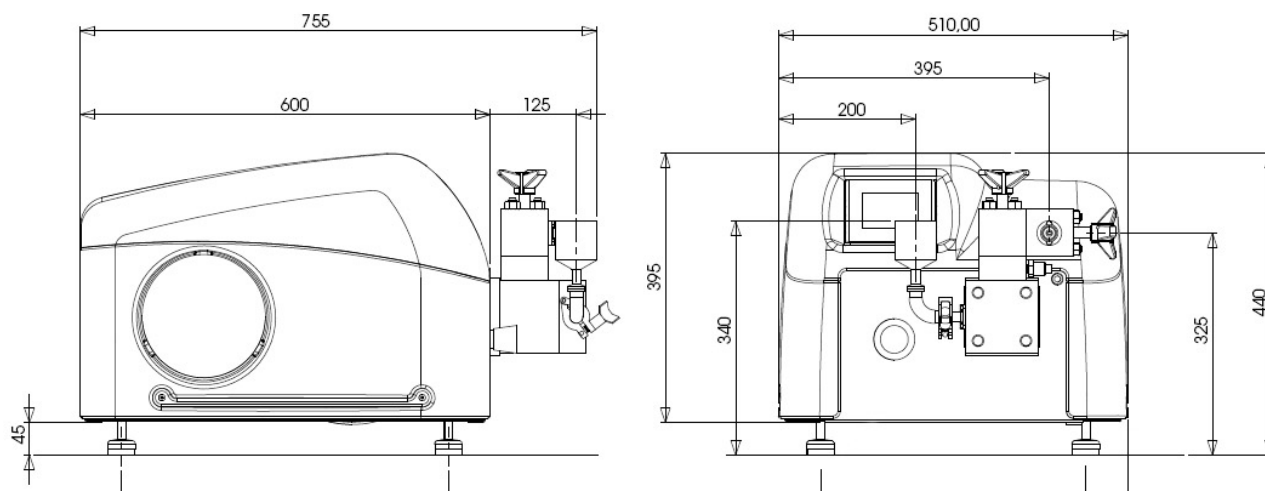
- Made in ABS, completely removable for maintenance and cleaning
- High quality stainless steel base frame
- Adjustable anti-vibration rubber feet

### CONTROL PANEL

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



## DIMENSIONAL DRAWING



measure in mm

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

### DESIGN FEATURES AND PERFORMANCE

Max operating pressure 2000 bar

Three-phase motor 1.85 kW    200 V / 50 Hz  
     220 V / 50 - 60 Hz  
     400 V / 50 - 60 Hz  
     460 V / 60 Hz

Weight 105 Kg

Dimensions mm W 540 x H 440 x L 810

Connections in/out 1/2" Tri-Clamp™

Minimum sample volume approx 15 ml

Sound pressure level < 69 dB (A)

Suitable for CIP/SIP

Feeding hopper volume 0,4 l

### AVAILABLE OPTIONS

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

FLOW RATE (l/h)	PRESSURE (bar)	ELECTRICAL SUPPLY (Hz)
9 l/h	2000 bar	50 Hz
10,8 l/h	2000 bar	60 Hz