



HOMOGENISING SYSTEMS

THE NEW HOME OF THE **STANSTED** RANGE OF HIGH PRESSURE HOMOGENISERS AND CELL DISRUPTER

“EP” PRESSURE CELL HOMOGENISER

PRESSURE CELL SIMPLICITY - STANSTED PERFORMANCE

BRINGING IMPROVED PERFORMANCE, VERSATILITY AND SAFETY TO SCIENTISTS

- **PRESSURES to 4,200 bar
60,000 psi**
- **SIMPLE TO USE**
- **SMALL SAMPLE SIZE**
- **STERILIZABLE CELL & VALVE**
- **TEMPERATURE CONTROL**
- **REPRODUCIBLE RESULTS**
- **MICROPROCESSOR CONTROLLED**
- **REVERSE FLOW PG AND IC
HOMOGENIZATION OPTIONS**

Pressure Cell instruments for cell rupture and homogenisation have been a long established and much loved instrument technology for researchers; now comes a system which takes the simplicity and ease of use of these systems and incorporates this into a new higher performance, safety interlocked system; keeping the best features of the old and combining this with the groups 45+ years of experience in high pressure cell rupture and homogenization to provide an improved system for multi-disciplinary applications.

Full pressure range flexibility 0-60000 psi
European CE and other international safety standards compliant construction.

9ml 60,000 psi cell (4200 bar)

16ml 30,000 psi cell (2100 bar)

32ml 15,000 psi cell (1050 bar)

Scale up and large capacity through HS's extensive range of high pressure cell disrupters and homogenizers



- **CELL RUPTURE**
(E.coli. , Yeast, Staph.a., Mammalian..etc.)
- **NANO PARTICLES**
- **NANO EMULSIONS**
- **SOLID LIPID NANO PARTICLES**
- **LIPSOMES**
- **MICRO EMULSIONS**
- **DISPERSIONS**
- **SUSPENSIONS**

Type 1 Cell

9ml 58,000 psi cell, flow rates up to 80ml min⁻¹

Type 2 Cell

16ml 30,000 psi cell, flow rates up to 140ml min⁻¹

Type 3 Cell

32ml 15,000 psi cell, flow rates up to 275ml min⁻¹

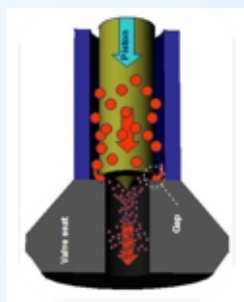
Disrupting / Homogenising Valve Options

- Type 1 High shear piston gap Model HPVS-1
- Type 2 Micro Channel Device Model MCD typical sizes 100 & 200 µm (MWP 30000 psi)

Standard Features

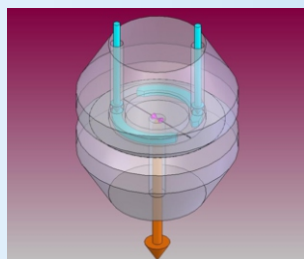
- Full Range Pressure Adjustment
- Variable flow rate including facility to drop by drop processing
- Single shot and automatic (continuous mode cycling modes)
- Interchangeable configurations

Optional Features



REVERSE FLOW PISTON GAP SYSTEM

Custom configurations, refurbishable, inspectable

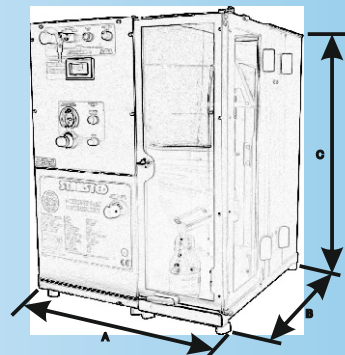


MICRO CHANNEL DEVICE IMPINGING JET SYSTEM

Custom configurations, refurbishable, inspectable

- **Air Cooled outlet cooler** (suits small volume applications) AC-HX
- **Liquid cooled outlet cooler** (suits larger volume applications requires cooling /heating fluid circulation supply) LC-HX
- **Cell body heat exchanger** (requires cooling /heating fluid circulation supply, not available for ultra low volume) CB-HX
- **Pressurised product feed systems**, (0.25 to 5 litre transparent feed chamber) PFS
- **Back Pressure (2nd stage) valve** (allows a two stage pressure processing.
- **Trolley Mount** (stainless steel surfaced trolley with locking castors and intermediate shelf)

MODEL	MWP		FLOW	POWER
	bar	psi	ml/min NOMINAL	kW
S-PCH-EP-10-60	4000	58000	80	2.2
S-PCH-EP-20-30	2100	30000	140	2.2
S-PCH-EP-30-15	1050	15000	275	2.2



Dimensions & Weight (basic configuration)

Width approx. 550mm (21.7")
 Depth approx. 600mm (23.6")
 Height approx. 670mm (26.7")
 Weight approx. 125 kg (275 lb)

Services is offered for either 230V 1ph 50Hz or 110V 1ph 60Hz (adaptations for alternative voltages, ie 220V 1ph 60Hz offered)



SPCH model with trolley mount



The Homogenising Systems range extends to pilot and production models for large scale applications, allowing Homogenising Systems to offer a full and comprehensive service from basic research to production for a wide range of industries from Biotech, Cosmetics, Pharmaceutical, Chemicals, Nano materialsetc.



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