



# ShearJet® PL300 SERIES

## PNEUMATIC HIGH SHEAR HOMOGENIZER

FOR MEDIUM VOLUMES

# ShearJet® PL300 / ShearJet® PL300PH

## Pneumatic High Shear Homogenizers



ShearJet PL300



ShearJet PL300PH

The ShearJet PL300 series is offered in two versions: **ShearJet PL300** and **ShearJet PL300PH** in pharma grade standard

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Specifications:	ShearJet PL300	ShearJet PL300PH
Sample size:	50 ml to 2 liters and more	70 ml
Pressure:	1 - 23 Kpsi (69 - 1586 bar)	
Stroke:	6 ml	
Output:	350 - 400 ml/min at 23 Kpsi (subject to Reaction Chamber® type)	
Power:	Pneumatic air motor (15hp compressor, 120psi, 57scfm, and or air tanks required)	
Dimensions:	17" x 32.3" x 16.7" (43,2 x 82,0 x 42,4 cm)	

### Areas of application:

Applications:	Nanoemulsions, nanodispersions, nanosuspensions, liposomes, de-agglomeration, encapsulation, cell rupture
Industries:	Pharmaceutical, personal care, chemical, biotech and food

Features:	ShearJet PL300	ShearJet PL300PH
Control:	<ul style="list-style-type: none"> <li>Dual gauge for air and process pressure</li> </ul>	<ul style="list-style-type: none"> <li>Dual gauge for air and process pressure</li> <li>Display with re-transmission</li> </ul>
Standard Features:	<ul style="list-style-type: none"> <li>Diamond Reaction Chamber® for longer life and wear resistant to abrasive applications</li> <li>Multiplier pump</li> <li>Back pressure chamber</li> <li>400 ml reservoir</li> <li>Simple feed jacketed helicoil heat exchanger</li> <li>Thermocouples with display</li> <li>Ceramic plunger</li> <li>Tools &amp; spares</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Reaction Chamber® for longer life and wear resistant to abrasive applications</li> <li>Multiplier pump</li> <li>Back pressure chamber</li> <li>400 ml reservoir</li> <li>Sanitary tube and shell heat exchanger</li> <li>Thermocouples with display – infeed and post product heat exchanger</li> <li>Ceramic plunger</li> <li>USP class 6 seals, O-rings, gas-kets, EP and passivation of high pressure connections</li> <li>Pressure transducer</li> <li>Tools &amp; spares</li> </ul>
Optional features:	<ul style="list-style-type: none"> <li>Jacketed Reaction Chamber®</li> <li>1 and or 2 Liter stainless steel reservoir</li> <li>Analog gauge</li> <li>Sanitary flush diaphragm pressure transducer and display</li> <li>Gaskets and O-rings in Viton, Teflon, Kalrez, Buna, EPDM, and EPR, optional tools &amp; spares</li> <li>FAT/SAT and its execution</li> <li>IQ-OQ documentation and its on-site execution</li> </ul>	<ul style="list-style-type: none"> <li>Jacketed Reaction Chamber®</li> <li>1 and or 2 Liter stainless steel reservoir with or without dip tube</li> <li>Gaskets and O-rings in Viton, Teflon, Kalrez, Buna, EPDM, and EPR, optional tools &amp; spares</li> <li>FAT/SAT and its execution</li> <li>IQ-OQ documentation and its on-site execution</li> </ul>

### Advantages:

Performance:	<ul style="list-style-type: none"> <li>Our Diamond Reaction Chamber® with our specially designed micro channels achieve consistent uniform repeatable results</li> <li>Product yield up to 99 percent</li> <li>Greater wear resistance</li> </ul>
Easy-to-clean:	<ul style="list-style-type: none"> <li>Systems low dead volume allows cleaning in a matter of minutes</li> <li>Clean in place (CIP)</li> </ul>
Economy:	<ul style="list-style-type: none"> <li>Save on raw material costs due to low dead volume</li> <li>Low maintenance cost due to superior system design</li> <li>Minimal seals and connections</li> </ul>