

## Pion Mini DeBEE

### The essential tool for effective experimentation with future growth in mind

Regarded as the perfect crossover between R&D and production scale, the Mini DeBEE provides unparalleled formulation discovery and experimentation capabilities at increased flow capacities for direct scalability.

- **Shear:** Force used in high shear mixers
- **Impact:** Force used in bead mills
- **Cavitation:** Force used in sonication equipment

A leader in process technology, the Mini DeBEE combines a variety of mixing tools into one advanced instrument. With unique process setups, you can select the intensity and force of mixing parameters:

- **Process Duration:** Extend or shorten the emulsifying cell for targeted force application
- **Operating Pressure:** Up to 45,000 psi
- **Back Pressure:** Between 0 - 5000 psi

### Ultra-High Pressure Homogenizer Electric Benchtop

- Stable micro / nano emulsions, encapsulations, suspensions & dispersions
- Efficient and controllable particle size reduction
- Cell Lysis with the highest yield
- Robust R&D capabilities with a direct path to increased production
- *Unmatched results in fewer passes*



# Pion Mini DeBEE

## Standard features

- Customizable Emulsifying Cell
- PLC with digital display for easy monitoring
- Robust spare parts kit for minimized downtime
- Process heat exchanger included
- Food & Pharma grade stainless steel construction

	Pressure	Capacity
Mini DeBEE 30 220v & 380v	30,000 PSI	Up to 20 L/hr
	2,000 bar	
Mini DeBEE 45 220v & 380v	45,000 PSI	Up to 20 L/hr @ 30KPSI Up to 15 L/hr @ 45KPSI
	3,100 bar	
Weight	552 Lbs. (250 kg)	
Dimensions	54.5" x 20.5" x 29.5" H (138 x 52 x 75 cm H)	
Minimum volume	100 mL, 150 mL with heat exchanger (30 mL with OPT-SV-Mini)	

## Additional options

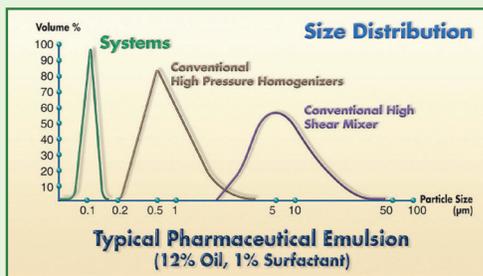
- Doc Packages including: IQ/OQ, COC's, SAT, and FAT
- In line pre-processing
- Electropolished product contact parts
- Feed pump systems
- Customized portable cart
- EC extension
- Back pressure controller

## Technology advantages

- Highest process intensity in the industry
- Easy cleaning and maintenance
- Low-cost replacement parts
- 100% Scalable
- CE compliant



## Emulsifying • Cell rupture • Dispersing • Grinding



Pion is experienced with every nuance of high energy processing. Unlike any homogenizer before, the Mini DeBEE gives you the highest process intensity in the industry and our patented modular Emulsifying Cell allows for unparalleled process customization. You now have independent control over pressure, flow pattern, and process duration as well as shear, cavitation, and impact forces.

We are dedicated to advancing homogenization technology across multiple different industries and applications. Our research and development is ongoing, and you can depend on our precision engineering, quality manufacturing, and worldwide service for the highest reliability.



Pion stands behind the science

Pion Inc. | 10 Cook St. | Billerica, MA 01821 | MA | 01821 | +1 978.528.2020

Pion Inc. (UK) Ltd | Forest Row Business Park | Station Road, Forest Row | East Sussex RH18 5DW | +44 (0) 1342 820720

www.pion-inc.com | sales@pion-inc.com

Specifications subject to change without notice

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