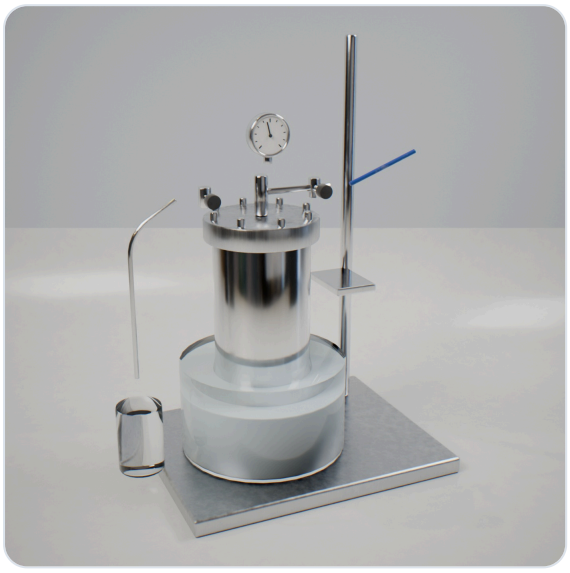
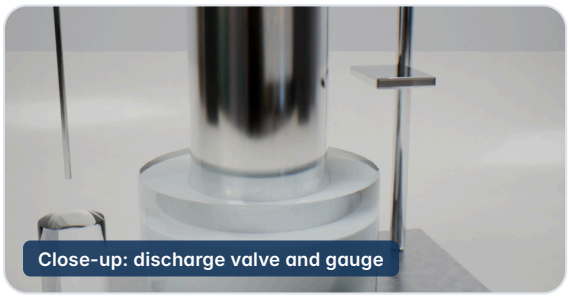
PRODUCT DATASHEET

Nitrogen-Decompression Cell-Disruption Vessel

Pressure vessels that break cells by nitrogen decompression for gentle extraction

Product page





Close-up: discharge valve and gauge

OVERVIEW

The Tech Inc. Nitrogen-Decompression Cell-Disruption Vessel breaks cells gently and evenly by nitrogen decompression. A cell suspension is placed in the stainless vessel and pressurised with nitrogen, which dissolves into the cells; when the suspension is released through the discharge valve to atmospheric pressure, the gas comes out of solution and bursts the cells, with little heating and without shear damage to organelles and proteins.

TYPICAL DESIGN DATA

Pressure	To about 135 bar (2,000 psi)
Material	316 stainless steel
Capacity	About 45 mL to 2 L
Codes and standards	Pressure parts designed with a safety factor and pressure tested
Gas	Nitrogen
Safety	Relief valve and pressure gauge
Cooling	Ice bath or jacket

MODELS AND CAPACITIES

- **TI-CDV-45** – about 45 mL
- **TI-CDV-2000** – about 2 L
- **TI-CDV-600** – about 600 mL
- **TI-CDV-J** – jacketed

Indicative capacity.

ORDERING CODE

Example **TI-CDV-600-J**: **600** capacity, mL; **J** options: J jacket, N none.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: cooling jacket; spare seals; stand; collection fittings.

KEY ADVANTAGES

- **Gentle** – little heat or shear
- **Even** – uniform disruption
- **Simple** – no moving parts
- **Scalable** – 45 mL to 2 L

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