

PowerFuge® P6

The PowerFuge P6 is designed to separate solids that are suspended in a liquid. Using an innovative design, the feed is introduced through a stationary pipe and accelerated to full rotational speed before entering the titanium-alloy bowl. In this system, centrifugal forces, as high as 20,000 x g, permit separation of even sub-micron particles. Compressed solids are periodically removed with a fully automated scraping cycle. After the solids have been discharged, automated CIP/SIP cycles can be performed via the PLC-controlled operating sequence.

Typical applications include:

- E. coli whole cell harvest, lysate removal and inclusion bodies
- P. pastoris clarification
- Specialty chemicals, including aluminum flake and carbon black
- XP and solvent separations, including ethanol, ethyl acetate and similar fluids.

Features

- Complete liquid/solid separations
- Produces the driest cake for maximum yield
- Capable of handling high-density feeds without dilution
- Automated Solids Removal & CIP/SIP Capable
- Optimize processes with full automation
- Regulatory documentation available
- Integrated Cooling Jacket
- Designs available for:
 - CE Marking
 - 2 bar Steam-In-Place (ASME/PED Rated)
 - Hazardous Environments

Operating Parameters

Variable Speeds	up to 20,000 x g
Typical Processing Rates*	1 L/min*
Max. Bowl Speed	15,325 RPM
Max. Concentrate Density	<1.5 g/ml
Bowl Volume	1.1 L

*Processing speeds are application-dependent and may vary. Please consult factory.

**Weights and dimensions dependent on system configuration and options required.



Equipment Specifications

- Designed to meet containment standards consistent with Biosafety Level 1 (BL1) and Biosafety Level 2 (BL2).
- Product-contact materials and surfaces: type 316 & 316L 17-4PH and Nitronic 60 stainless steel, high-strength titanium alloy, Teflon, silicone, EPDM O-rings and gaskets. Stainless steel finish: electropolish (25 RA). Titanium alloy bowl tumbled finish: (25 RA). Swinglock rollers of PEEK (Thermoplastic).
- System footprint (approx.): 102 cm wide x 152 cm deep x 203 cm high (40" x 60" x 80")**
- System weight (approx.): 700 -1,000 kg / 1,500 - 2,200 lbs.**

Utility Requirements

- Motor & Control Panel: 400V/50Hz or 480V/60Hz (configuration dependent)
- Instrument-quality air only, supplied at 80-100psi