

FLUSHING & REFILL CART

Safe and Efficient Liquid Handling for Power Load Products



OVERVIEW

The Powerload Flushing & Refill Cart is a purpose-built stainless steel liquid management system engineered to fill, drain, and flush water/glycol cooling circuits for data centre commissioning and maintenance.

Developed for data centre engineers and facility managers, it provides:

- Controlled transfer of cooling fluids.
- Integrated flushing for system cleaning.
- Safe refill of 500kW liquid-cooled load banks.
- Rapid connection and mobility for site flexibility.

The system complies with data centre safety standards, incorporating interlocks, alarms, and CE-certified components.

KEY FEATURES

- Robust stainless-steel construction – 304-grade frame, 316-grade tank.
- High capacity 250L tank with vacuum relief, auto air vent, and sight glass.
- Dual-pump configuration: high-volume circulation pump and dedicated fill pump with wand.
- Integrated control panel with push switches, alarm lamps, and interlocks.
- Flexible pipework design – manifold with 5x inlet and 5x outlet ports.
- Mobility & stability – 4 swivel lockable castors, anti-vibration pipe supports.
- Quick deployment – compatible with FD83 connectors, Tri-clamp hoses, and UQD drain/fill points.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Overall Dimensions	1380mm (L) × 650mm (W) × 1250mm (H)
Frame	40×40×2mm SHS (304 Stainless Steel)
Handle Rail	1.5" stainless tube
Tank Capacity	250L (316 Stainless Steel, 2mm wall)
Tank Fittings	2x level sensors, 3" filling cap, vacuum valve, auto air vent, level sight glass
Pipework	2" manifold, 5x 1.5" inlet + 5x 1.5" outlet (CSE sight glasses), 10µm cleanable strainer
Drain/Fill Ports	2x ½" UQD connections
Electrical characteristics	480vac / 60Hz
Pumps	1x circulation/flushing pump (high volume), 1x fill pump with wand
Control Panel	On/Off switches (pumps), high/low level alarms, 5m 480VAC 60Hz power lead
Mobility	4x swivel lockable castors
Options	10x FD83 connectors (Tri-clamp) + 10x peroxide-cured 3m hoses
Weight	Empty – 135kg Full – 385kg

APPLICATION IN DATA CENTRES

- Commissioning and flushing of water-cooled load banks.
- Controlled filling and draining of chilled water loops.
- Temporary or permanent cooling liquid distribution.
- System cleaning prior to commissioning.

SAFETY COMPLIANCE

- Tank level interlocks (high/low alarms).
- Emergency relief valve and auto air vent.
- Anti-vibration pipe clips for stability.
- CE certified components and compliance with commissioning safety standards.