



INDUSTRY INSIGHT

Data Center Pre-Commissioning Services: Clean Systems, On-Time Launch, Zero Surprises

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Mechanical HVAC Systems:

Keep your cool. We'll handle the heat.

Protect Your Investment. Guarantee Uptime from Day One.

Your data center's cooling infrastructure represents millions in capital investment and is the lifeline preventing catastrophic IT equipment failure. A single cooling system malfunction can cascade into expensive downtime, violated SLAs, and equipment damage that voids warranties.

The Cost of Skipping Pre-Commissioning Cleaning:

- Delayed go-live schedules costing \$100K+ per day in lost revenue
- CRAC/CRAH unit failures requiring emergency replacements during critical startup phases
- Reduced cooling efficiency increasing operational costs by 15-30% annually
- Voided equipment warranties due to contamination-related damage

- Unplanned downtime when debris causes blockages post-launch

Our Pre-Commissioning Cleaning Services Deliver Measurable Results:

FQE systematically removes operational threats before they impact your timeline or bottom line

Air Blows: Blow out large debris to prevent costly blockages at cleaning force ratios greater than 1.1, ensuring proper removal.

System Flushing and Filtration: Utilize external filtration systems designed to capture contaminants, thereby protecting in-line system strainers or meet NFPA standards by verifying fire systems are capable of designed flows.

Chlorination and Biofilm Removal: Disinfect potable water lines within the building for suitable drinking water.

High-Pressure Water Blasting: Remove even the toughest of mill scale by cutting it out of your system.



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Electrical Back-Up Generators

Flush the risks out. Keep the power steady.

When the Grid Fails, Your Generators Must Start—Every Single Time.

In mission-critical facilities, generator failure isn't just an inconvenience—it's a business-ending event. Contaminated lubrication systems are the leading cause of bearing failures that can destroy generators during the exact moments you need them most.

The Hidden Risk in New Generators:

Even factory-fresh generators contain manufacturing debris, metal particles, and contaminated oil that will damage precision bearings during startup and void your warranty before you generate your first kilowatt.

Our Oil Flushing Eliminates This Risk—Guaranteed:

FQE's specialized, self-contained oil flushing skids achieve even the most stringent ISO cleanliness criteria quickly and within the compact footprints typical of data center mechanical spaces.

What This Means for Your Operation:

- Warranty protection preserved – Meet OEM cleanliness requirements and maintain full coverage
- Bearing life maximized – Remove destructive particles before they cause wear

- Startup confidence – Know your backup power will perform when the grid fails
- Commissioning timeline protected – Avoid delays from contamination-related test failures
- Long-term reliability – Start with clean systems that deliver design life expectations

The Bottom Line: A generator that fails on startup represents millions in potential losses. Our pre-commissioning oil flushing is insurance you can measure—protecting both your equipment investment and your operational reputation.

Why Data Center Operators Choose FQE

Experience That Prevents Expensive Surprises

- Pre-Commissioning Specialists for Critical Infrastructure – We understand data center timelines and the cost of delays
- Customized Service Solutions – Every system receives cleaning protocols engineered for its specific requirements and contamination profile
- Cross-Discipline Expertise with Safety Focus – Our teams work across mechanical, electrical, and controls systems with zero-incident safety records
- Documentation for Compliance and Handover – Receive detailed reports proving system cleanliness for warranty claims, audits, and operations teams



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