

VENDOR CATALOG / EPIPHENE

Epiphene Catalog

CPH-16 chemical-free sub-micron silt separation skids and LPD-Mag magnetic Y-strainers for ECM pump protection – physical alternatives to chemical scale and fouling control.

CHEMICAL-FREE SOLIDS SEPARATION

CPH-16 Skid – Nucleation Seed Removal

Mineral scale doesn't form spontaneously in bulk solution – it needs a physical nucleation site. Heterogeneous nucleation occurs when dissolved minerals precipitate onto pre-existing 0.1–10 micron silt/sand/biological particles. Remove the seed particles, and you prevent the scale before it starts – a physical alternative to chemical antiscalant dosing, not a competing filtration technology.



CPH-16 – Four GPM Tiers

30–100 GPM • 100–250 GPM • 200–500 GPM • 500–1000 GPM • towable, tow-booster options at 50ft and 100ft head

Rapid-deployment plug-and-play skids, not fixed-installation only. Vendor's own headline claim in data center/HVAC cooling service: 25% extra cooling expansion capacity unlocked from the same infrastructure by preventing scale-driven capacity loss, plus higher achievable cycles of concentration and reduced biocide/dispersant chemical dosing.

POLISHING STAGE

Stackable Single Media Filters



Down to 5-Micron Filtration

Stackable design, low backwash requirement, reduced media volume versus conventional media filters — used as a polishing stage after CPH-16 separation, in applications targeting RO/desalination membrane pre-filtration, industrial process water reuse, and agricultural irrigation silt removal.

APPLICATION SCOPE

Directly in scope: RO/desalination membrane pre-filtration, industrial process water reuse, cooling-tower/HVAC scale prevention, and agricultural irrigation silt separation.

MAGNETIC Y-STRAINER — ECM PUMP PROTECTION

LPD-Mag Series

ECM (electronically commutated motor) pumps have powerful internal magnets that attract iron oxide into the pump's wet rotor, wearing through the housing and causing leaks or seizure. LPD-Mag intercepts that iron oxide upstream, before it reaches the pump.

Model	Pipe Size	Cv (GPM)	Weight
LPDMAG0200	2"	120	20 lbs
LPDMAG0250	2-1/2"	165	30 lbs
LPDMAG0300	3"	236	50 lbs
LPDMAG0400	4"	460	75 lbs
LPDMAG0500	5"	600	115 lbs
LPDMAG0600	6"	952	154 lbs
LPDMAG0800	8"	1580	273 lbs

Materials: Body/flanges/cover cast iron, screen 304 stainless steel, drywell 304 stainless steel, O-ring gasket Viton, magnets neodymium. **Rating:** water/oil/gas service 175 PSI @ 150°F, maximum operating temperature 212°F, 125# flange drilling.

NEXT STEP

Send LibertyCES the process data, not a part number.

Chemical-free silt separation and magnetic pump protection — two genuinely distinct technologies, but your actual application still has a specific flow rate, closed-loop system design, and scale/fouling risk profile that determines the correct configuration.

Flow rate, system type (open cooling loop, closed HVAC loop, irrigation, RO pre-treatment), pipe size, and current scale/fouling history — that's what a real spec review needs to start.

Request a spec review

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