

UV Disinfection System Spares: Berson, Trojan and Wedeco

cBallast · 2026 edition · Cross-reference guide

Lamp technology families

Low-pressure high-output (LPHO) amalgam lamps emit narrow 254 nm at high UV efficiency. Medium-pressure (MP) lamps emit broadband 200 - 300 nm at higher power density; fewer lamps per reactor. Both technologies appear in all three OEMs' catalog; the reactor nameplate identifies which is fitted.

Berson InLine+

Reactor	Technology	Power	Arc / sleeve OD x length
InLine+ 1150	LPHO amalgam	320 W	1500 mm / 32 mm x 1600 mm
InLine+ 2000	LPHO amalgam	320 W	1500 mm / 32 mm x 1600 mm
InLine+ 5000	Medium pressure	3 - 12 kW	800 - 1200 mm / 36 mm x 900 - 1300 mm

Trojan Technologies

Reactor	Technology	Power	Notes
UVSwift SC / ECT	LPHO amalgam	250 W	Municipal drinking water, US EPA validated
UVFit	LPHO amalgam	200 - 320 W	Compact in-line, small utility
UV Signa	LPHO amalgam Solo Lamp	600 W	Municipal wastewater open-channel
UV3000B	LPHO amalgam	250 W	Legacy open-channel

Xylem Wedeco

Reactor	Technology	Power	Notes
Spektron	LPHO amalgam Ecoray	150 - 350 W	Compact drinking water
K-series (K10 - K200)	LPHO amalgam Ecoray	350 W	Municipal wastewater
MiPRO	Medium pressure	1 - 26 kW	AOP with H ₂ O ₂ / O ₃
Duron	Medium pressure	1 - 12 kW	Ballast water (ScienceE)

Quartz sleeves

Sleeves must transmit >90% of 254 nm and withstand reactor operating pressure. Foul over time; maintenance plan includes OEM-recommended wipe cycle (auto wipers on large

reactors, manual CIP on smaller units).

Electronic ballasts

Each lamp needs an electronic ballast that provides start voltage, warm-up profile and running current. OEM-specific: a Trojan lamp physically fits a Wedeco reactor but the ballasts are not interchangeable. Cross-check ballast nameplate against lamp nameplate before install.

BWMS context

Ship-borne UV reactors require class-society type approval (DNV / ABS / LR / BV / ClassNK), USCG 46 CFR 162.060 type-approval, and IMO MEPC.279(70) operating parameters. Replacement lamps must be identical in transmissivity, arc length and end-cap to the type-approved lamp, or the type approval becomes invalid on the next survey.

Related on cBallast

- <https://cballast.com/brands/Berson>
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