CJC Fine Filter Inserts — Offline Oil Filtration, Insert Size Codes and Element Types

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How C.C.Jensen's offline (kidney-loop) filtration works, reading the insert size code (15/25, 27/27), what separates the B, BG, BLA and application-specific insert builds, coalescer elements for the PTU fuel-conditioning units, and the change-out logic that keeps hydraulic, gear and lube-oil systems inside cleanliness targets.

Why offline filtration earns its skid space

An offline (kidney-loop) filter circulates a side stream of the reservoir through a deep cellulose element at low velocity, independent of the machine's own full-flow filter. The slow pass is the point: depth media hold an order of magnitude more contaminant than pleated in-line elements, polish to fine-particle levels full-flow filters cannot run at, absorb free and emulsified water, and strip the soft oxidation products (varnish) that blind servo valves. Danish maker C.C.Jensen built its whole programme — around 65 line items stocked under the CJC brand — on that principle, and the consumable is the insert, not the housing.

Reading an insert reference

Element | What it says | Stocked examples |

Letter group | The media build for the duty | B 27/27 (the standard fine-filter insert), BG 15/25, BLA 27/27 |

Size fraction | Insert format — the two common frames are 15/25 and 27/27, and housings are built around one of them, singly or stacked | B 15/25 vs the 27/27 family |

Application builds | Media tuned to one fluid duty | LO4D 27/27, the Marine Diesel Insert 27/27 |

Coalescer elements | For PTU fuel/oil conditioning units — coalescing free water out of diesel rather than absorbing it | PTU2 27/27 coalescer |

The match that matters when re-ordering is letter group + size fraction together — a B 27/27 and a BLA 27/27 drop into the same housing but are different media. The housing label or the old insert's part number settles it; CJC part numbers (PA56… for inserts, FB43… for coalescers) are printed on every element.

Running and changing inserts

Change on differential pressure, not calendar: the housing gauge tells you when the depth media is loaded. A fast 9E ise after an insert change usually means the system is shedding stored contamination — expected on first installs.

Water capacity is finite: inserts absorb water until saturated; a system with a known leak needs the leak fixed or a coalescing stage, not faster insert changes.

Judge by oil analysis: ISO 4406 particle counts and water ppm before/after a month of offline filtration are the business case in two numbers — gear oils routinely clean from 22/20/17 toward 17/15/12 territory on a correctly sized loop.

Stock one change-out set per housing: inserts are the only consumable, and a planned 45-day replenishment cycle fits how these systems are actually serviced.

Quotations within 24 hours against the insert part number or the housing model, dispatched from European supplier stock worldwide — pair this page with the lubricant selection and oil chemistry references for the fluid side.

Frequently asked questions
How often should a CJC filter insert be changed?When the housing's differential-pressure indicator says so — the depth media is designed to load up over months. Oil analysis trending (ISO 4406 counts, water ppm) confirms the interval for each system; calendars alone waste inserts or run them saturated.What is the difference between a B 27/27 and a B 15/25 insert? Size only — 27/27 and 15/25 are the two insert frames CJC housings are built around, singly or stacked in the taller units. The media build (the letter group) is what changes filtration behaviour.Can offline filtration remove water from oil?Yes — the cellulose depth media absorbs free and emulsified water until saturation, and for continuous water loads (fuel conditioning) the PTU units use dedicated coalescer elements that drain water off instead of binding it.Does a kidney-loop filter replace the machine's own filter?No — the full-flow filter protects components during every pass; the offline loop controls the reservoir's long-term cleanliness and handles what full-flow porosity cannot. They solve different problems and run together.Why fit 3 µm offline filtration when the system filter is 10 µm?Because most wear is driven by the particle sizes full-flow filters pass: silting of servo valves and rolling-contact fatigue track fine-particle counts. Offline loops run fine media precisely because they see low flow and no cold-start surges.

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