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CLARIFY – Disposable Nuclear Filters

On-time delivery of high-quality replacement filter cartridges available through the Nuclear's Parts Center 24/7/365 online inventory

Challenge

Nuclear power plant operators need high-quality replacement filter cartridges to support refueling and spent fuel pool storage water clarity that are reliable, safe, cost effective and available in a timely manner.

Solution

The Framatome CLARIFY filters for service in nuclear power generating stations are designed to fit directly into existing Tri Nuclear Corp. filter housings, offering the same form, fit, and function as the Pall 140 Series filters.

The filters are constructed with type 304 stainless steel end caps and a perforated stainless steel outer shroud. The shroud allows the filter to be crushed or sheared more easily than mesh screens. The filter is designed for inside-to-outside flow and can be used in both vacuum and pressure applications.

CLARIFY filters have a polypropylene media with fixed pore construction that precludes solids unloading or media migration. They are compatible with the fuel pool water at typical process conditions during normal and refueling operations. The filter-to-housing seal is provided by the outer-formed lip of the open-end cap, which engages the integral housing o-ring. Existing change-out procedures will be maintained for the CLARIFY filter.

Application

CLARIFY filter elements remove suspended solids from the fuel pool, fuel transfer canal, suppression pool, and reactor cavity water for visual clarity and radiological improvement.

Performance

CLARIFY filter supports outage-related cleanup with its exceptional dirt-holding capacity and high efficiency. The filters enable plants to reduce the frequency of change-outs, resulting in less radiological waste. The design of the filter's outer cage delivers improved shearability and crushability, further reducing the amount of radiological waste generated.



Customer benefits

- Lower costs with the direct drop in replacement filters for PALL-140 Series filters typically used in underwater Tri Nuclear filtration systems.
- Rest assured with the high-quality filter material
- Meet industry standards; the filters are available in glass fiber and polypropylene
- Maintained in stock for rapid delivery
- No additional waste management costs, as the filters fit in existing waste handling process

Operating Characteristics

The recommended maximum pressure differential for the CLARIFY filter elements is 75 psid. The maximum operating temperature is 250°F.

CLARIFY cartridge filters are designed to tolerate process water containing up to 2.8 percent (wt) boric acid or 5,000 ppm boron, 5 ppm lithium, and will withstand 3 mega-rads of radiation from a cobalt-60 source without a reduction in overall integrity or performance.

The polypropylene media has been tested and certified to fully meet the OEM and utility chemistry standards for both totals and leachable contaminants in all categories.

Customer Service

The Framatome Nuclear Parts Center's extensive inventory enhances efficiency, enabling rapid turnaround during scheduled repairs or emergencies. As a premier provider of nuclear products solutions and services, Framatome is committed to enhancing safety and efficiency for the world's nuclear power plants. We combine innovative technology with a tireless commitment to responsiveness and reliable performance — all to help you succeed.

Framatome Part Number	Micron Rating B-5000 Absolute	Replaces Pall Part Number	Replaces Tri Nuclear Corp.
1251092-325	0.1	5ESC10770-3U001 Z	N/A
1251092-326	0.5	5ESC10770-3U0045	N/A
1251092-327	1.0	5ESC10770-3U010Z	VCPH-0.1G
1251092-328	2.0	5ESC10770-3U2-20Z	VCPH-0.3PE
1251092-329	5.0	5ESC10770-3U6-40Z	VCPH-1PE
1251092-330	10.0	5ESC10770-3U100Z	N/A
1251092-331	20.0	5ESC10770-3U200Z	VCPH-5PE
1251092-332	40.0	5ESC10770-3U400Z	VCPH-10PE



Scan to view our parts on the web: www.framatome.com/npc

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