framatome

Water Lance System



Framatome's water lance system cleans PWR steam generators using a highpressure, high-flow water jet with 90 degree sweeping action for effective sludge removal in square or triangular tube pitches.

Challenge

Secondary water flowing through recirculating steam generators can cause corrosion and sludge deposits over time. If not removed regularly, the deposits build up and can result in the degradation of steam generator efficiency. Longevity and integrity of the tubing is also compromised. The result is unplanned outages and compromised cost-efficiency for the plant.

Solution

The first to implement high-pressure (3,000 psi) and high flow rate (85–90 gpm) for sludge removal, Framatome's high-pressure/ high-flow patented static water lance system is delivered with a 90-degree sweeping action. This high-pressure system for square or triangular pitch steam generators enables fixed water jets to maintain tight water columns that penetrate completely through the SG tube bundle. This process transfers all of the energy to locations containing the most sludge and effectively removes hard collars. Framatome has removed nearly fifteen tons of sludge and foreign material using this lancing process. Additionally, the lancing tooling is designed to allow visual inspections without dismounting the equipment, driving schedule improvements.

Your performance is our everyday commitment

Customer benefits

- Proven, low-cost, mechanical process for hard collar removal without chemical cleaning
- Cleans shadow regions between tubes
- Immediate visual inspection of progress via integrated camera attachment
- Minimizes schedule, personnel, dose and cost

We continually invest to advance our technology and fine-tune our water lance process parameters. Our most current technology includes an improved suction foot, enhanced camera view, lockable FME dose-reduction plugs and a new remote alignment indexer.

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