

US: Framatome deploys new tool for innovative inspection of baffle bolts in reactor vessels

Framatome deployed an innovative new solution for ultrasonic testing of baffle bolts inside of a reactor vessel. The inspection tool, known as Falcon, has assessed up to 40 bolts per hour, saving approximately 30 hours on an outage schedule. Framatome deployed the tool during the fall 2018 and spring 2019 outage seasons.

"Falcon creates a stable environment to analyze the integrity of baffle bolts, addressing existing challenges with fluid movement in a reactor during these inspections," said Catherine Cornand, senior executive vice president of the Installed Base Business Unit at Framatome. "With Falcon, Framatome can inspect baffle bolts precisely, consistently and quickly, saving operators valuable time during outages."

Baffle bolts, which hold the reactor vessel structure together, present a variety of inspection challenges. Due to differences in location and age, their size and level of degradation can vary significantly.

Falcon includes four encoded motors that move a radiation-tolerant camera and an ultrasonic transducer along a neutrally buoyant pole that clamps to the top of a baffle plate. The device creates a stable environment for controlled movement and placement of these tools. Revolutionary software accompanying the device records and evaluates data in seconds per bolt, saving time and improving schedule predictability during an outage.

Falcon is Framatome's third generation solution for baffle bolt inspections, complementing the underwater submarine, SUSI. Depending on the needs of the customer, Framatome will deploy either Falcon or SUSI in the future.

Framatome is a major international player in the nuclear energy market recognized for its innovative solutions and value-added technologies for designing, building, maintaining, and advancing the global nuclear fleet. The company designs, manufactures and installs components, fuel and instrumentation and control systems for nuclear power plants and offers a full range of reactor services.

With 14,000 employees worldwide, every day Framatome's expertise helps its customers improve the safety and performance of their nuclear plants and achieve their economic and societal goals.

Framatome is owned by the EDF Group (75.5%), Mitsubishi Heavy Industries (MHI - 19.5%) and Assystem (5%).

CONTACTS

Press office press@framatome.com