



Multi-Functional Underwater Submarine Delivery System

SUSI Submarine-Based Inspection

The most stable, maneuverable and versatile submarine delivery system in the industry

Challenge

Nuclear plants worldwide perform a variety of underwater NDE activities from VT-3 to EVT-1 and UT examinations, both to primary and secondary side components. Plants are constantly challenged when trying to examine hard-to-reach areas. Along with a need for reliability in the underwater delivery system, plants need innovative tools for multiple examinations that allow for flexibility and speed to reduce overall outage time.

Solution

To meet the industry's underwater examination needs, Framatome developed the Submarine System for Inspections (SUSI). SUSI is available in a variety of models: the 420, 270, 190 and mini. SUSI can be outfitted with a variety of tools including cameras, UT transducers, and FME retrieval tools. In the water, SUSI is neutrally buoyant and is the most stable delivery submarine system in the industry.

In addition, SUSI is equipped with a precision depth gauge for location verification and can be calibrated underwater at any time during an examination. A separate satellite camera system can be deployed with SUSI, or on its own, to further enhance examination results in hard-to-reach areas.

Positioning Control During Examination of Core Barrel Baffle Bolts

SUSI is an essential tool for highly effective baffle bolt exams. Want enhanced reliability? SUSI delivers — and also saves time. In fact, Framatome developed a specialized UT technique to inspect baffle bolts for a customer with an urgent need. The UT examination on-site progressed so well, the scope was expanded to encompass all eight rows or 864 of the customer's baffle-to-former bolts — all completed in just 56 hours.

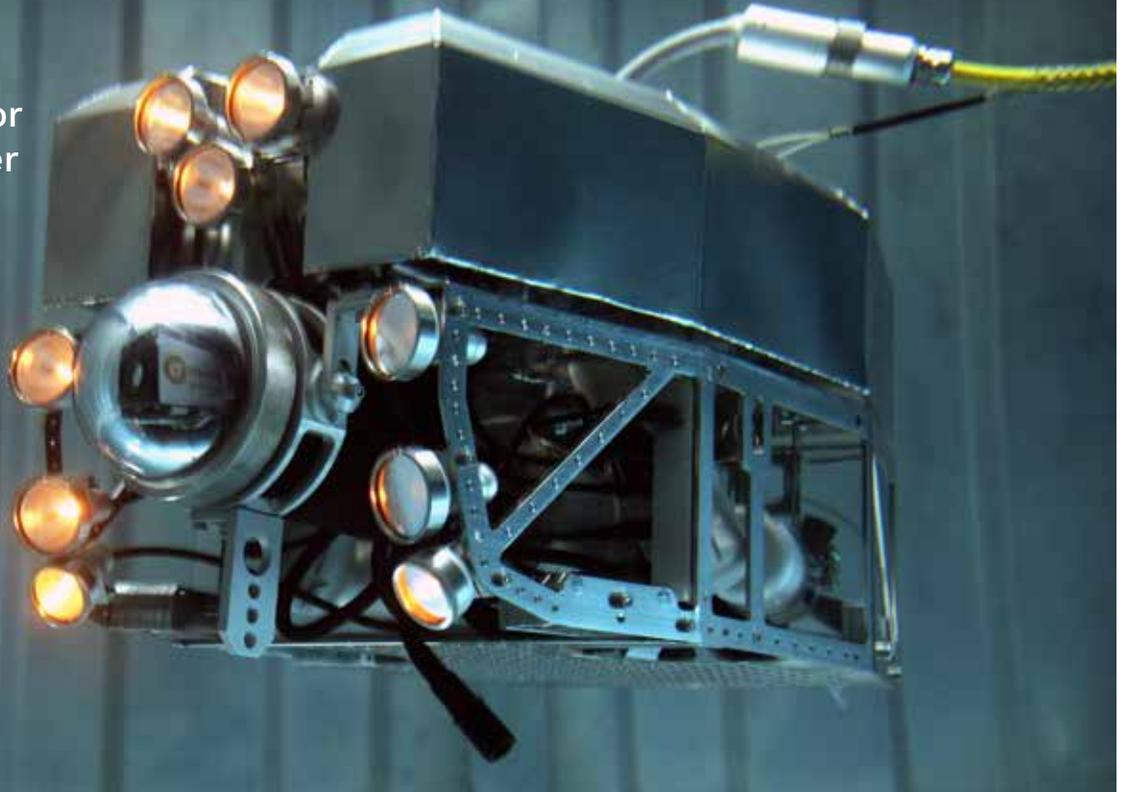
Your performance
is **our** everyday **commitment**



Customer benefits

- Four independent degrees of freedom make SUSI the most maneuverable submarine in the industry to provide the examination without compromising quality.
- Components are radiation-resistant to ensure equipment reliability and the highest quality video.
- SUSI is easily adapted and reconfigured for the changing needs of the nuclear industry.
- The system is easily set up and removed from containment to minimize impact to the overall outage.

SUSI delivers accuracy and predictability for your underwater inspections.



A Variety of Examinations

- Reactor vessels
- Reactor internals
- Primary loop from the steam generator (SG) and main coolant lines
- Core check after reload
- Main coolant pump housings
- Top of SG tube bundles
- Tanks and piping

Reliability. Performance. And speed. It all adds up to SUSI. Framatome's global resources stand ready to put this dynamic innovation to work for you.

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