

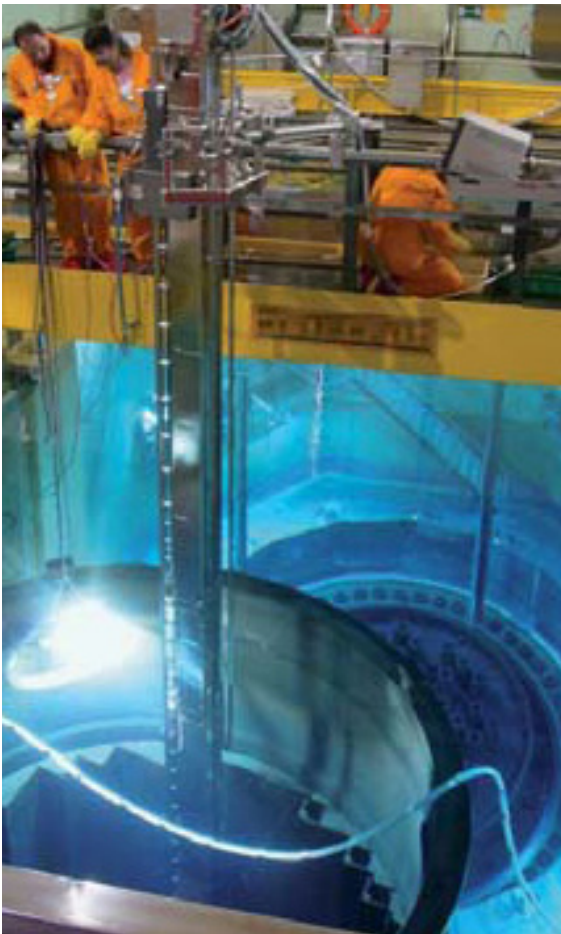
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Mast System

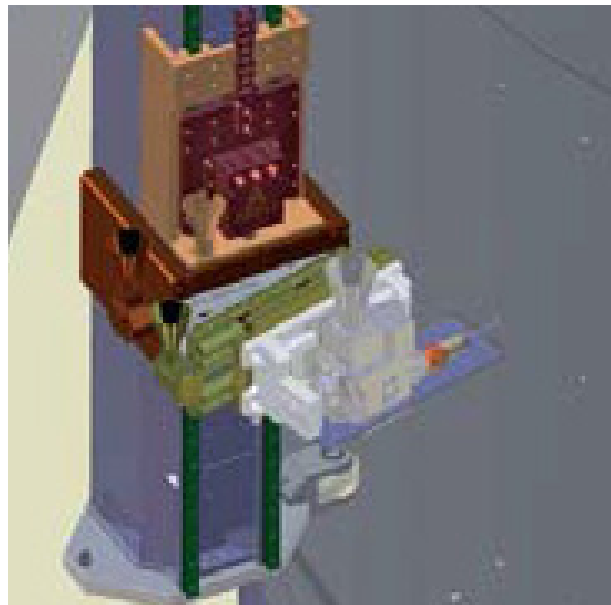
Multipurpose device for reactor pressure vessels (RPV) and RPV Internals repair—applicable to all PWR & BWR models

Easy-to-customize multipurpose repair tool for RPV and RPV internals requiring minimum time for installation and removal

The RPV with its internals is the heart of each nuclear power plant (NPP). Any inspection, intervention, repair or replacement must be executed with the highest level of accuracy and competence to guarantee a safe and reliable operation during its entire lifetime.



Baffle bolt replacement (PWR)



Computer Simulation for barrel bolt replacement (PWR)

Defect Challenge-Repair Solution

Framatome's Mast System is a high precision multipurpose positioning system for all kinds of tools and devices. It was designed for use with the existing auxiliary bridge or refueling machine. Upon request, Framatome can provide a separate working platform. The system has been successfully deployed in numerous nuclear power plants and is continuously being improved since 1984 to meet the latest technical requirements.

The Mast System can be adapted to any model of PWR and BWR reactor. The standard configuration comprises milling, drilling, EDM and bolt handling tools. On top of that, Framatome offers to develop customized one-stop solutions according to your individual requirements within a short time.

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

Expertise in RPV and RPV internals repair

With decades of experience, Framatome is highly qualified to perform any kind of RPV and RPV internals repair service. So far, we have replaced more than 8000 barrel / baffle bolts and have performed a broad variety of works, replacements, and repairs on core internal supports. Our technology is successfully applied all over Europe and the US in different reactor types.

Mast System

Fields of Application

- Reactor pool
- Fuel storage pool
- RPV
- RPV internals
- RPV nozzles

Standard Tools

- Carriage for precise positioning of tools with high repeatable positioning accuracy
- Milling, drilling, EDM, crimping, turning and bolt handling tools

Features

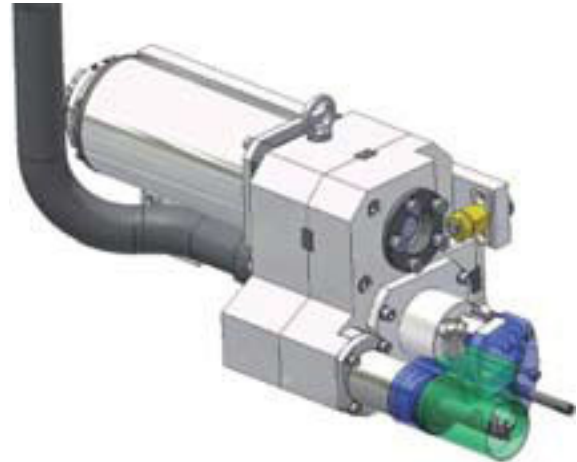
- Easy to use
- Radiation / water resistant
- X, Y, Z operations are manually driven and easy to handle (force feedback)
- Effective decontamination due to electro-polished surfaces

Standard Applications

- Exchange of barrel / baffle bolts
- Exchange / repair of supports and pipes
- Sampling
- Inspection (VT, UT, EC)
- Repair / Replacement of internals
- Decommissioning
- Recommendation of targeted measures
- (refurbishment, repair, replacement) if needed

Your benefits at a glance

- Lifetime extension of RPV and RPV internals
- Modular tool design, adjustable length, high precision
- Assembly (disassembly) within one shift
- Highly flexible installation (uses existing bridge)
- Minimal occupancy time of reactor pool



Milling Tool operated by water hydraulic

Framatome's Mast System-the all-in-one device suitable for almost every purpose

Contact:

component-repair-replacement@framatom.com

www.framatome.com

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