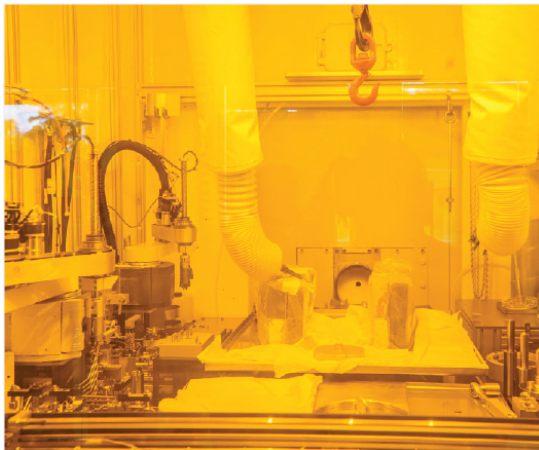




# World Leading Hot Cell Innovation and Expertise

Studsvik now offers its unmatched expertise in Hot Cell Technology to organizations throughout the world seeking support with their own hot-cell facilities.

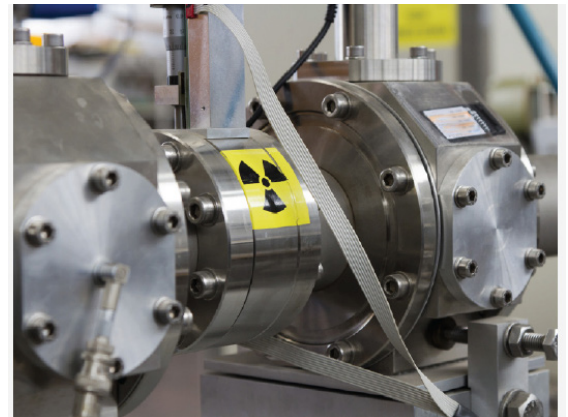
Studsvik's world renowned reputation of over 75 years, as experts, in performing examination and analysis of both nuclear fuel related material and reactor components, have long been desired by organizations developing their own hot-cell facilities.



## Unmatched expertise in Hot Cell Technology

Studsvik hot cell expertise is applicable to the entire nuclear fuel cycle, from fuel qualification of new fuel products, new cladding alloys, plant life extension (PLEX), dry storage to final repository. Through extensive experience, Studsvik developed expertise in the design and construction of custom built equipment for the hot-cells (e.g., simulation of LOCA, creep, crack initiation and crack growth rate measurements) and capability in quality assurance, regulatory licensing and transport issues associated with getting material to and from a hot-cell.

This is available for the companies that want to be leading within hot-cell performance. Contact Studsvik today for further discussions of tailored customized solutions. Your test capabilities will be state of the art with highest quality thanks to Studsvik innovative technology and knowledge transfer. In a typical scenario for testing, preparation and reactor irradiation of fuel samples takes 3–5 years and cost 2.5–5 MUSD, a significant investment. You will assure risk mitigation thanks to Studsvik's 70 years of experience and outstanding hot-cell performance.



Over the last 75 years, Studsvik has built unrivalled experience of what works and what doesn't, and now offer to apply that experience to increase efficiency and reduce risks for our customers

# Hot Cell Technology

## Leading Innovation

- Solution oriented organisation with a strong can do spirit and high flexibility
- Continuously developing new methods
- Tailored solutions to fit individual customers' needs
- Acknowledged for novel remote handling solutions in challenging hot-cell environments
- Winning culture with highly motivated people and passion for delivery in treating waste. We understand what happens to the waste during all stages of the process and where the radionuclides are captured during treatment.

## 75 Years of Experience

- World leading test capabilities of LWR materials
- Global customers representing fuel vendors, regulators, utilities and research organisations
- Global customer base covering BWR, PWR, VVER, AGR and GEN IV
- Extensive knowledge of in-pile testing of various fuel types and material
- Operating agent of OECD/NEA international program SCIP for 13 years

## Safe and Efficient Key Success Factors

- Compliance with global quality and technical standards
- Full control of hot-cell operations to fulfill national regulators' requirements
- Well established process and planning management
- Defined individual responsibilities on all levels
- Motivated staff to encourage innovation and initiatives for continuous improvements

## Unique Customer Values

- Outstanding performance of fuel and core material (best in class)
- World class technologies benchmarked to international standards and external audits
- Independent supplier
- Risk mitigation applying Studsvik's long experiences
- High customer commitment



## Facts of Studsvik hot-cells

- Located ca 100 km south of Stockholm
- Unique testing facilities with nuclear licences
- 7 concrete cells with more than 40 fuel rods examined per year
- 4 autoclaves with simulated LWR environment
- 11 lead cells and 8 steel cells with advanced material and mechanical test methods
- In-pile testing of various fuel types and material (more than 1,000 ramp test)
- Advanced chemistry laboratories for fuel and structural materials analyses
- Facility with fuel ponds for measurement of material and development of equipment international transport cask and services
- 95% yearly availability with no unplanned outages
- Safe and efficient maintenance with well-established waste streams

## Studsvik offers

- Studsvik Hot Cell Technology support:
  - Independent review of other hot-cells
  - Support of design of a new hot-cells
  - Conduct workshops in specific areas
  - Training of staff
- Expertise within technical, facility management, staff development, waste
- Equipment package including QA, manuals and training

## For further information please contact:

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