

WASTE TREATMENT CENTER

Design and construction of tailor-made, turnkey-waste treatment buildings and centers that can be equipped with all known waste treatment solutions

With one of the largest teams of engineers in the field of radioactive waste treatment, Framatome is committed to finding technical and economical optimized solutions for you, ensuring safe handling of radioactive waste resulting in long-term stable waste packages.



View of nuclear power plant Olkiluoto 3, Framatome's latest reference for a complete waste treatment center

Challenge

During operation, decommissioning & dismantling of a nuclear power plant radioactive waste will be generated in liquid, solid and gaseous states. This radioactive waste must be collected, stored and treated in accordance with its physical and chemical conditions in appropriate facilities in the waste building.

Discharges of liquid and gaseous radioactive waste from the nuclear power plant are subject to stringent national safety regulations for minimizing radioactive releases.

Solid and solidified radioactive waste must be treated and disposed off in a safe and secure manner in a final repository to keep the waste away from the environment until the radioactivity is decayed to an extent, which is harmless for mankind and environment.

Solution

Framatome offers customer specific waste treatment centers for low & intermediate level waste (LLW & ILW). From one purpose to multipurpose modular facilities Framatome supports the customer in planning, design, procurement & construction to get a safe nuclear waste treatment facility, which fulfills all customer needs such as the country specific waste acceptance criteria.

Framatome has solutions for every type of waste. The waste treatment center can be equipped completely or partially with systems to treat each aggregate state, be it solid, liquid or gaseous waste.

Customer benefits

- Proven waste treatment processes
- Worldwide references
- Comprehensive expertise on all areas of nuclear waste management
- Minimized effort to be compliant with the rules and regulations of your country
- Long-term stable waste packages, which are impervious to the environment
- Minimized waste volume and therefore less costs for final storage
- Maximization of ALARA compliance
- Everything available from one source
- Standardized and customized solutions available
- Recycling wherever possible
- Ongoing research activities for innovative solutions to optimize waste treatment processes and solve known challenges

Services offered

Consulting, design, engineering and full project execution on/of all relevant issues related to radioactive waste treatment & management

Solutions for complex challenges in the context of:

- Workshops
- Design reviews
- Co-financed R&D
- Conceptional studies
- Licensing
- Chemical and physical waste characterization
- Management of complex technical interface (process & building)
- Instrumentation and Controls
- Health physics and fire protection
- Planning of transportation and waste storage

All solutions are for low-and intermediate-level radioactive waste.

All systems and components will be designed in accordance with your country specific codes, regulations and waste acceptance criteria.

Key figures

> 40 years of experience

With radioactive waste treatment of every reactor type and research labs

24 installations for liquid & wet waste treatment

8 in-drum drying systems

7 cementation systems

2 bituminization systems

7 drying systems for sludge and resins

89 installations for solid waste treatment

22 compactors

5 shredders

9 sorting systems

50 devices for handling and packaging

3 super-compactors

119 installations for wastewater treatment

42 evaporator units

39 ion-exchangers

25 mechanical filters

13 centrifuge systems

2 complete waste treatment buildings

Olkiluoto & Taishan



View of nuclear power plant Taishan including the waste treatment building designed by Framatome

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

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