

Irradiated Hardware Services

Orano TN processes and packages irradiated reactor components safely with ALARA and FME principles.

BENEFITS

Minimized plant support costs

Maximized ALARA

Minimized storage and disposal costs

Foreign Material Exclusion (FME) control

Reduced risk

Project assurance

Reduced Project Time

Improved performance capability of spent fuel pool



Activated Services Shear

With the storage of miscellaneous hardware and filters adding to the spent fuel pool dose rates and consuming valuable real estate, Orano TN provides a full-service fuel pool cleanout to mitigate these issues.

Materials Processed include:

- Control Rod Blades (CRB) compaction
- LPRMs, SRMs and IRMs segmentation
- Roller balls and velocity limiter removal
- Sealed sources packaging
- Filters
- Jet pumps or parts
- Miscellaneous trash

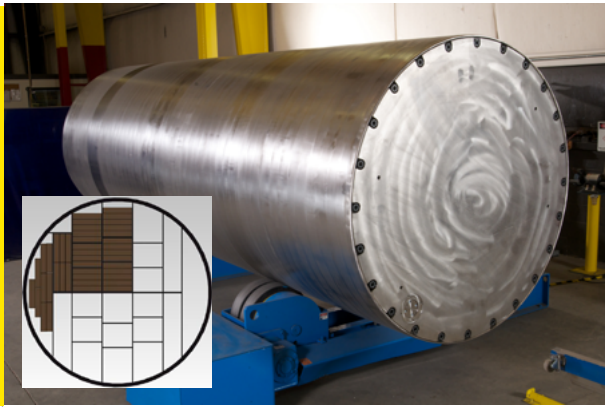
Additional Services

Other examples of services that are routinely offered in support of the loading operations:

- Waste characterization
- Under-rack camera inspection and retrieval of remaining special nuclear material or waste
- GTCC waste segmentation (top nozzle Inconel springs punching)
- Waste packages
- Specialized transport casks
- Transportation

IDEAL FOR...

...any facility needing a streamlined process for removing, volume reducing, storing or disposing irradiated hardware.



Orano TN's larger Rad Waste Container (RWC) with inset of CRB compaction diagram

Radwaste Container

Used for interim storage and disposal of LLRW Class A, B, C, and storage of GTCC. It also provides additional shielding, and allows up to 70,000 Ci Co-60 in transport, and higher in storage.

Scope of Services

In order to maximize the volume of waste loaded into each disposal container, and subsequently minimize the disposal costs, the irradiated hardware needs to be efficiently volume reduced.

In keeping with ALARA principles, this work is performed underwater, minimizing personnel radiation exposure and contamination. A primary use for this equipment is for compaction and segmenting of control rod blades (CRB) and fuel channels. Typically the CRBs do not require more than one cut, and all work is done with minimal disruption of the pool water. Sheaths are used on the CRBs to minimize spring back after compaction and prevent the transfer of contamination to the processing equipment.

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TN RAM Cask:

Licensed under NRC CoC Type B(U)

Weight: 78,250 lbs. maximum loaded (9,500 lbs. payload)

Cavity Volume: ~60 ft³

Max heat load: 500 W

Max Transportation Ci: 70,000 Ci

Up to 18 CRBs



Orano TN's TN RAM cask, with additional shield for transportation

MP197HB Cask:

Licensed under NRC CoC Type B(U)

Weight: 304,000 lbs. maximum loaded (112,000 lbs. payload)

Cavity volume: ~425 ft³

Max heat load: 32 kW

Max Ci Content: 70,000 Ci of Co-60 equivalent activity

120+ CRBs



Orano TN's MP197HB Cask ready for rail shipment.

To check out our recent operating experience, and containers and casks available for storage and transport of irradiated hardware, scan the QR code or click here.

