# Facilities for sorting low-level radioactive residues

In facilities for sorting low-level radioactive waste from the operation or decommissioning of nuclear facilities, the waste can be sorted manually according to specified criteria, e.g. groups of substances or combustible and non-combustible. Sorting is carried out, for example, by means of a sorting table, to which waste drums can be connected via discharge positions, or a self-contained sorting box with feed opening and discharge positions. Further equipment such as presses, drum dryers or conveyor systems to other post-treatment or measuring equipment can be connected to the sorting equipment.

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## Scope of services

- Concept, design and licensing planning
- Basic and detail engineering including 3D planning
- Design and manufacuring planning
- Materials procurement
- Manufacturing, delivery and assembly
- Commissioning and personnel training
- Quality assurance and final documentation
- Service and maintenance

## Additional equipment/design

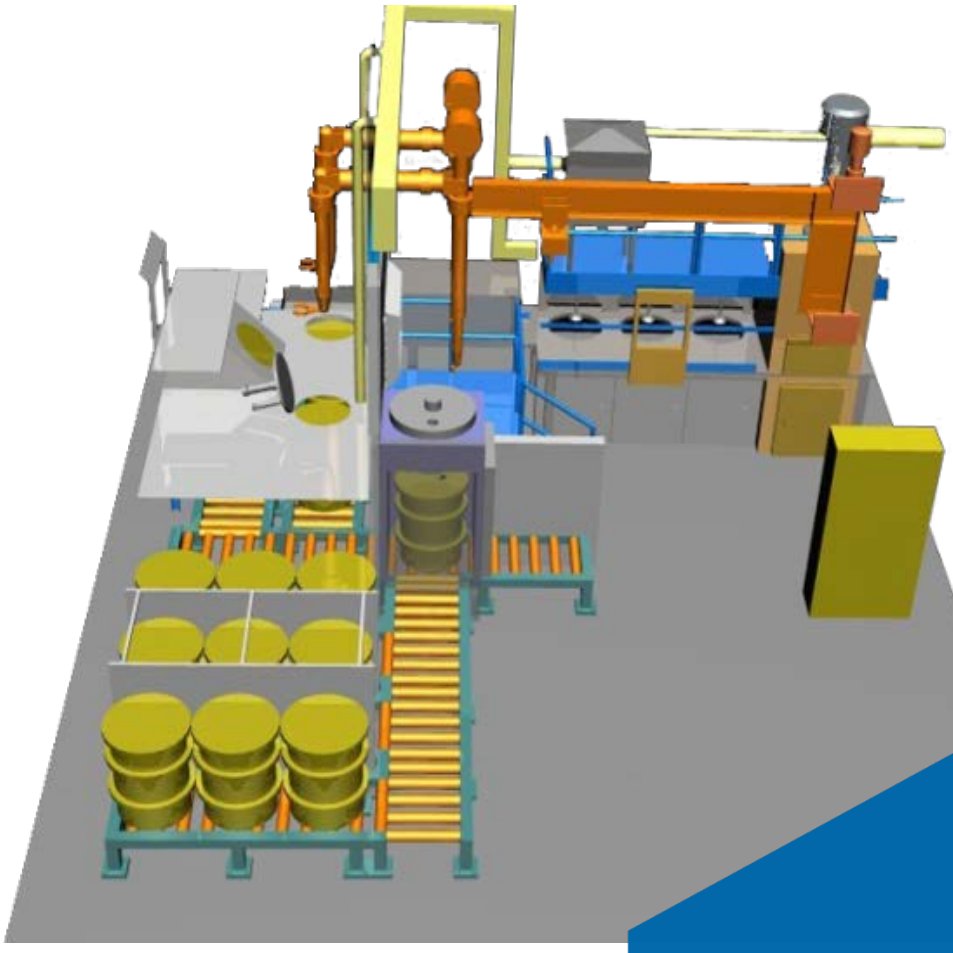
Connection to other waste treatment facilities (e.g. presses, drum lidding facilities, dryers) e.g. via roller conveyors, chain conveyors etc

## Equipment

- Manipulators or glove boxes with end position control
- Remote handling tools
- Shielding devices
- Conveyor belts for further transport of the waste
- Feeding and discharge positions with flaps
- Ventilation systems to ensure directional air flows
- Drum docking systems
- Airlock systems (double-lid airlocks, small parts airlocks)
- Dose rate monitoring
- Camera surveillance
- Footboard for ergonomic access to the sorting stations
- Safety limit switches or light barriers for monitoring interventions in systems with drives within the sorting device
- Electrical, control and measurement technology
- Plant control and monitoring

## References

- Sorting cell at the Biblis nuclear power plant
- Sorting boxes for the incinerator of the Lenin-grad nuclear power plant
- Conversion and modernisation of the sorting box for radioactive waste for Nuclear Engineering Seibersdorf, Austria
- Solid waste sorting and packaging facility for the Changjiang nuclear power plant, China
- Sorting table with supply and exhaust air device for the Greifswald nuclear power plant



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