AVDS ADVANCED
VACUUM DRYING SYSTEM

ACTIVELY CONDITIONING ILW AT UK NUCLEAR DECOMMISSIONING SITES - MAGNOX INNOVATION AWARD WINNER - NDA HIGHLY COMMENDED

MECHATECH SYSTEMS
10+ YEARS
TECHNICAL VACUUM EXCELLENCE
SINCE 2008

Advanced Vacuum Drying System (AVDS) is a proven solution for removing moisture content from intermediate level nuclear waste (ILW), e.g. IX resin, sludges and fuel element debris. AVDS is designed, manufactured and supported by UK SME vacuum system specialists, MechaTech Systems Ltd.

AVDS VACUUM CONDITIONING UNIT (VCU)

AVDS HEATING STATIONS FOR MOSAIK (CYLINDRICAL) CONTAINER

AVDS HEATING STATIONS FOR TYPE VI (CUBOIDAL) CONTAINER

Waste is conditioned inside its final, disposable, transportable, container for long term, above ground storage

Heat and vacuum are used to remove moisture content down to a level of less than 1% wt/wt (waste dependent)

Conditioning the waste achieves long term stability, and prevents corrosion and gas generation

The conditioned waste can then be stored safely above ground and transported to interim ILW stores, in the same container

MechaTech Systems Ltd, Unit 9 Brunel Way,
Thornbury Industrial Estate,Thornbury, Bristol, UK. BS35 3UR.
Registered in England and Wales No. 6469333

www.mechatechsystems.co.uk

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AVDS comprises a Vacuum Conditioning Unit (VCU), which serves up to six heating stations.

The heating stations are adaptable to the container shapes, whether they are cuboidal or cylindrical. Each heating station can be run independently.

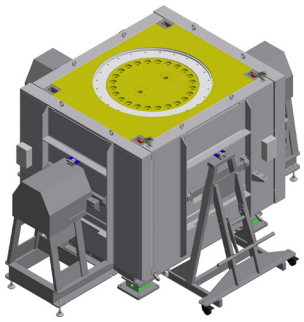
AVDS incorporates high level automation, maximising efficiency and minimising operator intervention.

AVDS has a purpose-built transport frame, and plug and socket connectivity for ease of installation.

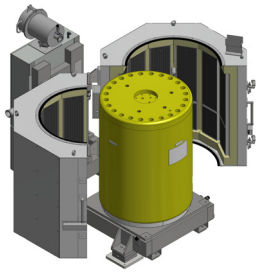
WET WASTE BEFORE CONDITIONING

DRY WASTE AFTER CONDITIONING

AVDS VACUUM CONDITIONING UNIT (VCU)



CUBOIDAL HEATING STATION



CYLINDRICAL HEATING STATION

COST EFFECTIVE: conditions waste inside original and final disposable, transportable container for long term, above ground storage	PROVEN: actively conditioning at UK nuclear sites for over five years
TIME AND ENERGY SAVING: reduced temperature drying with automatic endpoint determination and duty/ standby condenser system enable fast, high efficiency waste conditioning	SUSTAINABLE: incorporates well established, commonly available parts for long term maintenance
SAFE: closed system design with high level control automation enables minimal operator intervention; hydrogen management system prevents explosive atmospheres	SUPPORTED: MechaTech Systems have a combined experience of over fifty years in design, manufacture, installation, commissioning, operational qualification, and maintenance of high vacuum systems

CONTACT US FOR A QUOTATION AND/OR FURTHER INFORMATION:

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