TWSTER Drying damp textile waste by centrifugation



Centrifugation unit



Treatment unit in its containment and transport case

Fields of application

An industrial tool for drying textiles used during cleaning operations to absorb residual liquids or to decontaminate equipment using damp wipes :

- Mobile, compact and autonomous, designed for the exudation of damp textiles by high speed centrifugation (2800 rpm)
- Ergonomic solution equipped with two spin-driers, allowing the optimization of treatment rates
- Easy to use and robust, with no complex electronic or mechanical components

Modular solution to meet the different settings and needs of our customers :

- Installation of the spin-driers in a fixed position (without mobile skid)
- Operation of a single spin-driers for small size deposits
- Possibility to process the textile to reach dryness levels greater than 90%
 - Treatment compatible with a wide range of fibrous waste (e.g. glass wool, rock wool, etc.)

Performance characteristics compatible with outlet requirements :

- Compatibility of treated waste with the dry waste processing chain : incineration at the French processing and packaging nuclear center (Cyclife), VLL-waste compactors, mid-to high-capacity LIL-waste drum presses depending on textile type
- Constant product quality : dryness independent of wipes load and moisture content

Advantages

- PERFORMANCE Major reduction in treatment operating times compared to current drying practices (divided by >10 compared to a ventilated hood)
- WASTE OPTIMIZATION Very good exudation performance allowing for «dry waste» compatibility
- OCCUPATIONAL SAFETY
 Secure system for safe operator use
- RELIABILITY
 Robust «zero maintenance» system
- QUALITY Elimination of non-conformities by the absence of free water in the packages

Key data

- **Treatment time:** 2 minutes per 10 to 15-liter per batch
- 2 parallel centrifugation systems for continuous treatment:
 - Drying rate for damp waste: 300 l/h
 - Up to 600 I/h on an automatic and constant rate
- Exudation performances:

Textile type	Synthetic	Cellulosic
Dryness	~90%	~65%
Compaction test	No release at 360 kg/cm²	Release from 140 kg/cm²

A proven solution for waste management optimization

Our offer

Orano DS proposes:

- The implementation of the solution for recurrent or specific operations requiring the treatment and packaging of radioactive wet textile waste
- The supply of standard equipment and the deployment of support services
- The study and the adaptation of this solution to the specific constraints of each operator



Our references

• Processing of legacy waste:

Treatment of 80 drums of wet wipes at the Orano Tricastin site

Compaction of the dried wipes on the STD's compactor before storage at Andra's VLLW storage facility



• Treatment of waste from clean-up/ dismantling:

Implementation of the centrifugal drying process as part of the clean-up operations on the EDF Saint Laurentdes-Eaux site undergoing dismantling



Packaging of dried wipes in HDPE drums for incineration at Cyclife

• Treatment of operating waste:

Treatment of wet textile waste from operating activities at the EDF Chinon NPP



Pre-compacting of dried wipes in HDPE drums for incineration at Cyclife

> Watch the TWISTER presentation video



Contact us to discover the range of capabilities of TWISTER

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