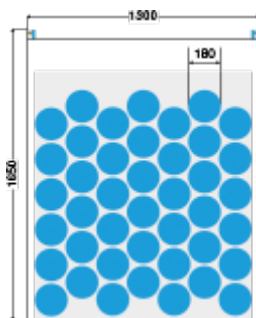


# Dry Tower Technical Details

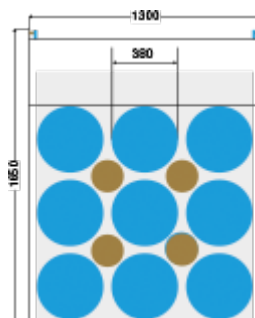
## Drawers

### Maximum volume consolidation

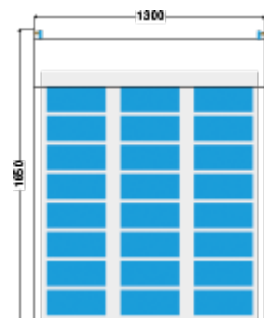
Our Dry Towers consist of up to four cabinets equipped with an optimum number of drawers. The placing strategy guarantees volume optimised storage.



7" reels



15" and 7" reels



Stacked trays or boxes

## Benefits

- Stores up to 43.000 reels per m<sup>2</sup>
- Optimised utilisation of height, depth and width
- Fast access to all components
- Volume optimised storage
- Extendable by combining any number of storage modules
- Sample layouts. Drawer layouts can generally be customized



# Storage Cabinets

## Unlimited storage in 3 dimensions

Each cabinet comes with a maximum surface area of 2.2 m<sup>2</sup> and – depending on its height and the size of stored packages – accommodates up to 125 drawers with a total utilizable storage area of 210 m<sup>2</sup>.

For each cabinet, this means 5,250 reels\* if stored individually or 10,375 reels\* in the case of twin-storage. For single-storage, the drawers have been equipped with anti-slip mats; for twin-storage they provide locating pins.

\*refers to reels of 7" in diameter and maximum 15mm height

## Benefits

- Manual removal possible, if necessary
- Reliable, highly advanced technology
- Maximum volume consolidation
- Quick access



# 5-axis Gripper System

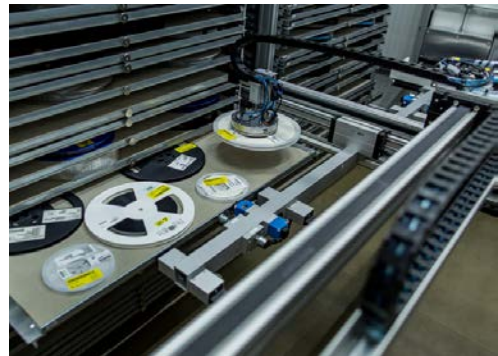
## Gentle component transportation

The gripper systems are driven by low-noise and low-maintenance servomotors and move simultaneously within a 5-axis system. Vacuum grippers transport component packages like reels, trays or boxes quickly and safely.

Maximum loads of up to 3 kilos are possible.

## Benefits

- Short access time
- Safe and gentle transportation
- Reels, trays and other unopened packages  can be moved



# Conveyor Technology

## Individual and customized solutions

The Dry Tower can be equipped with custom-engineered conveyor technology for batch processing of reels and boxes, catering for decentralised loading/unloading as well as line supply. Our system allows for maximum flexibility in your component logistics, as each batch is automatically transferred by roller and belt conveyors, lifts or autonomous transport system to the best available position.

## Benefits

- Minimum personnel time
- Just-in-time line processing
- Decoupling of loading and retrieval processes



# Climate Control

## Perfect storage conditions for electronic components

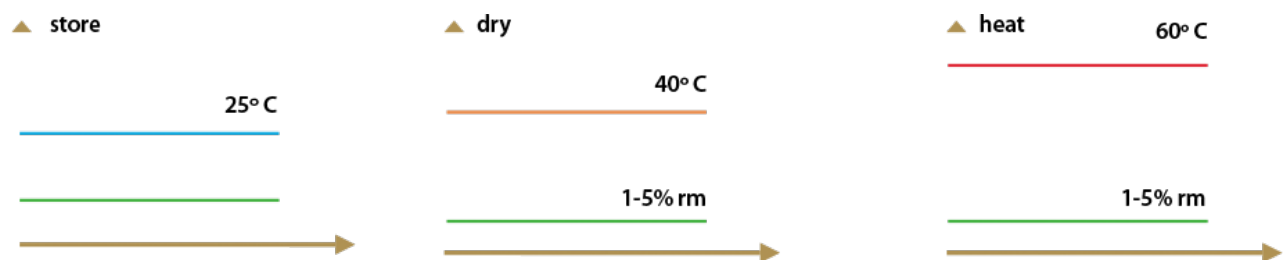
Our U-7000 series drying unit guarantees controlled humidity values less than 5% RH. When moisture-sensitive components are stored in the unit, the processing time sequence as well as the humidity absorption is automatically stopped. Any possible oxidation of sensitive metal surfaces of components is prevented by electrolyte deprivation. Combined with a 40 °C or 60 °C heater, the entire storage system, or a just a separate area within it, can be tempered. Any expired MSL components can be gently re-dried at the right temperature.

## Benefits

- Permanent re-drying of components according to JEDEC standard
- Fast re-drying thanks to minimum relative humidity
- Optional heating (up to 60°C) accelerates □ drying process
- Oxidation processes are prevented



The Dry Tower provides as many as three separate storage areas with different climatic zones. Components are automatically stored and relocated within these three zones in accordance with the remaining processing time.



# Just In time

## Minimum lead times

The Dry Tower can be equipped with customized conveyor technology for individual packages and/or boxes. Direct follow-up supply of lines is also possible. Centralized, as well as decentralized, removal sites can be realized as customized solutions by deploying roller conveyors, belts, lifts and/or autonomous conveyor systems.

This ensures maximum flexibility in component logistics for each and every user.

## Benefits

- Reduced staff engagement times
- Follow-up line supply just-in-time
- Separate storing and removal processes
- Increased component availability



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# Software

## Perfect documentation

The standard interface allows for the integration of the Dry Tower into your existing MES system. Important storage data and parameters such as humidity, temperature and operator intervention are documented.

Our integrated commissioning function enables efficient retrieval in the desired sequence and with regard to FIFO.

# Benefits

- Reliable monitoring & documentation of moisture sensitivity levels as well as drying, stopping and processing times according to JEDEC standards
- Automatic commissioning function
- Standard interface for integration into existing systems
- Seamless logging along entire logistics chain
- Unrivalled versatility thanks to freely configurable storage strategies



Krepro AS

Kolonivegen – Letohallen, 2072 DAL

Postboks 233, 2071 RÅHOLT

63 95 20 00 / [post@krepro.no](mailto:post@krepro.no)

[www.krepro.no](http://www.krepro.no)