

**Quality Service
Quality Products
Attractive Price**



Drying cabinet with ultra - low humidity 1% - 3% RH

**Fulfills the industry standard
IPC/Jedec J-STD-033B**

- Closed loop humidity controlled drying and storage cabinets
- Mekko Technologies "Active Desiccant" dehumidifier incorporating MTX - flow technology
- Continually regenerated molecular sieve desiccant
- Protect your valuable components from micro-cracking and delamination
- Less than 5%RH guaranteed.
Normal hysteresis 1-3%RH
- Closed loop humidity control ensures swift return to spec if humidity rises
- Normally less than 2 minutes to return to <5% RH after a door is opened!
- Not only dry storage, but also rapid moisture removal from components
- Exceeds the requirements of IPC/Jedec standard J-STD-033B, which details recommendations for handling, packing, shipping and use of moisture/reflow sensitive surface mount devices.

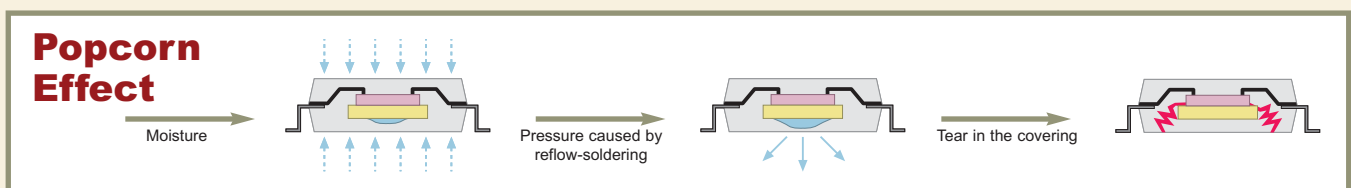


RH - meter MT - 2
with Digital Display



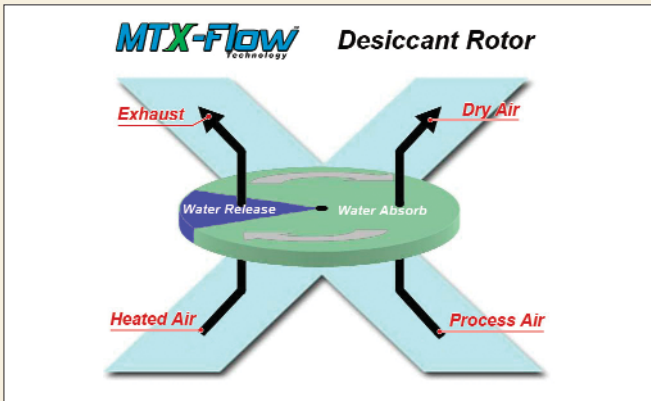
model AD - 06

For the next generation ...



ESD - 61340 - 5 - 1

Mekko Technologies
Unit 20 / Matrix House / Constitution Hill / Leicester / LE1 1PL / England
Tel.: +44 116 - 2 51 46 48 / Fax: +44 116 - 2 51 85 59
E - mail: martin.chambers@mekko.co.uk / Website: www.mekko.co.uk



MTX - flow diagram



High performance drying unit installed in base of cabinet

Active Desiccant

The new Mekko Technologies "Active Desiccant" range of drying and storage cabinets was designed to guarantee the new class of quality and reliability standards required by Surface Mount Devices and substrates. By assuring moisture free components, solder reflow can be achieved without damage from micro-cracking or delamination.

If moisture is absorbed from the environment by surface mounted components, and then the components are exposed to high temperatures, as in solder reflow ovens (convection, infrared, IR/convection, vapour phase, hot air rework tools), then the absorbed moisture will expand rapidly, causing internal device stress. The resulting stress can cause internal or external cracking, delamination, and internal corrosion. Eliminate "popcorning" and micro-cracking of ICs and BGAs during reflow by using MTX-flow technology "Active Desiccant" component drying and storage, rather than baking.

Drying out the components resets the "floor life" clock. Active Desiccant cabinets with MTX-flow technology offer the best solution for storage and drying.

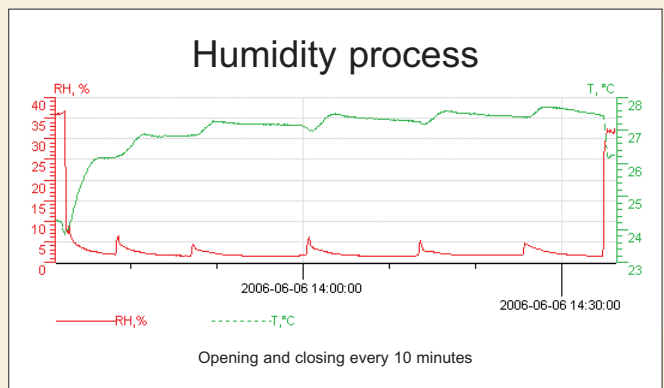
The only consumable costs are an average 50 Watts mains power! There is no need for any extra consumables or services to operate the unit. The rotor drying units continually regenerate the powerful Zeolite desiccant.

Principle of operation:

The drying unit is built into the base of the cabinet. We have designed a new powerful absorbing desiccant rotor system incorporating our own "MTX-flow" technology. This new development is more efficient and faster reacting than our competitors. We have developed an air flow system to optimize the drying and regenerating ability with minimal air leakage into the cabinet.

The desiccant rotor rotates in two separate streams of air. One sector has air flowing through it within the cabinet (moisture absorb), while a smaller sector uses an external heated air flow to regenerate the desiccant (moisture release). As the disk rotates, fresh, dry desiccant is always presented to the process air flow.

Much research was done into the air flow, and our new design uses a unique air flow system to guarantee speed, efficiency, and minimal cross-over at the wet/dry interface.



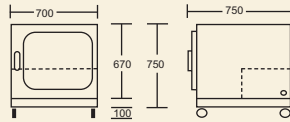
Example humidity process

Benefits of the system:

- No need for moisture barrier bags, nitrogen or compressed air
- Less complicated than baking
- Reduces oxidation
- Prevents "popcorning" or other problems associated with ingress of moisture
- Can use low temperature packaging
- Closed loop control of internal humidity
- No "off" time. The desiccant will **always** be absorbing moisture
- Powerful molecular sieve type desiccant used (Zeolite)

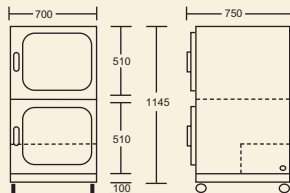
AD - Series

Fulfil the Industry standard
IPC - Jedec J-STD-033B/020C

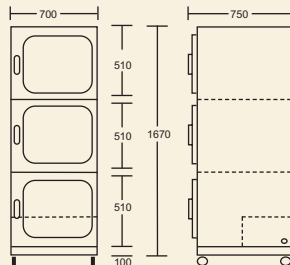


Castors optional on AD - 101

Specifications	AD - 101
External dimensions (in mm)	750(H) x 700(W) x 750(D)
Capacity	ca. 250 litre
Drying unit	MTX-Flow (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 10
Doors	1
Weight	ca. 80 kg
Power consumption	AC 230 V (50/60 HZ) average value 50 Watt
Integrated accessories	(RH - meter, MT- 2), 4 shelves



Specifications	AD - 202
External dimensions (in mm)	1245(H) x 700(W) x 750(D)
Capacity	ca. 450 litre
Drying unit	MTX-Flow (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 20
Doors	2
Weight	ca. 120 kg
Power consumption	AC 230 V (50/60 HZ) average value 50 Watt
Integrated accessories	(RH - meter, MT- 2), 6 shelves



Specifications	AD - 303
External dimensions (in mm)	1770(H) x 700(W) x 750(D)
Capacity	ca. 750 litre
Drying unit	MTX-Flow (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 30
Doors	3
Weight	ca. 150 kg
Power consumption	AC 230 V (50/60 HZ) average value 50 Watt
Integrated accessories	(RH - meter, MT- 2), 9 shelves

Finish: Powder coated steel cabinet and doors in RAL7035 (light grey gloss) with optional static conductive powder coat. Stainless steel shelf holders with light-weight aluminium sliding removable shelves.

Control system: High quality humidity and temperature sensor probe, with Mekko Technologies microprocessor control system. Closed loop control of internal humidity level with upper and lower set points. Clear illuminated digital display of humidity and temperature. Our standard meter includes set points for humidity, temperature, and humidity alarm level. System accuracy = +/- 1,3% RH, +/- 1°C.

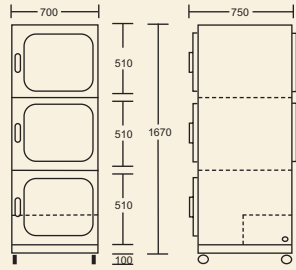
Status LEDs: Red/Green = humidity level, Orange = Drying unit power on.

Earth bonding point fitted as standard for ESD standard EN 61340-5-1.

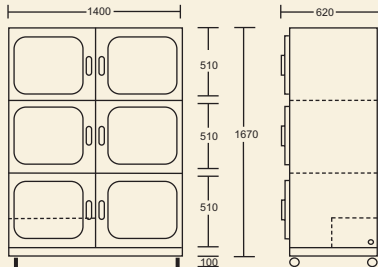
Cabinet base: 2-door models and above are fitted with 4 x anti-static castors as standard. Optional extra on 1 door cabinet.

TECHNOLOGY USING ZEOLITE DESICCANT

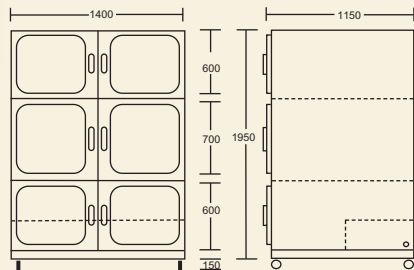
AD - Series



Specifications	AD - 305
External dimensions (in mm)	1770(H) x 700(W) x 750(D)
Capacity	ca. 750 litre
Drying unit	MTX-Flow (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 30
Doors	5
Weight	ca. 150 kg
Power consumption	AC 230 V (50/60 HZ) average value 50 Watt
Integrated accessories	(RH - meter, MT- 2), 9 shelves



Specifications	AD - 606
External dimensions (in mm)	1770(H) x 1400(W) x 620(D)
Capacity	ca. 1300 litre
Drying unit	MTX-Flow (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 60
Doors	6
Weight	ca. 200 kg
Power consumption	AC 230 V (50/60 HZ) average value 50 Watt
Integrated accessories	(RH - meter, MT- 2), 18 shelves



For Feederbase, Feederwagon and printed circuit board magazines, catalog available on request.

Specifications	AD - 606L
External dimensions (in mm)	2100(H) x 1400(W) x 1150(D)
Capacity	ca. 2500 litre
Drying unit	MTX-Flow 2x (Rotation-Drying unit, with Zeolite Desiccant)
Material / colour	ESD 61340-5-1/RAL7035, light-grey
Removable shelves	total max. 60
Doors	6
Weight	ca. 270 kg
Power consumption	AC 230 V (50/60 HZ) average value 100 Watt
Integrated accessories	(RH - meter, MT- 2), 18 shelves

Options:

- Convection heater for faster drying of components.
- Static dissipative EVA mats.
- Static dissipative powder coat.
- Locking doors.
- Vertical racking for tape reels.
- Fixed stainless steel shelves.
- Telescopic sliding fixed shelves.
- Status beacon light tower.
- Data recording software with transfer of data to PC.
- Pass-through systems with doors on front and back.
- Various other sizes built to order, eg 4- doors, deeper 6- doors etc.

Manufacturer:

Mekko Technologies
Unit 20 / Matrix House / Constitution Hill
Leicester / LE1 1PL / England
Tel.: +44 116 - 2 51 46 48
Fax: +44 116 - 2 51 85 59
E-mail: martin.chambers@mekko.co.uk
Website: www.mekko.co.uk

Distributor:

Hoang-PVM GmbH
Am Gierath 26
40885 Ratingen / Germany
TEl. 02102-7407838
Fax. 02102-7407871
E-mail. info@hoang-pvm-engineering.com
www.hoang-pvm-engineering.com