T O T E C H

Totech Dry Cabinet
Designed by Japan
Since 1973

Model: SDM-1206-01

1%RH, Room (25℃) ~50 ℃, 1190L

Made in Japan

Totech (Toyo Living) is the creator of world's first Automatic Drying System invented in 1973.

Super Dry cabinets use the highly-quality and highly reliable Toyo Living engine and has been sold over 700,000 units and used in over 10,000 companies around the world. We also supply various kinds of custom-build cabinet to best suit our client's need.

Features

❖ Advanced ultra-low humidity technology, effective thermal insulation to make the energy consumption the lowest.
❖ Dry units: 1%RH
❖ Heater: Room temperature (25℃) ~50℃.
❖ ESD safe design: Cabinet is with ESD metal painted steel body (10^6 Ohm/sq), dissipative glass windows (in- and outside 10^8 Ohm/sq) , stainless steel shelves and ground wire, well comply with IEC 61340-5-1.
❖ Convenient Operation : SDM-1206-01 is with digital control panel, can control the humidity precisely by adjusting ±0.1%RH, and temperature from room temperature to 50° C. Humidity, temperature and alarm functions are shown and can be adjusted by digital control panel. Key Lock function on the digital control panel prevents unintended changes of setting. Sensor calibration function is also available with digital panel.
❖ Maintenance free design: Totech dry cabinet works by dry units. An interlocked fan causes the air to circulate through the dry unit, while passing through the dry unit moisture in the air is absorbed by the zeolite desiccant. During periodic regenerating of the zeolite desiccant by heating, the absorbed humidity is evaporated and exhausted through the external shutters of the dry unit. The process is physical, and no extra maintenance at all.
❖Lockable doors: Every door can be locked separately with a key.

Applications

Totech MSD series maintains preset internal humidity levels 1%RH and temperature from room temperature to 50° C and is ideal for moisture-proof and anti-oxidation storage applications, offering protection from corrosion, mold and deterioration for such items as:
❖ MSD reels and racks.
❖ All kinds of Integrated Circuits (IC), like Monolithic, BGA, QFP; PLCC, Bipolar etc.
❖ Silicon Wafers.
❖ Aerospace related Instruments and Tools.
❖ Optical Equipment and Machine Tools.
❖ Watches.
❖ PDP Inspection Equipment, Liquid Crystal Cleaning Equipment, LCD's, TAC's etc.
❖ LED's and LD's.

SDM-1206-01 has an outstanding performance for drying moisture sensitive components and PCBs as a result of a high performance drying unit and a heater. It is specially designed for moisture sensitive SMD packages to comply with IPC/JEDEC J-STD-033C.

Specifications

Humidity control	1%RH (1%~30%RH adjustable)
Temperature range	Room temperature (25℃) ~50℃
Sensor precision	±2%RH, +/-1° C
External dimensions	(W x H x D) 1240 x 1860 x 810 mm
Internal dimensions	(W x H x D) 1198 x 1569 x 658 mm
Weight	235 kg
Capacity	1190 L
Shelves	5 pcs, adjustable
Max weight on shelf	100 kg
Structure	1.2mm Steel, conductive coated 10^6 Ω/sq
Cabinet color	Gray
Door	6 pcs, with handles, airtight magnetic sealers.
ESD grounding wire	1M Ω
Voltage	AC 100 V
Mean Power consumption	370W/h
Castors	4 pcs

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Dry Cabinets with 50° C+ Ultra-low Humidity(1%RH)

Baking is needed to reset the floor life of MSDs, to deal with MSDs that the exposure time has exceeded the floor life in the ambient environment or even the MSDs that expose in the environment for only a short time. Backing can extend the storage time and ensure the quality safety. However, with the development of new style of chip encapsulation and mounting technics, the traditional high temperature backing shows its shortcomings.

Problems Caused by Traditional High Temperature Baking

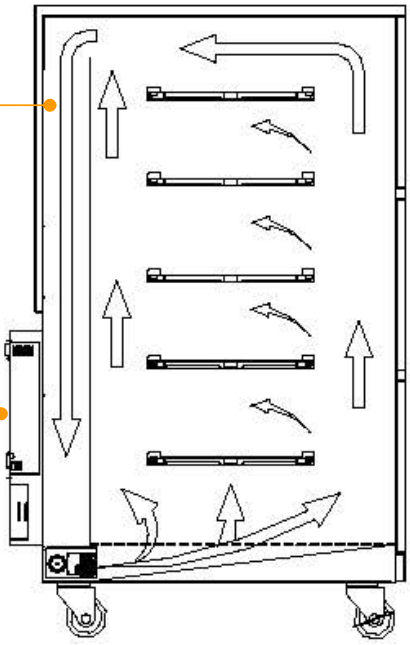
❖ Some MSD reels and racks are not suitable for high temperature baking, and the efficiency would be very low if baking after taking off the MSDs from the racks.
❖ Some MSD components and PCBs can not bear high temperature baking for a long time.
❖ For some other MSD components, if the temperature is higher, the damage caused to the components would be more serious, even though the components can bear the high temperature, there would still be potential thermal destruction and oxidation, or there would be inter metallic growth at the inner joint of the components, reducing solder ability.
❖ Baking is only possible one time according to IPC, and the components must be processed at once after baking to avoid re-absorption of moisture.
❖ With the popularity of IPC/JEDEC J-STD-033C, people are taking more consideration on the the double functions of dry cabinets with ultra-low humidity and medium temperature baking. Our Super Dry medium temperature baking cabinets (MSD Series) install a 50° C (Set from room temperature to 50° C) heater into our dry cabinets to accelerate the dehumidification. And if the MSD Series are used in all production processes, not only the defective products caused by thermal stress can be avoided, but also the process can be simplified and the production cost be reduced.

Why Choose MSD Series?

❖ No need of pre-baking: To prevent the defective products.
❖ Mild baking: Cause no flaws to SMDs during dehumidification.
❖ Moisture prevention: To prevent moisture absorption in one hour after taken from the cabinet.
❖ SDM-1206-01 has an outstanding performance for drying moisture sensitive components and PCBs as a result of a high performance drying unit and a heater.
❖ It is specially designed for moisture sensitive SMD packages to comply with IPC/JEDEC J-STD-033C.

Heating

Hot air blows from bottom to the top, making the temperature even inside cabinet. Precise sensor installed, digital control panel, operation easily. Items cannot be stored on the bottom(air outlet) of cabinet to prevent hot air to be blocked.



Heater

To heat and reach the temperature set value

Dry Unit

High Reliablity and Stability.

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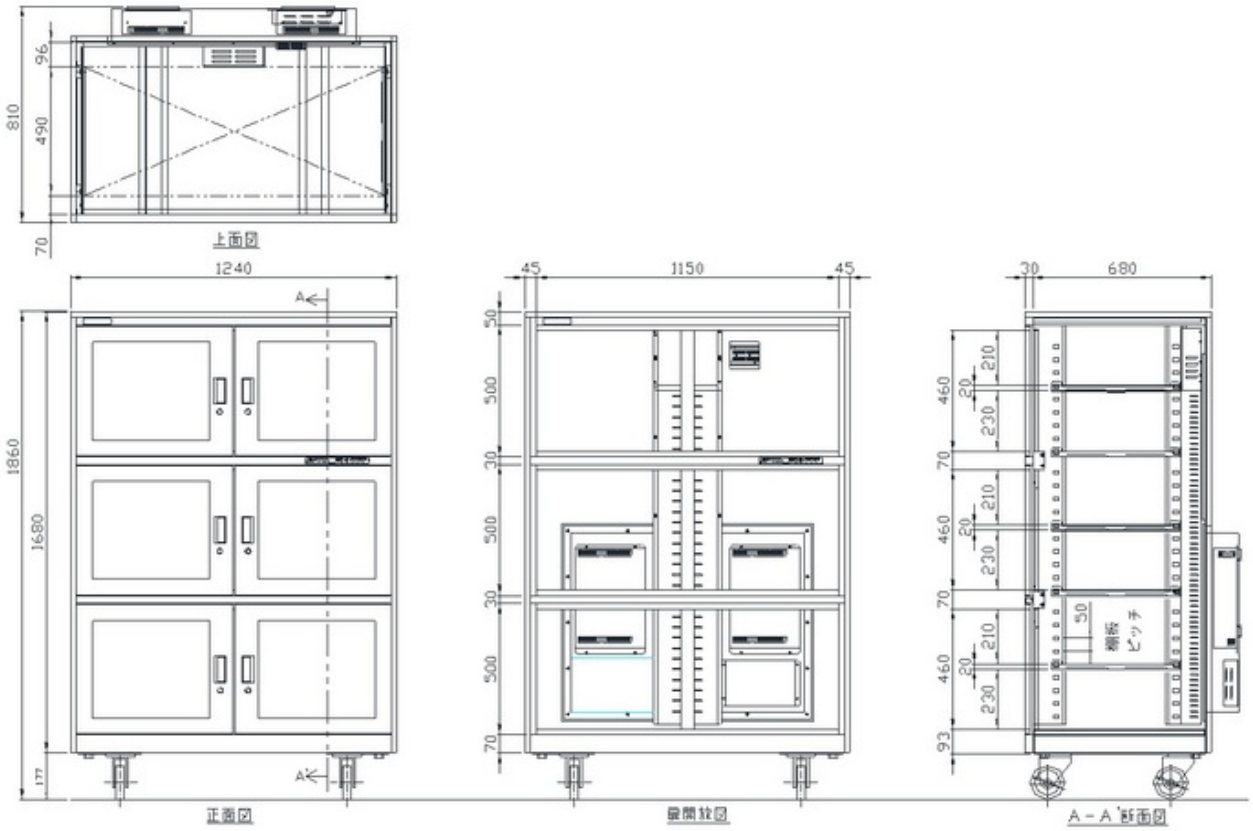
Drawing of SDM-1206-01



❖Unloaded test for SDM-1206-01