

Drying Cabinets and Vacuum Machines for Moisture Sensitive Components



Content



Our cabinets are esd-safe



Very environmentalfriendly



Jos Brehler CEO Totech Europe B.V.

We are very pleased to welcome you to our newest brochure, and to show you the many new innovations that have been introduced in our new product line-up, much of which is German engineered and manufactured. During the past 5 years Totech Europe has grown into a global market leader, supplying MSD management solutions to many well-

known companies with whom we have worked closely to extend our technology. We also provide custom designs to meet special applications and invite you to contact us with any special requirements you might have.

Our development efforts have produced new levels of drying performance but also environmentally responsible products such as our HSDi series. The control and management of moisture sensitive components and PCB's in today's industry is a fast changing challenge. Super Dry by Totech is here to help you meet that challenge head on.



Page		ВН 0,5%	RН <5%	M²	Room-	40°C	8 0°C
3 SDB-Series		0,0%	< 3∞	×	temp.*	40 0	00 0
4	SD-Series		×	×	×		
6	HSD-Series	×		×	×		
8	MSD-Series	×		×	×	×	
10	HSDi-Series	×		×		×	×
11	Custom-made cabinets	×	×	×	×	×	×
12	XSD-Series	×		×		×	×
14	SDA-Series		×	×	×		
15	SDF / SDR-Series		×	×	×	×	×
16	iStorage-System				×		
18	SDV-Vacuum Machines		×	×			

- 20 Product advantages
- 21 Optional Accessories for all cabinets
- 22 ESD & Cleanroom products
- **23** Reference tables of the cabinets
- Series equipment

* without temperature adjustment, Ø-room temperature: 25°C

Optional available

Dry storage cabinets SDB-Series Wide choice at low prices.

 Storage
 Room temp.

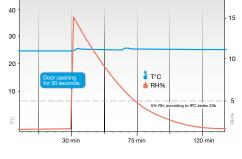
 < 5% RH</td>
 Ø 25°C



Our Super Dry Basic dry storage cabinet Series combines 3 different sizes with patented drying technology. Specially designed for Dry Storage < 5% RH in conformity with IPC. These cabinets do not have door or humidity alarm and will be deliverd with painted ESD shelfs.

Options:

no further options available





SDB 151-21

Ext. dimensions (whd): 500 x 630 x 580 mm
Int. dimensions (whd) (excl. dry unit): $490 \times 560 \times 530 \text{ mm}$
Effective capacity: 145 I
Weight: 29 kg
Number of shelves: 3
Drying unit: 1 x U-2000 for < 5% RH
Power consumption: 21 W/h

- 00ACT

SDB 1104-21

Ext. dimensions (whd): 1200 x 184 x 670 mm
Int. dimensions (whd) (excl. dry unit): 1190 x 1560 x 620 mm
Effective capacity: 1160 I
Weight: 155 kg
Number of shelves: 5
Drying unit: 1 x U-2000 for < 5% RH
Power consumption: 21 W/h

SDB 1106-21

Ext. dimensions (whd): 1200 x 1840 x 670 mm
Int. dimensions (whd) (excl. dry unit): 1190 x 1560 x 620 mm
Effective capacity: 1160 I
Weight: 160 kg
Number of shelves: 5
Drying unit: 1 x U-2000 for < 5% RH
Power consumption: 21 W/h





Text display with operation field of the 21-Series

(These cabinets cannot be equipped with N2 or Heater)

Dry storage cabinets SD-Series

Optimal protection with minimal deployment. User-friendly operation and compact construction guarantee safe and reliable storage requirements.







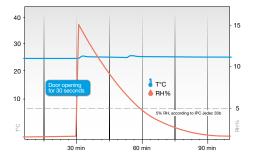




The cabinet of the SD-Series is equipped with a patented drying unit. This achieves a

low humidity of < 5% RH. Humidity, temperature and alarm function are shown on a digital display. The circulation of the air in the cabinet is regulated through a door automatic. All surfaces are painted in a conducted way and in conformity with current ESD standards. These series were developed for a medium to long-term storage to avoid damages of humidity and oxidation.

Ext. dimensions: 500 x 630 x 580 mm	Ext. dimensions: 500 x 1230 x 640 mm	Ext. dimensions: 880 x 900 x 740 mm
Int. dimensions (whd) (excl. dry unit) : 490 x 560 x 530 mm	Int. dimensions (whd) (excl. dry unit) : 490 x 1160 x 590 mm	Int. dimensions (whd) (excl. dry unit) : 870 x 830 x 690 mm
Effective capacity: 145 I	Effective capacity: 340 I	Effective capacity: 500 l
Weight: 29 kg	Weight: 60 kg	Weight: 60 kg
Number of shelves: 3	Number of shelves: 7	Number of shelves: 3
Drying unit: 1 x U-2000 for < 5% RH	Drying unit: 1 x U-2000 for < 5% RH	Drying unit: 1 x U-2000 for < 5% RH
SD 151-21	SD 302-21	SD 502-21



SD 151, 302, 502

Dry storage cabinets SD-Series



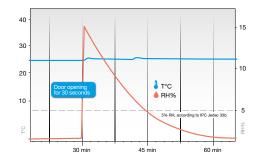
Door alarm & RH alarm included

Included:

- Chrome steel shelves
- Pre mounted holes for heater & auto flow system
- = 2 dry units (SD 1106, SD 1104)

Options:

- Shelves
- Adjustable legs
- Automatic nitrogen unit with door contact switch
- Two-colour alarm lights
- Datalogger
- Optional accessories





Ext. dimensions: 620 x 1840 x 780 mm
Int. dimensions (whd) (excl. dry unit) : 610 x 1560 x 730 m
Effective capacity: 700 I
Weight: 110 kg
Number of shelves: 5
Drying unit: 1 x U-2000 for < 5%

SD 1104-21

Ext. dimensions: 120 x 1840 x 670 mm
Int. dimensions (whd) (excl. dry unit) : 119 x 1560 x 620 mr
Effective capacity: 1160 I
Weight: 155 kg
Number of shelves: 5
Drying unit: 2 x U-2000 for < 5% RH

SD 1106-21

Ext. dimensions: 120 x 1840 x 670 mm
Int. dimensions (whd) (excl. dry unit) : 119 x 1560 x 620 mm
Effective capacity: 1160 I
Weight: 160 kg
Number of shelves: 5
Drying unit: 2 x U-2000 for < 5% RH







SD 1104, 1106

Drying cabinet HSD-Series

DryingRoom temp.Nitrogen0.5% RHØ 25°Coptional

Our HSD Series combines a large choice of various cabinet sizes with high achievement drying technology "Made in Germany". Catagory: Very good – our practice test winner for your production.





Int. dimensions (whd) (excl. dry unit) : 119 x 1740 x 660 mm/780 mm



Int. dimensions (whd) (excl. dry unit) : 119 x 1740 x 660 mm/780 mm

Text display with operation field of the 52-Series



Equipment

- Height adjustable and sliding shelves
- Lockable doors
- Drying unit U-5000 Series, < 0.5% RH
- Precision sensor (Rotronic)
- Door and humidity alarm
- Text display with operation field
- Humidity and temperature report
- RS 232 interface for guarding online data
- ESD-safe design
- 4 Transport castors/ 4 Feet
- Integrated data logger

Ext. dimensions (whd): 610 x 1950 x 670 mm Int. dimensions (whd) (excl. dry unit) : 600 x 1730 x 660 mm Effective capacity: 700 l Weight: 90 kg Number of shelves: 5 sliding shelves Dry unit: 1 x U-5000 for < 0.5% RH

HSD 702-52



Effective capacity: 1400 I

Number of shelves: 5 sliding shelves

Dry unit: 1 x U-5000 for < 0.5% RH

HSD 1406-52

Effective capacity: 1400 I

Dry unit: 1 x U-5000 for < 0.5% RH

Drying cabinet HSD-Series

The HSD cabinet is especially characterized by its fast back drying, the precision sensor, and its reliable control unit. The dynamic drying unit U-5000 Series guarantees a fast drying and regeneration adapted to the number of its opening cycles. Therefore it is very suitable for operation with frequent approach. The maximum dryness is around < 0.5% RH and provides optimal storage conditions for your materials.

HSD 241-52

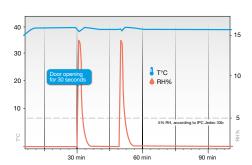
Ext. dimensions (whd): 610 x 820 x 670 mm
Int. dimensions (whd) (excl. dry unit) : 600 x 600 x 660 mm
Effective capacity: 240 I
Weight: 55 kg
Number of shelves: 2 sliding shelves
Dry unit: 1 x U-5000 for < 0.5% RH

HSD 351-52

Ext. dimensions (whd): 610 x 1100 x 670 mm
Int. dimensions (whd) (excl. dry unit) : 600 x 880 x 660 mm
Effective capacity: 350 I
Weight: 70 kg
Number of shelves: 2 sliding shelves
Dry unit: 1 x U-5000 for < 0.5% RH

HSD 472-52

Ext. dimensions (whd): 610 x 1380 x 670 mm
Int. dimensions (whd) (excl. dry unit) : 600 x 1170 x 660 mm
Effective capacity: 470
Weight: 80 kg
Number of shelves: 3 sliding shelves
Dry unit: 1 x U-5000 for < 0.5% RH









Modular drying cabinet MSD-Series

Drying	Room temp.	Temperature	Nitrogen	
0.5% RH	Ø 25°C	40°C (optional)	optional	

The cabinet that grows with your requirements. Made to size solutions are possible through modular construction. The standard cabinet can be extended with further modular cabinets up to 6000 l.



Ext. dimensions (whd): 840 x 2040 x 900 mm
Int. dimensions (whd): 760 x 1780 x 850 mm
Effective capacity: 1200 I
Weight: 120 kg
Number of shelves: 4 sliding shelves
Number of doors: 4 doors back & front
No drying unit pre-installed

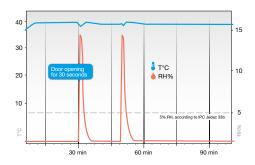
MSD 1212



Ext. dimensions (whd): 840 x 2040 x 900 mm
Int. dimensions (whd) (excl. dry unit) : 760 x 1780 x 850 mm
Effective capacity: 1150 l
Weight: 150 kg
Number of shelves: 4 sliding shelves
Number of doors: 3 doors back & front
Dry unit: 1 x U-5000 for < 0.5% RH

MSD 1202-52

The cabinet is characterized by its innovative modular construction and makes a step by step extension of the storage capacity in the process of cabinet construction posssible. Further cabinet parts or drying units can be integrated on demand in the system of the cabinet. The conveniently arranged and user-friendly display makes a safe adjustment of the following functions possible: humidity, alarm functions and heating. The serial production of RS 232 interface makes a simple reading of the integrated Dataloggers with our software possible. Our dynamic Drying unit U-5000 makes regenerations adapted to your demands.



Modular drying cabinet MSD-Series



Lockable doors

Equipment

- Drying unit U-5000 Series, < 0.5% RH</p>
- Precision sensor (Rotronic)
- Door and humidity alarm
- Text display and operation field
- Humidity and temperature report
- RS 232 interface for online guarding of data
- ESD-safe design
- 4 Transport castors/ 4 Feet
- Integrated data logger

MSD 611

Ext. dimensions (whd): 840 x 1200 x 900 mm
Int. dimensions (whd): 830 x 980 x 690 mm
Effective capacity: 561 I
Weight: 75 kg
Number of shelves: 2 sliding shelves
No drying unit pre-installed

MSD 601

Ext. dimensions (whd): 840 x 1200 x 900 mm
Int. dimensions (whd) (excl. dry unit) : 830 x 980 x 690 mm
Effective capacity: 561 I
Weight: 90 kg
Number of shelves: 2 sliding shelves
Dry unit: 1 x U-5000 for < 0.5% RH





Insulated drying cabinets HSDi-Series

Drying	Temp.	Temperature to	Nitrogen
0.5% RH	40°C	60°C (optional)	optional









ions (whd): 640 x 1980 x 700 mm	Ext. dimensions (whd): 1230 x 1980 x 700 n
ons (whd) (excl. dry unit) : 600 x 1730 x 660 mm	Int. dimensions (whd) (excl. dry unit) : 1190 x 174
apacity: 700 l	Effective capacity: 1400 I
kg	Weight: 180 kg
shelves: 5 sliding shelves	Number of shelves: 5 sliding shelves
x U-5000 for < 0.5% RH	Dry unit: 1 x U-5000 for < 0.5% RH

HSDi 702-52

xt dime

t. dimei

HSDi 1404-52

Low energy consumption with temperatures up to 60°C are the successful way for a quick, drying of your components and PCB's. The drying of humidity sensitive components becomes increasingly important. To speed up the drying process we recommend insulated drying cabinets.



- Lockable doors with 20 mm double glass
- Continuously adjustable heating up to 40°C (60°C as option)
- Insulated cabinet body
- Drying unit U-5000 Series, < 0.5% RH</p>
- Precision sensor (Rotronic)
- Door and humidity alarm
- Text display with operation field
- Humidity and Temperature report
- RS 232 interface for online guarding of data
- ESD-safe design
- 4 Transport castors/ 4 Feet
- Integrated data logger
- Various sizes on application
- 5 Sliding shelves

Custom-made cabinets

Our custom-made cabinets are the answer to the increased interest of our customers in individual solutions. With this modular concept we are in a position to react quickly to the wishes of our customers. By using reliable parts we guarantee a safe process also with special solutions. We are interested in low energy values and environment-friendly solutions. You have a choice in our single parts MSD / HSD and XSD. You can choose from the following components:

Equipment possibilities

- Drying unit U-5000 Series
- Computer steering with touchscreen Display LCD 5.7" (320x240 Pixel)
- SD card reader
- Text display with operation field
- Double-walled insulation
- Heat-resistant double glazing
- Heating up to 60°C
- Electrical sliding door
- Individual cabinet sizes
- Individual Construction
- RS 232 interface for guarding online data
- Software for data processing
- Log steering with text display etc.











U-5000

U-7000





Purge System

Heater 40°C Heater 60°C

RS 232 interface





Double Glazing





High accuracy sensor



Insulated drying cabinets XSD-Series

The combination of high achievement dryer, heating and thick-walled insulation enables the XSD-Series to effect a quick drying of moist components and pcb's.



External dimensions (whd): 740 x 2120 x 800 mm
Internal dimensions (whd): 670 x 1440 x 590 mm
Effective capacity: 570 I
Weight: 142 kg
Number of shelves: 5
Dry upit: 1×115002 for $< 0.5\%$ PH

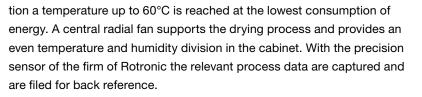
Internal dimensions (whd): 1330 x 1430 x 590mm Effective capacity: 1150 l Weight: 230 kg Number of shelves: 10 Dry unit: 1 x U-5002 for < 0.5% RH

External dimensions (whd): 147 x 2120 x 800 mm

XSD 702-52



The XSD-Series reaches humidity values of < 0.5% RH and regenerates automatically if necessary. Thanks to the double walled stainless steel body with 70 mm insula-



Text display with operation field of the 52-Series



- Lockable doors
- Heat-resistant double glazing
- Radial fan for a stable temperature profile
- Continuously adjustable heating up to 60°C
- Insulated cabinet body / 70 mm
- Drying unit U-5000 Series, < 0.5%</p>
- Precision sensor (Rotronic)
- ESD-safe design (also in- and outside glass)
- Height adjustable feet
- 5/10 Extendable shelves



Equipment XSD with text display

- Text display with operation field of the 52-Series
- Humidity and temperature report
- Integrated data logger
- RS 232 interface for data.

Insulated drying cabinet xSD-Series

Equipment XSD

General equipment like XSD-Series (page 10)

- Interior lighting
- SD card reader for process documentation
- Viewer (to show recorded data of PC)
- Computer steering with touchscreen Display LCD 5.7" (320x240 Pixel)
- Reading of humidity and temperature for a period of 120 min.

XSD 702-53

External dimensions (whd): 740 x $2120 \times 800 \text{ mm}$
Internal dimensions (whd): 670 x 1440 x 590 mm
Effective capacity: 570 l
Weight: 142 kg
Number of shelves: 5 sliding shelves
Dry unit: 1 x U-5000 for < 0.5% RH

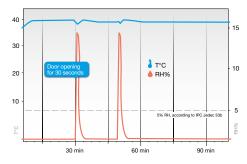
XSD 1404-53

External dimensions (whd): 147 x 2120 x 800 mm
Internal dimensions (whd): 1330 x 1430 x 590 mm
Effective capacity: 1150
Weight: 230 kg
Number of shelves: 10 sliding shelves
Dry unit: 1 x U-500 for < 0.5% RH





Full graphic touchscreen Display LCD 5.7" 320x240 Pixel







Acrylic cabinets ESDA-Series

Drying	Room temp.	N2	< 1%	
< 5% RH	Ø 25°C	optional	optional	

Our acrylic cabinet series offers conveniently arranged storage possibilities with low humidities. Installation of an optional nitrogen or drying unit is available.







External dimensions (whd): 520 x 750 x 520 mm
Internal dimensions (whd): 560 x 480 x 730 mm
Effective capacity: 200 I
Weight: 30 kg
Number of shelves: 2
Optional drying unity LL 4000

ESDA 201

External dimensions (whd): 570 x 1770 x 520 mm
Internal dimensions (whd): 560 x 480 x 1480 mm
Effective capacity: 400 l
Weight: 50 kg
Number of shelves: 5
Optional drying unit: U-4000

ESDA 402

External dimensions (whu). Thoux 1770 x 520 min	Ľ.,
Internal dimensions (whd): 1120 x 480 x 1480 mm	
Effective capacity: 800 l	
Weight: 100 kg	
Number of shelves: 10	
Optional drying unit: U-4000	

ESDA 804

Text display with operation field of the 41-Series







N2 Auto Purge system

Nitrogen unit

Our ESDA-Series is suitable for storage under controlled atmosphere. This can be achieved through a nitrogen-unit or installation of our drying unit U-4000 for <5% RH or U-5000 for <1% RH. By ordering the U-5000 all technical features as well the text display out of the 52 serie are included (simular as the HSD/ MSD series). All ESDA cabinet versions are made ESD safe.



are made LOD sale.

Drying Cabinet for feeder systems

The cabinets of the SDF and SDR-Series are equipped with high performance dryers and are suitable for storage in between of complete feeder systems. Special sizes on application.

Drying*	Room temp.	Temperature to	Nitrogen	
1% RH	Ø 25°C	40°C & 60°C (optional)	optional	

* <5% RH SDF, 1% RH SDR

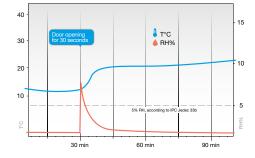




The feeder cabinets achieve a very low humidity level of up to 1% RH and are suitable for storage in between of feeder (trolley) systems. The internal life of the cabinets is especially geared to its feeder system. With this the upper part of the cabinet can be fitted with shelves. The SDR-Series can be



supplied with Touchscreen Display, Heating (up to 60°C) and dynamic Drying unit U-5000 series.



External dimensions (whd): 1200 x 1840 x 960 mm
Internal dimensions (whd): 1190 x 1560 x 910 mm
Effective capacity: 1700 I
Weight: 197 kg
Dry unit: 2 x U-2000 for <5% RH

SDF 1704

External dimensions (whd): 1050 x 1560 x 1050 mm
Internal dimensions (whd): 990 x 1200 x 990 mm
Effective capacity: 1200 I
Weight: 197 kg
Dry unit: 1 x U-5000 for <1% RH

SDR-Series Data SDR-1200



Different feeder racks available: Siplace, Europlacer Assembleon, Fuji, Juki etc.

Super Dry iStorage SDI

The first intelligent storage system for process-ready components up to 5,500 reels!

The first automatic modular storage system for keeping more than 5,500 reels, pcb's, trays etc. The Totech Super Dry iStorage System combined with The U-7000 Drying Unit protects humidity sensitive components against the dangers of oxidation and humidity, because it can achieve a relative humidity of less than 2% RH. This new drying cabinet stands out by its innovative modular construction which enables the user to add more room when production demand increases.

Ext. dimensions (whd): 1155 x 2663 x 1190 mm
Weight: 263 kg
Racks for components
Space for lodging 160 reels of 7" up to 16mm
Automatic arm with handle manipulator for components pick-up/storage
Chamber for pick-up/storage of the components
Recognizable system through barcode for the management of the material location in the cabinet, PC, software for orders management and traceabilit
Head Module
Ext. dimensions (what): 1700 x 2000 x 1100 mm

Weight: 371 kg
FREEDOM 630 - 630 reels diameter 7" and height up to 16mm
FREEDOM 765 - 315 reels diameter 7" and height up to 16mm and 450 reels diameter 7" height 8mm
FREEDOM 900 - 900 reels diameter 7"and height 8mm

Free Module





t. dimensions (whd): 1780 x 2663 x 1190 mr

Veight: 371 kg

TRAY 160 - 160 trays for reels with diameter up to 15" and height up to 32 mm or tray for QFP/BGA or PTH components or various material in proper containers

TRAY 228 - 80 trays for reels with diameter up to 15" and height up to 32 mm or tray per QFP/BGA or PTH components or various material in proper containers and 148 shelves for reels diameter up to 15" and height up to 12 mm or tray for QFP/BGA

TRAY 296 - 296 trays for reels diameter up to 15" and height until 12 mm or tray for QFP/BGA

Tray Module

Ext. dimensions (whd): 1780 x 2663 x 1190 mm

Veight: 371 kg

MIX 395 - 315 reels with diameter 7" and height 16mm; 80 trays for reels with diameter up to 15" and height up to 32 mm or tray per QFP/BGA or PTH components or various materials in proper containers

MIX 463 - 315 reels with diameter 7" and height 16mm; 148 trays for reels with diameter up to 15" and height up to 12 mm or tray for QFP/BGA

VIX 530 - 450 reels with diameter 7" and height 8mm; 80 trays for reels with diameter up to 15" and height up to 32 mm or tray per QFP/BGA or PTH components or various materials in proper containers

MIX 598 - 450 reels with diameter 7" and height 8mm; 148 trays for reels with diameter up to 15" and height up to 12 mm or tray for QFP/BGA

Mix Module

Drying Unit

The U-7000 "Rotation Series" is developed for bigger dry rooms. By uninterupted drying you always have drying achievement available.

Max. Dry performance: 2% RH Drying capability: 1,6 kg/h Dry air max.: 300 m³/h

U-7000 Drying Unit





Vacuum Machines SDV 46

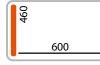
Our ESD vacuum machine series is particularly suitable for being used in ESD protected sections. The controlled reduction of humidity and oxygen content serve to ensure safe storage and transport conditions. Ideally suitable for the packaging of moisture-sensitive materials.



Int. dimensions (whd): 650 x 210 x 475 mm
Sealing length: 460 mm
Vacuum pump: 21 m ³ /h
Weight: 95 kg
Digital steering Z-3000

SDV 46

Sealing length



Control Display Z3000 / (Model Z-2000, Time Controlled)

Our sensor control has been equipped with a vacuum sensor, and allows for the accurate setting of important parameters. Humidity and oxygen content can be reduced in a controlled manner. 99 program memories facilitate your packaging result's reproducibility and ensure easy handling and operation.

ESD Safe

Our machines have been equipped with acrylic covers. All surfaces are electrically conductive. Critical surfaces have been coated with dissipative plastics, and feature a bleeder resistance of 1-6 Ohm/sq, compliant with the ESD standard.

Nitrogen

Optionally, a nitrogen unit may be installed to facilitate the packaging of materials, which are vulnerable to oxidation or of pressure-sensitive nature. The additional reduction of oxygen content and diffusion rate are ideal for long-term storage.

IPC Conform

The construction & control system are based on the IPC regulation









Vacuum Machines SDV-Series

The ideal combined action of vacuum chamber, heating system, and vacuum pump characterizes this apparatus.

Dependent on the size of the machine trays, sticks and reels can be packed in conformity with the "IPC norm Jedec 033B". All models are available in ESD Design, with Nitrogen Unit, and Under Carriage. In case you are interested in consumer materials such as drying means, humidity indicators or moisture barrier bags, go to our webshop, www.totech_superstat.com



SDV 26



Sealing length

19





120

410



¹²⁰

410



oisture Barrier Baas

600



100 x 660 mm

250 x 500 mm

420 x 440 mm

420 x 540 mm



600



Drying level (example)

- Recoverytime after door opening
- Accuracy of Sensor RH% & T°C
- Accuracy of Temperature
- User Friendly Handling
- FSD features
- Datalogging
- Online read out
- RH% Setting & Stability
- Internal illumination

Drying level (example)

Accuracy of Temperature

• User Friendly Handling

RH% Setting & Stability

Door & humidity alarm buzzer

Energy saving consumption

Internal illumination

ESD features

Datalogging

Online read out

Specification

Recovervtime after door opening

Accuracy of Sensor RH% & T°C

- Door & humidity alarm buzzer
- Energy saving consumption
- Specification

XSD 1404-53

- Level 3 component < 1.4mm, 18 hours. (60°C / 1%RH)
- < 6 minutes
- 1% / ± 1°C (Rotronic) • ± 2°C
- Display with Touchscreen & features
- Conductive stainless steelbody also window ESD safe
- Endless
- SD card
 - All settings possible & stable read out
 - Standard
- Standard
- Due to 800 Watt/h and 40 mm double PUR Insolation & dynamic dry unit
- Fast drving

HSD-i 1404-52

- Level 3 component < 1,4mm, 18 hours, (60°C / 1%RH)
- < 6 minutes
- 1% / ± 1°C (Rotronic)
- ± 5°C
- Display multi language. 5 menu's & up and down button
- ESD metal painted body also window ESD safe
- Standard 2000 measuring points
- RS232 Standard
- All settings possible & stable read out
- Not available
- Standard
- Due to 10mm Airflex insolation
- & dynamic dry unit
- Dvnamic drv unit

Competitors

- Level 3 component < 1,4mm, (25°C / 5%RH) 16 days
- < 1 hours</p>
- 3% / ± 1°C
- ± 10°C
- Only up & down button
- No ESD paint, window ESD safe
- Not standard, available as option
- Not standard, available as option
- No settings or not stable read out
- Not available
- Not standard
- No or poor insolation & no dynamic dry unit
- Not in programm

MSD / HSD

- Level 3 component < 1,4mm, 8 days, (25°C / 1%RH)
- < 6 minutes</p>
- 1% / ± 1°C (Rotronic)
- ± 5°C
 - Display multi language, 5 menu's & up and down button
 - ESD metal painted body also window ESD safe
 - Standard 2000 measuring points
 - RS232 Standard
 - All settings possible & stable read out
 - Not available
 - Standard
 - Dvnamic drv unit
 - MSD can grow with your needs

SD

- Level 3 component < 1,4mm, 13 days, (25°C / 3%RH)
- < 45 min
- 3% / + 1°C
- + 5°C
- Up en down settings, calibration as well as alarm settings
- Dissipative body also window ESD safe
- Not standard, available as option
- Not standard, available as option
- All settings possible & stable read out
- Not available
- Not standard by SDB serie • N/a
- Stable dry unit

Competitors

- Level 3 component < 1,4mm, (25°C / 5%RH) 16 days
- \circ < 1 hours
- $\circ 3\% / + 1^{\circ}C$
- + 10°C
- Only up & down button
- No ESD paint, window ESD safe
- Not standard, available as option
- Not standard, available as option
- No settings or not stable read out
- Not available
- Not standard
- No or poor insolation & no dynamic dry unit
- Not in programm

General options for all cabinet series



Shelves

SMD reel

holders



Separation elements



External alarm lights



Door alarm







Various data loggers

.....



SMD reel holder extendable



ESD wheels



adjustable feet

Height



Calibration apparatus



Nitrogen unit



N2 Auto Purge system

SMD reel holder on

extendable shelf



Heating 40°- 60°C





Various steerings



Heater max. 40°C

ESD & Cleanroom 6 Totech



A leader in ESD & Cleanroom safety, with a broad depth of products.

We have all the static control products you will need to outfit your static safe environments and Cleanroom Areas.

You will see that we will have many opportunities for innovative new products, including a wider offering of static control and cleanroom products.





Our ESD product offering

- ESD Flooring
- ESD Workstations
- Personnel Grounding
- ESD Garments
- ESD Table Mats
- Cleanroom Wipes
- •.Cleanroom Garments

- ESD Packaging Materials
- ESD Handling and Storage
- ESD Foams
- ESD Test and Measurement
- ESD Brushes
- Cleanroom Accessories
- Kapton tapes

- ESD Paper
- ESD Office Equipment
- ESD Service Equipment
- ESD Tapes
- ESD Gloves
- Cleanroom Masks
- ESD Shoes

We Aim for the following:

- Customer Satisfaction
- Quality Products
- Very Competitive Pricing
- Innovation
- Highly Motivated and Specialist Team
- Long Term Relationships with Customers
- Maximum Availability
- Respect Delivery Terms







www.totech-superstat.com for online orders

Our reference table offers you a survey of the drying times of your components. Please read it dependent on component strength, MSL Level, temperature and humidity Level.

* according 100TQFP-Test (Semiconductor Device (100TQFP) Dehumidifying Property)

** according to IPC J-STD-033B



Body Thickness	Level	Drying at 1% RH (MSD, HSD, HSDi & XSD-Series)		Drying at 2% RH (SDB, SD & SDA-Series)		**Drying at 5% RH		
		25°C 1% RH	40°C 1% RH	60°C 1% RH	25°C 2% RH	40°C 2% RH	40°C 5% RH	90°C 5% RH
Thickness ≤ 1,4 mm	2a *3 4 5 5a	5 days 8 days 9 days 10 days 10 days	2 days 3 days 4 days 5 days 6 days	12 hours 18 hours 24 hours 30 hours 36 hours	7 days 12 days 13 days 14 days 15 days	3 days 5 days 6 days 7 days 9 days	5 days 8 days 9 days 10 days 10 days	23 hours 33 hours 37 hours 41 hours 54 hours
Thickness > 1,4 mm ≤ 2,0 mm	2a 3 4 5 5a	22 days 23 days 28 days 35 days 56 days	10 days 11 days 14 days 16 days 18 days	2 days 2 days 3 days 4 days 4 days	30 days 35 days 40 days 50 days 67 days	15 days 16 days 17 days 24 days 27 days	22 days 23 days 28 days 35 days 56 days	3 days 4 days 5 days 6 days 8 days
Thickness > 2,0 mm ≤ 4,5 mm	2a 3 4 5 5a	67 days 67 days 67 days 67 days 67 days	20 days 22 days 22 days 22 days 22 days	5 days 5 days 5 days 5 days 5 days 5 days	80 days 80 days 80 days 80 days 80 days	30 days 31 days 31 days 31 days 31 days	67 days 67 days 67 days 67 days 67 days	10 days 10 days 10 days 10 days 10 days



