



MORE THAN JUST DRY AIR

PRODUCT CATALOGUE



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REFERENCE TABLE
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.

Body Thickness Level	Drying at 1% RH (PC & PCB-Series)			Drying at 2% RH (S2 & S2C-Series)			Drying at 5% RH (S3 & S3C-Series)	
	25°C 1% RH	40°C 1% RH	60°C 1% RH	25°C 2% RH	40°C 2% RH	60°C 2% RH	25°C 5% RH	30°C 5% RH
Thickness 1-2.5 mm	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
Thickness 2.5-5 mm	20 min	20 min	20 min	20 min	20 min	20 min	20 min	20 min
Thickness 5-10 mm	30 min	30 min	30 min	30 min	30 min	30 min	30 min	30 min
Thickness 10-20 mm	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
Thickness 20-30 mm	1.00 h	1.00 h	1.00 h	1.00 h	1.00 h	1.00 h	1.00 h	1.00 h
Thickness 30-40 mm	1.30 h	1.30 h	1.30 h	1.30 h	1.30 h	1.30 h	1.30 h	1.30 h
Thickness 40-50 mm	1.60 h	1.60 h	1.60 h	1.60 h	1.60 h	1.60 h	1.60 h	1.60 h
Thickness 50-60 mm	2.00 h	2.00 h	2.00 h	2.00 h	2.00 h	2.00 h	2.00 h	2.00 h
Thickness 60-70 mm	2.50 h	2.50 h	2.50 h	2.50 h	2.50 h	2.50 h	2.50 h	2.50 h
Thickness 70-80 mm	3.00 h	3.00 h	3.00 h	3.00 h	3.00 h	3.00 h	3.00 h	3.00 h
Thickness 80-90 mm	3.50 h	3.50 h	3.50 h	3.50 h	3.50 h	3.50 h	3.50 h	3.50 h
Thickness 90-100 mm	4.00 h	4.00 h	4.00 h	4.00 h	4.00 h	4.00 h	4.00 h	4.00 h

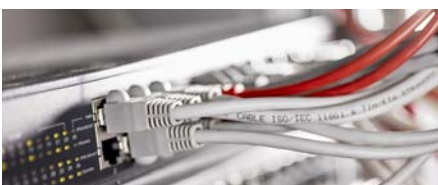
REFERENCE TABLE **24**
Drying times at a glance

OPTIONAL EQUIPMENT AND ACCESSORIES
Options that make all the difference

	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control	Advanced control
SDI 100-01	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-02	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-03	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-04	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-05	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-06	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-07	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-08	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-09	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-10	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-11	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-12	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-13	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-14	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-15	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-16	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-17	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-18	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-19	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-20	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-21	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-22	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-23	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-24	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-25	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-26	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-27	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-28	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-29	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-30	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-31	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-32	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-33	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-34	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-35	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-36	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-37	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-38	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-39	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-40	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-41	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-42	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-43	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-44	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-45	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-46	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-47	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-48	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-49	•	•	•	•	•	•	•	•	•	•	•	•
SDI 100-50	•	•	•	•	•	•	•	•	•	•	•	•

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Volume & process optimised component storage

VACUUM UNITS



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Safe packaging of components for storage and transport

SDB SERIES

ENTRANCE MODEL



Reliable and easy to use

FEATURES:

- Maintenance-free U-4001 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- User-friendly humidity visualisation
- Through hygrometer
- Coated shelves
- Lockable doors
- Relative air humidity below 5% RH

OPTIONS:

- SMD reel rack
- Honeycomb module for IC tubes, etc.
- Additional shelves

For more options, see page 24.

SDB SERIES

The drying cabinets of the SDB series have been specifically designed as low-cost entrance models and feature only the basic functions. The patented 4001 drying unit guarantees constant low relative humidity for medium to long-term storage.



	SDB 151-40	SDB 1104-40	SDB 1106-40	
Ext. dimensions (WHD)	500 x 630 x 580 mm	1200 x 1840 x 658 mm	1200 x 1840 x 658 mm	
Int. dimensions (WHD)	490 x 560 x 530 mm	1190 x 1533 x 630 mm	1190 x 1533 x 630 mm	
Effective capacity	135 l	1139 l	1139 l	
Weight	37 kg	155 kg	155 kg	
Power consumption	24 W/h	24W/h	24 W/h	
Number of shelves	3	5	5	

Characteristics



U-4001 series dryer:
Air drying RH to below 5%
Regeneration: static (timer-controlled)



Sensor:
No integrated sensor



Performance:
30 min recovery time after door opening to below 5% RH



Control:
No integrated control
Display of climate data through hygrometer



Convection:
Forced convection through forced air circulation



Documentation:
External data logger (optional)

SD SERIES

ROBUST DESIGN



Advanced technology and Robust design

FEATURES:

- Maintenance-free U-2000 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Digital control panel with humidity and temperature display
- Lockable doors
- Regulated relative humidity

- Suitable for storage and drying according to IPC standards
- Interruption-free and redundant drying by means of 2 drying units (SD-1104/1106 and SDF-1704 only)

OPTIONS:

- Manual or automatic nitrogen unit
- Heater (40°C)
- Feeder rack

For more options, see page 24.

SD SERIES

The SD series comprises a wide range of cabinet models. Thanks to their advanced design, chrome steel standard shelves and reliable drying units, they offer maximum protection for medium to long-term storage.



	SD 151-21	SD 302-21	SD 502-21	SD 702-21	SD 1104-21	SD 1106-21	SDF 1704-21
Ext. dimensions (WHD)	500 x 630 x 580 mm	500 x 1127 x 640 mm	880 x 898 x 740 mm	620 x 1840 x 768 mm	1200 x 1840 x 658 mm	1200 x 1840 x 658 mm	1200 x 1840 x 960 mm
Int. dimensions (WHD)	490 x 560 x 530 mm	490 x 1124 x 594 mm	870 x 830 x 702 mm	610 x 1533 x 735 mm	1190 x 1533 x 630 mm	1190 x 1533 x 630 mm	1190 x 1560 x 910 mm
Effective capacity	135 l	320 l	496 l	680 l	1139 l	1139 l	1700 l
Weight	37 kg	68 kg	70 kg	152 kg	155 kg	155 kg	197 kg
Power consumption	35 W/h	35 W/h	35 W/h	35 W/h	70 W/h	70 W/h	70 W/h
Number of shelves	3	7	3	5	5	5	depending on cabinet layout

Characteristics



U-2000 series dryer:
RH drying to below 1% RH
Regeneration: timer-controlled



Sensor:
Integrated sensor,
accuracy +/- 3% RH
Offset configuration



Performance:
30 min recovery time after
door opening to below 1% RH



Control:
Humidity and temperature
display with parameter value
input; humidity and door
monitoring functions



Climate control:
Optional heating up to 40°C
Forced air circulation



Documentation:
External data logger

SD+ SERIES

PRECISION DRYING



Economical and precise

FEATURES:

- Maintenance-free U-2000 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Lockable doors
- Dynamic regeneration
- Integrated data logger
- Including software for PC visualisation

- Ethernet interface
- Regulated relative humidity

OPTIONS:

- Additional shelves
- Heater (40°C)
- Alarm light

For more options, see page 24.

SD+ SERIES

The models of the SD+ series are essentially upgraded versions of the SD series. The cabinets are equipped with high-precision sensors. Dynamic regeneration of the drying units minimizes power consumption. A second drying unit ensure uninterrupted and redundant drying (SD+ 1104 and 1106 only).



	SD+ 302-22	SD+ 1104-22	SD+ 1106-22	
Ext. dimensions (WHD)	500 x 1127 x 640 mm	1200 x 1840 x 658 mm	1200 x 1840 x 658 mm	
Int. dimensions (WHD)	490 x 1124 x 594 mm	1190 x 1533 x 630 mm	1190 x 1533 x 630 mm	
Effective capacity	320 l	1139 l	1139 l	
Weight	68 kg	155 kg	155 kg	
Power consumption	24 W/h	48 W/h	48 W/h	
Number of shelves	7	5	5	

Characteristics



U-2000 series dryer:
RH drying to below 1% RH
Regeneration: dynamic



Sensor:
Rotronic sensor,
accuracy +/- 0.8% RH



Performance:
30 min recovery time after
door opening to below 1% RH



Control:
PLC with limit value input through
text display
Door and humidity alarm



Climate control:
Optional heating up to 40°C
Forced air circulation



Documentation:
Integrated data logger
Climate data recording
Free Totech-Viewer software

SDI SERIES

THERMAL INSULATION



Energy-efficient drying

FEATURES:

- Maintenance-free U-2000 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Lockable doors
- Digital control panel with humidity and temperature display
- Regulated relative humidity below 5%
- Suitable for storage and drying according to IPC

standards

- Heater (40°C)
- Insulated cabinet body

OPTIONS:

- SMD reel racks
- Additional shelves
- Automatic or manual nitrogen unit
- Stainless steel version available on request

For more options, see page 24.

SDI SERIES

The models of the insulated SD series are particularly recommended for temperature-controlled drying. Low relative humidity and temperatures up to 40°C accelerates the drying process. The thermal insulation ensures low energy consumption and homogeneous temperature distribution inside the cabinet.



	SDI 261-22	SDI 451-22	SDI 892-22	
Ext. dimensions (WHD)	660 x 1172 x 687 mm	660 x 1897 x 687 mm	1316 x 1897 x 702 mm	
Int. dimensions (WHD)	560 x 728 x 478 mm	560 x 1409 x 478 mm	1217 x 1409 x 462 mm	
Effective capacity	260 l	450 l	885 l	
Weight	131 kg	155 kg	275 kg	
Power consumption	30 W/h	70 W/h	30 W/h	
Number of shelves	6	6	6	

Characteristics



U-2000 series dryer:
RH drying to below 1% RH
Regeneration: timer-controlled



Sensor:
Integrated sensor,
accuracy +/- 3% RH
Offset configuration option



Performance:
30 min recovery time after
door opening to below 5% RH



Control:
Humidity and temperature
display with parameter value
input; humidity and door
monitoring functions



Climate control:
Heating up to 40°C
Forced air circulation



Documentation:
External data logger

HSD SERIES

EXTRA-FAST DRYING



Maximum process safety

FEATURES:

- Maintenance-free U-5000 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Lockable doors
- Regulated relative humidity below 0.5%
- Dynamic regeneration
- Integrated data logger

- Free software with viewer function
- Ethernet interface

OPTIONS:

- Automatic nitrogen unit
- Heater (40°C)
- Alarm light

For more options, see page 24.

HSD SERIES

The models of the HSD series come with a high-performance drying unit, precision measuring technology and an intuitive control panel.



	HSD 1104-52	HSD 1106-52	HSD 1704-52
Ext. dimensions (WHD)	1200 x 1675 x 658 mm	1200 x 1675 x 658 mm	1200 x 1675 x 960 mm
Int. dimensions (WHD)	1190 x 1533 x 630 mm	1190 x 1533 x 630 mm	1190 x 1533 x 910 mm
Effective capacity	1179 l	1179 l	1700 l
Weight	189 kg	189 kg	197 kg
Power consumption	58 W/h	58 W/h	58 W/h
Number of shelves	5	5	depending on cabinet layout

Characteristics



U-5000 series dryer:
RH drying to below 0.5% RH
Regeneration: dynamic



Sensor:
Integrated sensor,
accuracy +/- 0.8% RH



Performance:
15 min recovery time after
door opening to below 1% RH



Control:
PLC with limit value input through
text display or web interface
Door and humidity alarm



Climate control:
Optional heating up to 40°C



Documentation:
Integrated data logger
Climate data recording
Free Totech-Viewer software

MSD SERIES

MODULAR DESIGN



The cabinet that grows with your requirements.

FEATURES:

- Maintenance-free U-5000 drying unit with integrated fan
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Coated sliding shelves
- Lockable doors
- Regulated relative humidity below 0.5%
- Dynamic regeneration
- Integrated data logger

- Free Totech-Viewer software
- Ethernet interface
- Feet for height adjustment

OPTIONS:

- Passive MSD 1223 add-on cabinet
- Automatic nitrogen unit
- Additional drying unit
- Convection module with heater (40°C)

For more options, see page 24.

MSD SERIES

The MSD drying cabinets can grow with your demand. The modules are designed for easy extension to suit your needs.



	MSD 1222-52 Basic cabinet	MSD 1223-00 Add-on cabinet
Ext. dimensions (WHD)	840 x 2040 x 900 mm	840 x 2040 x 900 mm
Int. dimensions (WHD)	830 x 1780 x 850/730 mm	830 x 1780 x 850 mm
Effective capacity	1200 l	1255 l
Weight	140 kg	125 kg
Power consumption	30 W/h	30 W/h
Number of shelves	4	4

Capacity MSD 1222-52:	
Reels:	352
Diameter:	330 mm
Thickness:	8 mm

Characteristics



U-5000 series dryer:
RH drying to below 0.5% RH
Regeneration: dynamic



Sensor:
Integrated sensor,
accuracy +/- 0.8% RH



Performance:
20 min recovery time after
door opening to below 1% RH



Control:
PLC with limit value input
through text display
Door and humidity alarm



Climate control:
Optional heating up to 40°C
Forced air circulation



Documentation:
Integrated data logger
Climate data recording
Free Totech-Viewer
software

XSD SERIES

HIGH END TECHNOLOGY



Unrivalled perfection down to the last detail

FEATURES:

- Maintenance-free U-5000 drying unit with integrated fan
- Insulated cabinet body
- Powerful radial fan
- Heater (40°C) (XSDB)
- Heater (60 °C) (XSD)
- ESD safe design (IEC 61340-5-1)
- Limit value monitoring (RH; °C)
- Door alarm
- Sliding grate shelves (XSD only)
- Lockable doors

- Regulated relative humidity below 0.5%
- Dynamic regeneration
- Integrated data logger
- Free Totech-Viewer software
- Ethernet interface

OPTIONS:

- Drawers
- Heater (60°C) (XSDB)
- Cooler (10°C)
- Touch screen display

For more options, see page 24.

XSDB / 52 SERIES

The premium cabinets of the XSD series combine high-performance drying along stable temperature and humidity curves with top-class design and craftsmanship.



	XSDB 701-52	XSDB 1402-52	
Ext. dimensions (WHD)	700 x 1930/2110 x 808 mm	1432 x 1930/2110 x 808 mm	
Int. dimensions (WHD)	544 x 1504 x 600 mm	1315 x 1504 x 600 mm	
Effective capacity	490 l	1190 l	
Weight	142 kg	230 kg	
Power consumption	230 W/h (40°C)	230 W/h (40°C)	
Number of shelves	5	10	

Characteristics



Dryer:
RH drying to below 0.5% RH
Regeneration: dynamic



Sensor:
Integrated sensor,
accuracy +/- 0.8% RH



Performance:
10 min recovery time after
door opening to below 0.5% RH



Control:
PLC with limit value input
through text display
Door and humidity alarm



Climate control:
Heating up to 40°C
(optional up to 60°C)
Forced air circulation



Documentation:
Integrated data logger
Climate data recording
Free Totech-Viewer
software

XSD / 52 / 53 SERIES

The XSD series based on the XSDB series but features a stainless steel cabinet body, LED lighting, 60°C heater as well as sliding shelves with telescopic rails.



	XSD 701-52	XSD 1402-52	
Ext. dimensions (WHD)	700 x 1930/2110 x 808 mm	1432 x 1930/2110 x 808 mm	
Int. dimensions (WHD)	544 x 1504 x 600 mm	1315 x 1504 x 600 mm	
Effective capacity	490 l	1190 l	
Weight	142 kg	230 kg	
Power consumption	230 W/h (40°C)	230 W/h (40°C)	
Number of shelves	5	10	

Characteristics



Dryer:
RH drying to below 0.5% RH
Regeneration: dynamic



Sensor:
Integrated sensor,
accuracy +/- 0.8% RH



Performance:
10 min recovery time after
door opening to below 0.5% RH



Control:
PLC with limit value input
through text display
Door and humidity alarm



Climate control:
Heating up to 60°C
Forced air circulation



Documentation:
Integrated data logger
Climate data recording
Free Viewer software

XSDV / 52 / 53 SERIES

The XSDV series is the ideal solution for customised drying cabinets.



Individual sizes available

	XSDV 1302-52	XSDV	
Ext. dimensions* (WHD)	1432 x 1930 x 1000 mm	variabel	
Int. dimensions* (WHD)	1315 x 1504 x 870 mm	variabel	
Effective capacity*	1380 l	variabel	
Weight*	257 kg	variabel	
Power consumption*	230 W/h (40°C)	variabel	
Number of shelves*	variabel	variabel	

* might vary, depending on cabinet layout

Characteristics



Dryer:
RH drying to below 0.5% RH
Regeneration: dynamic



Sensor:
Integrated sensor,
accuracy +/- 0.8% RH



Performance:
10 min recovery time after
door opening to below 0.5% RH



Control:
PLC with limit value input through
text display
Door and humidity alarm



Climate control:
Heating up to 60°C
Forced air circulation



Documentation:
Integrated data logger
Climate data recording
Free Totech-Viewer software

ESDA SERIES

ACRYLIC CABINETS



Transparency combined with versatility

FEATURES:

- High-quality polycarbonate cabinet body
- Lockable doors
- U-2000 drying unit (ESDA 402-21 and 804-21 only)

OPTIONS:

- External signal lamp
- ESD wheels
- Nitrogen unit
- U-4000 drying unit

For more options, see page 24.

ESDA SERIES

The cabinets of the ESDA series have been designed with transparency in mind. They come with a wide range of equipment options, such as nitrogen units, various different dryers, ESD safe design, etc.



	ESDA 201-00	ESDA 402-00	ESDA 804-00	ESDA 402-21	ESDA 804-21
Ext. dimensions (WHD)	574 x 750 x 517 mm	574 x 1690 x 517 mm	1152 x 1690 x 517 mm	574 x 1690 x 517 mm	1152 x 1690 x 517 mm
Int. dimensions (WHD)	560 x 730 x 480 mm	560 x 1480 x 480 mm	1120 x 1480 x 480 mm	560 x 1480 x 480 mm	1120 x 1480 x 480 mm
Effective capacity	200 l	400 l	800 l	400 l	800 l
Weight	23 kg	59 kg	87 kg	60 kg	88 kg
Power consumption	/	/	/	35 W/h	35 W/h
Number of shelves	2	5	10	5	10

Characteristics



U-2000 series dryer:
RH drying to below 1% RH
Regeneration: timer-controlled



Sensor:
No integrated sensor
(xxx-21 with integrated sensor)



Performance:
30 min recovery time after
door opening to below 1% RH



Control:
Humidity and temperature
display with parameter value
input; humidity and door
monitoring functions



Convection:
Forced convection through
forced air circulation



Documentation:
External data logger

SDR SERIES

WALK-IN DRY ROOMS



Custom-built dry rooms

OPTIONS:

- Maintenance-free U-5000 drying unit with integrated fan (also available with U-7000 drying unit)
- Insulated wall panels
- Heater (40°C) with powerful radial fan
- Heater (60°C) with powerful radial fan
- Limit value monitoring (RH; °C)
- Door alarm
- Lockable doors
- Sight panels
- Regulated relative humidity below 5%
- Dynamic regeneration
- Integrated data logger
- Free software with viewer function

SDR SERIES

Custom-built dry rooms. We assist you in choosing the right dimensions, colour, drying capacity and software for your specific application. We use top-quality series components and advanced technology to build affordable dry rooms that meet your requirements.



Characteristics



U-2000 series dryer:
RH drying to below 5% RH
Regeneration: dynamic



Sensor:
Integrated Rotronik sensor,
accuracy +/- 0.8% RH



Performance:
Depending on dry room size



Control:
PLC with setpoint input for humidity and temperature
Humidity, temperature and door monitoring with alarm



Heating:
Active drying by means of integrated heater up to 60°C (optional)



Documentation:
Integrated data logger recording both climate and humidity data

REFERENCE TABLE

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.

MSL level	Drying at 1% RH <i>(HSD & XSD-Series)</i>			Drying at 2% RH <i>(SD & SDA-Series)</i>		**Drying at 5% RH <i>(N²-Cabinets)</i>		
	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	
Body thickness ≤ 1,4 mm	2	3 days	36 hours	10 hours	8 days	3 days	8 days	17 hours
	2a	4 days	2 days	12 hours	9 days	4 days	9 days	23 hours
	*3	8 days	3 days	18 hours	12 days	5 days	13 days	33 hours
	4	9 days	4 days	24 hours	15 days	6 days	15 days	37 hours
	5	10 days	5 days	30 hours	17 days	7 days	17 days	41 hours
	5a	10 days	6 days	36 hours	22 days	9 days	22 days	54 hours
Body thickness ≤ 2,0 mm	2	18 days	8 days	2 days	25 days	10 days	25 days	63 hours
	2a	22 days	10 days	2 days	30 days	15 days	29 days	3 days
	3	23 days	11 days	2 days	35 days	16 days	37 days	4 days
	4	28 days	14 days	3 days	40 days	17 days	47 days	5 days
	5	35 days	16 days	4 days	50 days	24 days	57 days	6 days
	5a	56 days	18 days	4 days	67 days	27 days	79 days	8 days
Body thickness > 2,0 mm ≤ 4,5 mm	2	67 days	20 days	5 days	80 days	30 days	79 days	10 days
	2a	67 days	22 days	5 days	80 days	30 days	79 days	10 days
	3	67 days	22 days	5 days	80 days	31 days	79 days	10 days
	4	67 days	22 days	5 days	80 days	31 days	79 days	10 days
	5	67 days	22 days	5 days	80 days	31 days	79 days	10 days
	5a	67 days	22 days	5 days	80 days	31 days	79 days	10 days

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

** according to IPC J-STD-033C

OPTIONAL EQUIPMENT AND ACCESSORIES

Options that make all the difference



	Additional shelves	Separation elements	SMD reel holders	Pull-out SMD reel holders	Reel holders on sliding shelves	External alarm lights	Height adjustable feet	ESD reels	Manual/autom. nitrogen unit	Pull-out feeder system	Heater 40°/60°C	Honeycomb module for IC tubes, etc., also available with optical position indicator	Feeder holder	Data logger and software
SDB 151-40	coated	•	•				•		○/○		•/○			•
SDB 1104-40	coated	•	•	•			•	•	•/○		•/○	•	●(ASM only)	•
SDB 1106-40	coated	•	•	•			•	•	•/○		•/○		●(ASM only)	•
SD 151-21	chrome steel	•	•			•	•		•/•		•/○			•
SD 302-21	chrome steel	•	•			•	•		•/•		•/○			•
SD 502-21	chrome steel	•	•			•	•		•/•					•
SD 702-21	chrome steel	•	•			•	•	•	•/•				●(ASM only)	•
SD 1104-21	chrome steel	•	•	•		•	•	•	○/•		•/○	•	●(ASM only)	•
SD 1106-21	chrome steel	•	•	•		•	•	•	○/•		•/○		●(ASM only)	•
SDF 1704-21	chrome steel	•	•			•	•	•	○/•	•	•/○	•	•	•
SD+ 302-22	chrome steel	•	•			•	•	•	•/•		•/○		●(ASM only)	••
SD+ 1104-22	chrome steel	•	•	•		•	•	•	○/•		•/○	•	●(ASM only)	••
SD+ 1106-22	chrome steel	•	•	•		•	•	•	○/•		•/○		●(ASM only)	••
SDI 261-22	chrome steel	•	•				•	•			••/○			•
SDI 451-22	chrome steel	•	•				•	•			••/○			•
SDI 892-22	chrome steel	•	•				•	•			••/○			•
HSD 1104-52	stainless steel	•	•	•		•	•	•	○/•		•/○	•	●(ASM only)	••
HSD 1106-52	stainless steel	•	•	•		•	•	•	○/•		•/○		●(ASM only)	••
HSDF 1704-52	stainless steel	•	•			•	•	•	○/•	•	•/○	•	•	••
MSD 1222-52	coated/ stainless steel	•	•		•	•	••		○/•		•/○	•	•	••
MSD 1223-00	coated/ stainless steel	•	•		•		••				•/○	•	•	
XSD 701-52/53	stainless steel		•		•	•	••	•	○/•		••/••	•	●(ASM only)	••
XSD 1402-52/53	stainless steel		•		•	•	••	•	○/•		••/••	•	●(ASM only)	••
XSDB 701-52/53	stainless steel		•		•	•	••	•	○/•		••/•	•	●(ASM only)	••
XSDB 1402-52/53	stainless steel		•		•	•	••	•	○/•		••/•	•	●(ASM only)	••
XSDV	coated/ stainless steel	•	•	•	•	•	••	•	○/•	•	•/•	•	•	••

• optional •• standard ○ not available

SOFTWARE

USER FRIENDLY DOCUMENTATION



TOTECH VIEWER

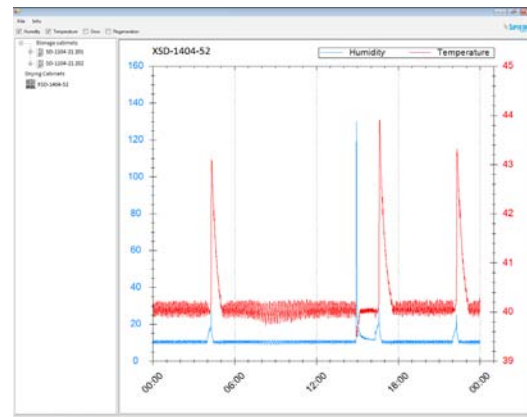
Standard cabinet monitoring with integrated logger

FUNCTIONS:

- Writing of climate data, door openings and alarms to SD card
- Transfer of data through Ethernet to PC
- User-friendly display of all relevant data
- Data processing in MS Excel

BENEFITS:

- Seamless documentation
- Excellent process safety



TOTECH MONITOR

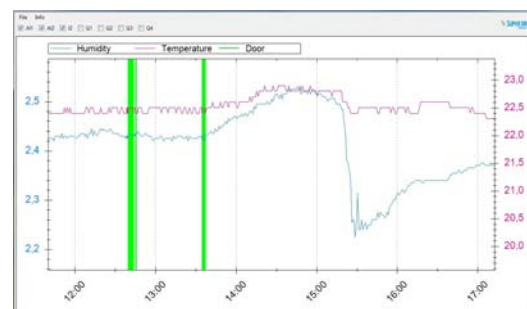
Real-time cabinet monitoring with alarm function

FUNCTIONS:

- Online monitoring of humidity and temperature
- Management of data of multiple drying cabinets
- Measurements displayed on PC in table or chart format
- Automatic device identification
- Real-time alarm messages via e-mail and/ or SMS

BENEFITS:

- Seamless documentation
- Excellent process safety
- Tamper-proof
- Fast response thanks to real-time monitoring



MSL 2.0

Reliable cabinet and component monitoring

CABINET MONITORING:

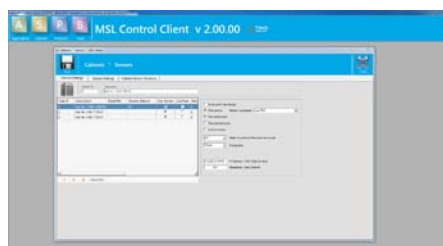
- Online monitoring of humidity and temperature
- Management of data of multiple drying cabinets
- Measurements displayed on PC in table or chart format
- Automatic device identification

COMPONENT MONITORING:

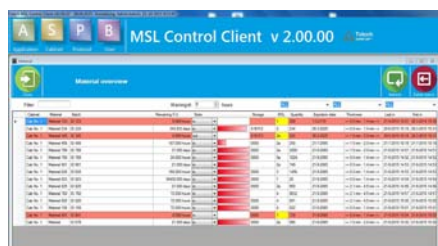
- Recording of all loading and unloading processes
- Dynamic calculation of remaining floor life time
- Documentation of drying process
- Lockout function upon expiry of floor life time

COMPONENT LOGISTICS:

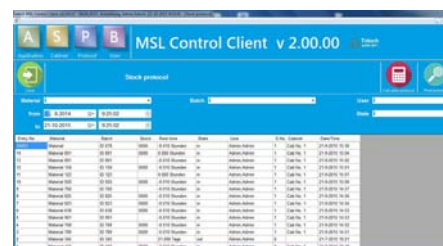
- Continuous localisation of all components
- Traceability of all stock movements
- Information and evaluations about unused material



All data from all cabinets available at a glance



Dynamic calculation of remaining floor life time



Stock reports available at a push of a button

DRY TOWER

VOLUME & PROCESS OPTIMIZED COMPONENT STORAGE



BENEFITS:

REDUCED PERSONNEL TIME

VOLUME OPTIMISED STORAGE

SHORT SETUP TIME

HIGH DEGREE OF AUTOMATION

PERFECT DOCUMENTATION



DRAWER CABINETS

Our Dry Towers consist of up to four cabinets equipped with the maximum number of drawers. A chaotic placing strategy guarantees volume optimised storage.

BENEFITS

- Stores up to 43,000 reels per m²
- Optimised utilisation of height, depth and width
- Fast access to all components
- Volume optimised storage
- Extendable by combining any number of storage modules

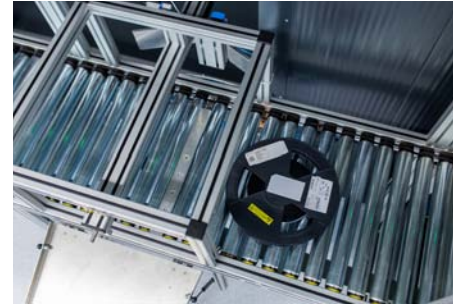


5-AXIS GRIPPER SYSTEM

The automated gripper system moving along 5 axes uses vacuum to transport component reels and trays safely and quickly. The gripper system can pick up loads of up to 3 kg.

BENEFITS

- Short access times
- Safe and efficient component transport
- Suitable for reels, trays and closed packagings



CONVEYOR TECHNOLOGY

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 systems to the best available position.

BENEFITS

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

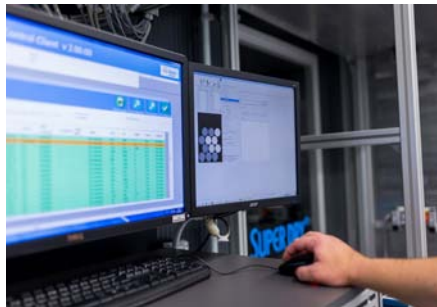


CLIMATE CONTROL

Our U-7000 series drying unit guarantees controlled humidity values <5% RH. When components sensitive to moisture are brought into the unit, the processing time is automatically stopped, reducing the risk of damage from oxidation. Using a 40°C heater, MSL components can be dried gently at the right temperature.

BENEFITS

- Permanent re-drying of components according to JEDEC standard
- Fast re-drying thanks to minimum relative air humidity
- Optional heating (up to 40°C) accelerates drying process



SOFTWARE

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 for subsequent evaluation. Our integrated commissioning function allows for efficient retrieval in the desired sequence and with regard to FIFO.

BENEFITS

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



WE ASSIST YOU ALL THE WAY – FROM PLANNING TO IMPLEMENTATION.

SDV SERIES

PERFECT PACKAGING



ESD safe packaging for long-term storage

SDV 46 FEATURES:

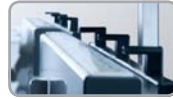
- Deep-drawn stainless steel vacuum chamber
- Antistatic acrylic glass cover
- Double seam welding
- High-pressure sealing systems
- Inserts for level adjustment
- Z-3000 sensor control
- 99 Program memory slots
- Service function
- Key lock, fast-stop and step vacuum functions

- Shipped with initial equipment
- Quality Busch vacuum pump
- Cordless sealing systems

OPTIONS:

- Shielding gas unit
- Additional sealing systems
- Trolley frame with bag tray
- Etc.

SDV SERIES



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 1×10^6 Ohm, compliant with the ESD standard.



Nitrogen

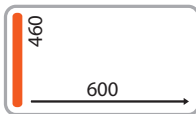
Optionally, a nitrogen unit may be installed to facilitate the packaging of materials, which are vulnerable to oxidation or of pressure-sensitive nature. The additional reduction of oxygen content and diffusion rate are ideal for long-term storage.



IPC Conform

The construction & control system are based on the IPC regulation.

	SDV 46
Int. dimensions	650 x 210 x 475 mm
Seal length	460 mm
Vacuum pump	21m ³ /h
Weight	95 kg
Digital control	Z-3000 (sensor-controlled)



	SDV 26	SDV 36 basic	SDV 36	SDV 46 basic
Int. dimensions	580 x 125 x 350 mm	450 x 210 x 460 mm	450 x 210 x 460 mm	650 x 210 x 475 mm
Seal length	320 mm	420 mm	450 mm	460 mm
Vacuum pump	10m ³ /h	16m ³ /h	16m ³ /h	16m ³ /h
Weight	60 kg	69 kg	70 kg	102 kg
Digital control	Z-2000 (timer-controlled)	Z-2000 (timer-controlled)	Z-3000 (sensor-controlled)	Z-3000 (sensor-controlled)

