

日本島津 紅外線水分天平

MOC120H

水分天平



MOC120H provides excellent stability and a long operational life

- Large Pan.
- Long-life heater.
- UniBloc sensor
- Moisture vaporization monitoring

品牌簡介

日本島津為全世界第三大儀器公司，專為藥廠、醫療生技、航太、高科技、工業等各領域研發各種尖端分析儀器與試驗機。而從1918年島津製造出第一台天平至今已100週年，100年來島津一直朝著為世界提供最精確與高品質的天平不斷前進著。

在台灣，包括工研院量測中心、經濟部標準檢驗局、台灣電子檢驗中心、SGS台灣檢驗科技(股)公司、UL 優力國際安全認證 Bureau Veritas 國際商品試驗等全世界各權威商品檢驗公司皆有使用日本島津天平，其品質深受各界信任與肯定。

堅定不移地以客戶為中心的承諾與對卓越技術的執著為日本島津天平所堅持的信念，既是歷史的標誌，亦是走向未來的原則。

天平特色

- ※ 大型LCD背光螢幕即時可顯示溫度、時間、含水率、含水率變化量等資訊。
- ※ 紅外線陶瓷石英加熱器，加熱深層且均勻，並同時有超長使用壽命之優點(20000-30000小時，為其他品牌3倍以上)。
- ※ 高秤量高精密度，秤重達120公克；含水率精度達0.01%。
- ※ 螢幕上即時顯示30秒內的水分變化率，可幫助判斷樣品乾燥程度。
- ※ 九種加熱模式滿足各種材料需求，並可將加熱模式加以記憶，每次使用時無須重新設定。
- ※ 可自訂10組量測條件，方便不同樣品測試。亦可記憶100組量測資料可供輸出列印。
- ※ 溫度定義：可將溫度定義為燈管溫度或樣品處溫度。



Different forms of samples can be measured.



● Powder ● Particles ● Paste or liquid

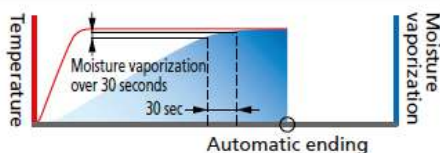


Various materials can be measured.

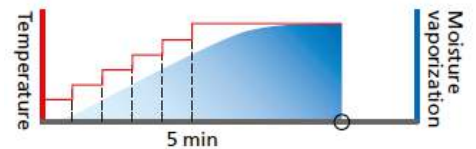


● Cereals ● Other foods ● Chemical resin

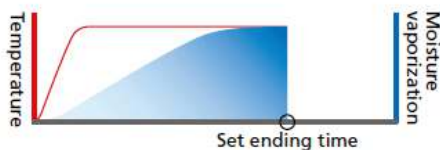
【自動測定模式】



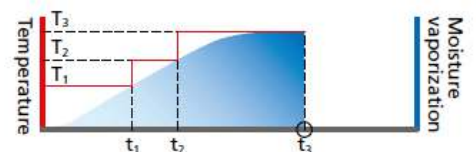
【慢速自動模式/ 慢速時間模式】



【時間測定模式】



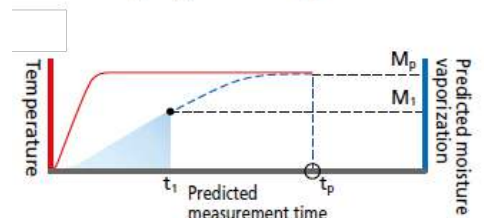
【階段自動模式/ 階段時間模式】



【快速自動模式/ 快速時間模式】

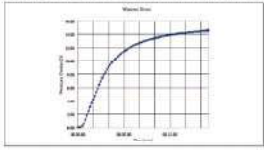


【預測模式】



【米粒 玉米粒】含水率量測

The drying curve for white rice in automatic ending mode is shown below.



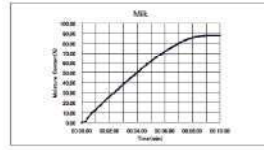
Photos of the white rice before and after drying are shown below.



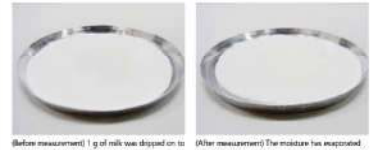
(Before measurement) The white rice was spread evenly over the pan. (After measurement) The entire sample turned yellow.

【牛奶】含水率(或固形物)量測

The drying curve for milk in timed ending mode is shown below.



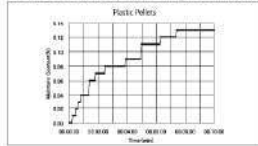
Photos of the milk before and after drying are shown below.



(Before measurement) 1g of milk was dropped on a fiberless sheet for liquid measurement. (After measurement) The moisture has evaporated from the milk, and the remaining fat has yellowed slightly.

【塑膠粒】含水率量測

The drying curve for plastic pellets in timed ending mode is shown below.



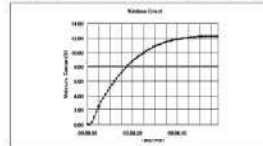
Photos of the plastic pellets before and after drying are shown below.



(Before measurement) The weight was spread evenly over the pan. (After measurement) There was basically no change in appearance.

【藥粉】含水率量測

The drying curve for corn starch in automatic ending mode is shown below.



Powder medicine: before and after drying are shown below.



(Before measurement) The powder medicine was spread evenly over the pan. (After measurement) There was basically no change in appearance.

※ 可由RS232及USB介面輸出資料至電腦或印表機

※ 電腦無須再安裝特殊軟體，可將量測資料

上傳EXCELL，並產生曲線圖表或做編輯紀錄。



Data output with the optional printer

● Example of print out in the graph output mode

| | | | |
|--|------------------|--|------------------|
| Model | MOC120H | Maker | SHIMADZU CORP |
| Serial number | 002700000 | Model | MOC120H |
| Serial ID | AB10101 | Serial number | 002700000 |
| Sample code | 8.28 | Serial ID | AB10101 |
| Date & time of measurement | 2003/06/06 15:07 | Sample code | 8.28 |
| Measuring conditions storage area number | 0 | Date & time of measurement | 2003/06/06 15:07 |
| Drying temperature setting | 120°C | Measuring conditions storage area number | 0 |
| Automatic ending condition | 0.05% | Drying temperature setting | 120°C |
| Predicted value convergence range | ± 0.1 | Automatic ending condition | 0.05% |
| Net Mass | 1.0007 g | Predicted value convergence range | ± 0.1 |

Elapsed measuring time: 4:00:00
Changes in drying temperature: 0.00%
Measured value (%): 6.45

Predicted measurement:
Dry Mass: 4.9037 g

WIN DIRECT電腦直傳

印表機列印範例

【各種材料含水率量測範例】

| Sample | Sample Quantity | Measurement Mode | | Set Temperature (°C) | Measurement Time (min) | Moisture Ratio (%) |
|---------------------------|-----------------|-------------------|---|----------------------|------------------------|--------------------|
| | | Ending Conditions | Finishing Conditions (N ₂ dry) | | | |
| Dog food | 1g | AUTO | 0.05% | 160 | 5:48 | 6.45 |
| Table salt | 5g | TIME | 10 minutes | 200 | 10:00 | 0.08 |
| Instant coffee | 1g | TIME | 10 minutes | 120 | 10:00 | 7.43 |
| Coffee beans (raw) | 5g | AUTO | 0.05% | 140 | 17:30 | 9.32 |
| Coffee beans (roasted) | 3g | AUTO | 0.05% | 140 | 7:06 | 2.68 |
| Green tea | 5g | AUTO | 0.05% | 120 | 9:05 | 3.76 |
| Corn starch | 5g | AUTO | 0.02% | 180 | 9:25 | 12.17 |
| Sugar (granulated sugar) | 5g | AUTO | 0.05% | 160 | 1:02 | 0.13 |
| White rice | 6g | AUTO | 0.05% | 200 | 13:55 | 14.48 |
| Mayonnaise | 1g | TIME | 10 minutes | 160 | 10:00 | 20.61 |
| Orange juice | 1g | AUTO | 0.05% | 140 | 10:09 | 88.89 |
| Milk | 1g | AUTO | 0.05% | 140 | 7:30 | 87.36 |
| Chocolate | 3g | AUTO | 0.01% | 140 | 6:18 | 2.36 |
| Rolled oats | 6g | AUTO | 0.05% | 200 | 10:05 | 12.65 |
| Tomato ketchup | 2.5g | AUTO | 0.1% | 140 | 19:47 | 69.40 |
| Frozen sweets | 2.5g | TIME | 12 minutes | 140 | 12:00 | 84.53 |
| Dried mangoes | 5g | AUTO | 0.05% | 120 | 28:27 | 6.62 |
| Palm oil | 2.5g | TIME | 5 minutes | 120 | 5:00 | 0.41 |
| Hand soap | 1g | AUTO | 0.05% | 200 | 21:36 | 88.89 |
| Lipstick | 1g | TIME | 3 minutes | 100 | 3:00 | 0.73 |
| Plastic (PMMA pellet) | 10g | TIME | 25 minutes | 100 | 25:00 | 0.13 |
| Photocopier paper | 1g | AUTO | 0.05% | 200 | 1:50 | 7.84 |
| Sodium tartrate dihydrate | 5g | TIME | 15 minutes | 160 | 15:00 | 15.80 |
| Detergent (powdered) | 5g | AUTO | 0.05% | 160 | 13:08 | 9.79 |
| Solid soap | 3g | TIME | 16 minutes | 200 | 16:00 | 9.09 |
| Water-based paint | 1g | AUTO | 0.05% | 200 | 9:27 | 52.39 |
| Sludge cake | 2g | AUTO | 0.05% | 200 | 21:31 | 81.55 |
| Potting soil | 5g | AUTO | 0.05% | 120 | 15:30 | 33.40 |
| Sawdust | 4g | AUTO | 0.05% | 160 | 8:27 | 34.38 |

| 規 | 格 |
|-----------|--|
| 1. 型號 | MOC120H |
| 2. 最大秤重 | 120g |
| 3. 精密度 | 0.001g |
| 4. 含水率精密度 | 0.01%(可切換成0.1%) |
| 5. 再現性 | 0.02% (@10g) |
| 6. 溫度設定範圍 | 30~200°C(可1°C調整) |
| 7. 單位顯示 | ①公克 ②Wet Base $\frac{W-D}{W} \times 100\%$ ③Dry Base $\frac{W-D}{D} \times 100\%$ ④Solid $\frac{D}{W} \times 100\%$ |
| 8. 螢幕 | LCD省電背光液晶螢幕 |
| 9. 八種量測模式 | ①自動測定 ②時間測定 ③快速自動 ④快速時間 ⑤慢速自動 ⑥慢速時間 ⑦階梯式自動 ⑧階梯式時間 ⑨預測模式 |
| 10. 加熱時間 | 1~240分鐘，最長可12小時連續加熱 |
| 11. 自訂模式 | 可自訂10組量測模式 |
| 12. 資料記憶 | 可記憶100組資料 |
| 13. 加熱原理 | 紅外線加熱 |
| 14. 燈管壽命 | 20000~30000小時 |
| 14. 輸出 | RS232C、USB 可外接電腦以及印表機 |
| 15. 秤盤 | 120mm圓盤(2PCS) |
| 16. 尺寸 | 220(寬)X415(深)X190(高)mm |
| 17. 六段電壓 | 100,110,120,220,230,240V可自行切換 |