

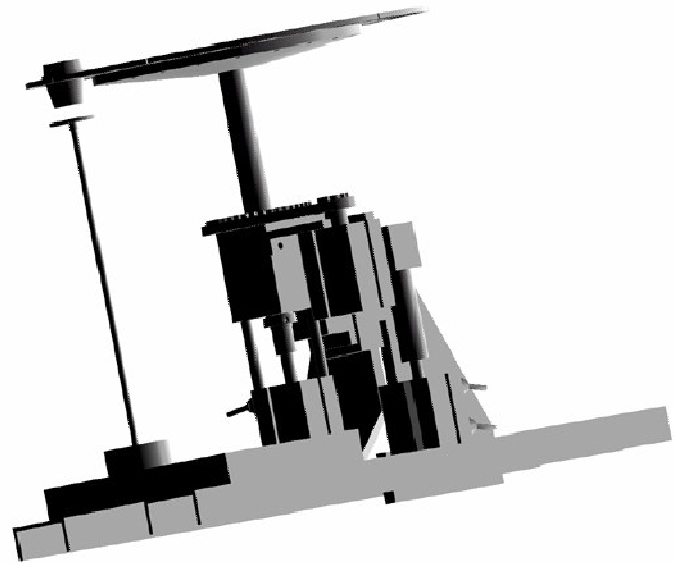


Prüfgeräte für Petrochemie,
Gefahrgutanalytik und mehr

MAKRO TGA 1000

Thermogravimetric Analyzers (19 Samples) for:
Coal, coke, graphite, cement, bauxite, iron ore, food, feed,
flour, rubbers, fertilizers, plastics etc ...

Determination of: Moisture, volatiles, ash, fix carbon, LOI



Single carousel configuration with manual placement & removal of crucible-covers for volatiles if used for coal (expandible to dual carousel, automatic crucible - covers)

AUTO-RECOVERY FROM MAINS POWER FAILURE

SINGLE FURNACE OR DUAL FURNACE CONTROLLED BY ONE SINGLE PC



Metal parts instead of ceramics

- The carousel is made of a stainless steel alloy for high temperature.
- The carousel do not bend nor warp under temperature stress, metal does not break like ceramics.
- Ceramics charges with static electricity and may produce unstable balance readings.
- No deformation, unbreakable, durable
- All heated parts metallic: carousels, crucibles, pedestal, covers.
- Ceramic crucibles can be used (as an option) for analysis of corrosive materials.
- 1 Full year warranty on all parts including carousels and crucibles.**

Standard components

All complete brand name balances and temperature controllers from recognized manufacturers.

The balance has display FOR EASY service.

The temperature controller has 2 displays: 1 for the set point and other for the present temperature.

The balance and the temperature controller are programmable using the buttons in the devices.

These devices are manufactured by the experts in the business.

All the electric and pneumatic parts in the TGA can be acquired in the market: Magnetic switches, relays, pneumatic valves, pistons, fans etc...

Other TGA manufacturers use special electronics and ceramic parts that can only be purchased from the manufacturer at very high prices.

All sensors are magnetic not affected by dust.

Very few proprietary electronics (Only 2 boards), that are located in 2 PC slots.

ACCESS FOR SERVICE from back, sides, front and underneath.

The screenshot displays the TGA Windows Application interface. On the left, a graph shows weight loss percentage over time. Below the graph, a table lists 19 positions with their respective IDs, sample weights, moisture, and volatiles. The table is as follows:

Position	ID Sample	Weight	Moisture	Volatiles
1	C-1	0.9909	10.495	43.061
2	C-2	1.0129	10.518	42.507
3	C-3	0.9790	10.520	42.416
4	C-4	0.9772	10.568	42.916
5	C-5	1.0072	10.569	42.867
6	C-6	0.9819	10.570	43.149
7	C-7	0.9917	10.555	43.013
8	C-8	1.0470	10.577	42.619
9	C-9	1.0419	10.572	42.904
10	C-10	0.9830	10.592	43.008
11	C-11	1.0917	10.619	42.466
12	C-12	1.0259	10.633	41.960
13	C-13	1.0954	10.610	42.974
14	C-14	1.0743	10.650	42.980
15	C-15	1.0511	10.646	43.177
16	C-16	1.0049	10.674	42.511
17	C-17	0.9303	10.639	43.082
18	C-18	0.9841	10.664	42.545
19	C-19	1.0514	10.688	42.164

Below the table, a furnace diagram shows 19 numbered positions arranged in a circle. On the right, a table lists the furnace name (ASTM) and a list of 17 positions with their IDs, sample weights, crucible weights, and cover weights.

TGA Windows Application

The Windows software allows easy instrument operation.

Integration with Microsoft Office, results are stored in Microsoft Access Data base automatically, data can be exported automatically and manually in TXT, CSV and XLS formats to Microsoft Excel or several Laboratory Information Management Systems (LIMS), data can also be printed automatically after analysis and manually with customizable layouts.

Configurable parameters for all slopes up to 8 sets of settings: Final temperatures, plateau deviations,

Hold times, gases, ramp rates etc...

Volatiles calibration with non linear regression software with least squares, quadratic and cubic formulas.

EASY TO USE DIAGNOSTICS SCREEN.

TGA-1000 Series

Multiple Sample (19) Thermogravimetric Analyzer

Complies with standard methodologies related to this type TGA analysis

Brief technical specifications ...

Temp. range: 50 ~ 1000 ° C ±1 ° C

Sample size: 0.1 ~ 10 grams.

Standard deviation of ± 0.0002 g

Weight Loss/Gain range: 0 ~ 100 %

etc ...

Ihr Ansprechpartner

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