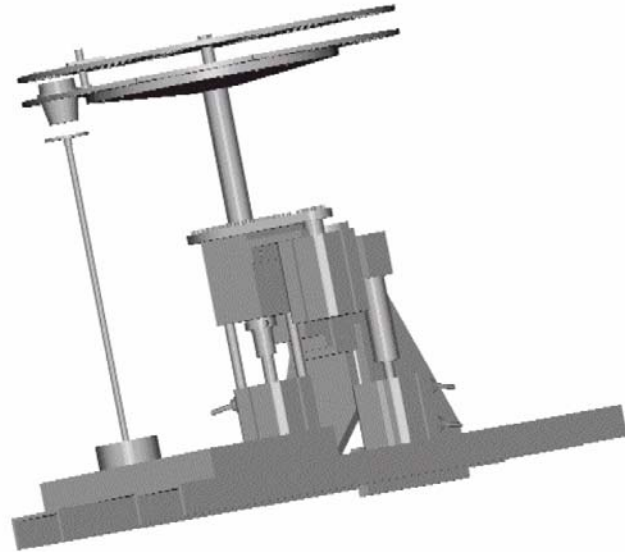


Navas Instruments TGA-3000 Series

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



**Dual carousel configuration (for Coal only), Fully automatic
Installation & Removal of crucible-covers inside furnace
(Patent Pending) with additional external balance for increased
throughput**

The dual carousel configuration allows automatic installation and removal of crucible-covers inside the furnace. This prevents sample oxidizing and provides better volatile matter accuracy in addition to automation, (It works unattended).

No danger to operator opening furnace at 600 °C.

No danger of falling covers inside furnace.

Reduced analysis time in coal as the TGA does not go down from 900-950 °C to 600°C to remove covers.

SINGLE FURNACE OR DUAL FURNACE CONTROLLED BY ONE SINGLE PC



Metal parts instead of ceramics

The carousels are made of refractory stainless steel alloy.

The carousels do not bend nor warp under temperature stress, metal is unbreakable unlike 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 for analysing corrosive materials

Standard components

Navas Instruments buys 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 as well as 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...

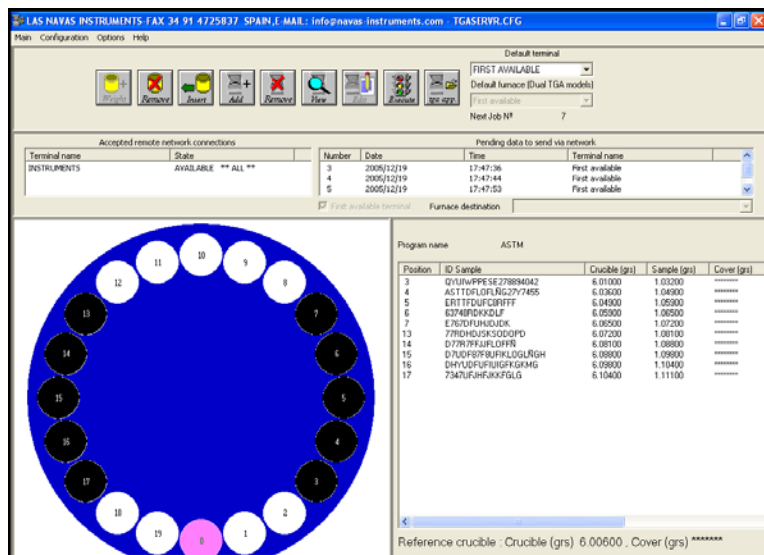
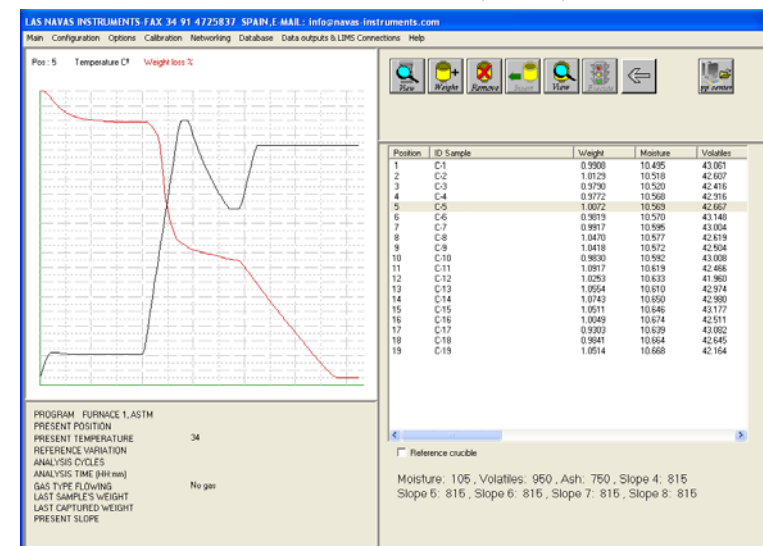
With no dependency on Navas Instruments.

Other TGA manufacturers use special electronics that can only be repaired and purchased from the manufacturer at higher cost.

All sensors are magnetic not affected by dust.

Very few proprietary electronics (Only 2 boards), that fit inside 2 slots of the PC.

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



TGA Windows Application & Productivity Center Software

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**).

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

Hold times, gases, ramp rates etc...

EASY TO USE DIAGNOSTICS SCREEN.

The **Productivity & Performance Center (Patent Pending)** allows using an external balance to get initial weights of crucibles, samples and/or covers during analysis time, crucibles are placed in plastic trays for loading later into the TGA carousel for next batch after present analysis finishes, This software allows a 20-200% more runs/day, TGA-3000 uses 1 single PC to manage the instrument and the external balance at the same time (**Networking is optional**).

Navas Instruments TGA-3000 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 ...



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