

Ash Fusion Determinator

EATC16

Data Sheet



▶ The EATC16 Ash Fusion Determinator is specifically designed for the precise determination of fusibility temperatures of coal ash, coke ash, and biomass ash samples.

▶ This instrument is fully compliant with ISO, ASTM, CEN/TS, DIN, and CEN/TR test methods.

| Temperature Range: Up to 1600°C

| Programmable Temperature Ramp Rate: Up to 12°C/min

| Maximum Sample Load: 6 samples per analysis

| Typical Analysis Time: 4 hours per cycle (varies based on ramp rate & temperature range)

| Complies with Standards:

- ASTM D 1857, ASTM E953, AS1038-15
- BS ISO 540, BS ISO 21404
- CEN/TS 15370-1, CEN/TR 15404:2010
- DIN 51730, ISO 540, ISO 21404
- GB/T 219-2008, GOST 2057-94

▶ **Automatic Temperature Detection:**

The EATC16 automatically determines the following four critical temperatures:

- Initial Deformation Temperature (IDT)
- Softening Temperature (ST)
- Hemispherical Temperature (HT)
- Fluid Temperature (FT)

▶ **Gas requirements:**

| The furnace has three gas connections on the rear of the furnace: Individual ports for Air/CO₂, CO/H₂ and one for Purge gas.

| Gas Requirements:

- Purge: N₂ or Co₂
- Oxidizing: Air, CO₂, or O₂
- Reducing: CO - CO₂ or H₂ - Co₂

Note: At the time of ordering, the user must specify the required gases for their analysis, choosing either H₂/CO₂ or CO/CO₂ for the reduction mode.



| Ventilation: Forced air ventilation

| Operating Temperature: 5°C to 45°C

| Relative Humidity: 20% to 80% (non-condensing)

▶ **Electrical & Power Requirements:**

| Power Supply: 380–415V, 50/60 Hz, Two-phase, 25A

| Overtemperature Protection: Digital with single high alarm relay

▶ **Physical Specifications:**

| Dimensions (H x W x D in mm): 700mm x 505mm x 970mm

| Weight: 95 kgs

▶ **Required PC Specifications:**

| Processor: i3 or i5

| Storage: 512GB HDD or SSD

| Memory: Minimum 8GB RAM

| Operating System: Windows 10 or Higher

| PCIe slots: PCIe 2.1 x 4, RS232 Ports: 1

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