

Ash Fusion Determinator

EATC16 Manual

Data Sheet



- ▶ Ash fusion determinator EATC16 Manual is designed for the determination of fusibility temperatures of coal ash, coke ash and bio mass ash samples.
- ▶ This instrument complies with ISO, ASTM, CEN/TS, DIN, 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

▶ Manual Temperature Interpretation:

In the EATC16 Manual Ash Fusion Determinator, the operator must manually interpret the fusion points of each sample

- 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.

- Purge: N₂
- Oxidizing: O₂, CO₂ or Air
- Reducing: CO - CO₂ or H₂ - Co₂
- Ventilation: Forced air ventilation

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 × 505mm × 970mm
- | Weight: 90 kgs

▶ Required PC Specifications:

- | Processor: i3 or i5
- | RAM: Minimum 8GB
- | Memory: 512GB HDD or SSD
- | PCIe slots: Minimum 1, RS 232 Ports: 1
- | OS: Windows 10 or higher

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