SDAF1200b Ash Fusion Tester - AFT

Up to 10 sample position.

Dimensions: 550mm*850mm*843mm
Weight:108kg

Application

SDAF1200b Ash Fusion Tester can be used to determine the ash fusibility of coal and coke ash, biomass ash, solid wastes ash. It is widely used in power plant, coal industry, metallurgical industry, petrochemical industry, environmental protection, cement industry, paper manufacturing, geological exploration, and institutes.

Conformance to Standards

- ISO540 Hard coal — Determination of ash fusibility.
- ASTM D1857 Standard test method for fusibility of coal and coke ash.
- ISO 21404 Solid biofuels - Determination of ash melting behaviour.

Specification

Sample loader	10 sample position(SDAF1600b:16 sample position)
Temperature Control Range	Room temperature to 1600℃
Temperature Resolution	1℃
Temperature Control Precision	±1℃
Test Atmosphere	Oxidizing atmosphere Weak reducing atmosphere
Power Source	220V±10%，50/60Hz
Temperature Ramp Rate	from 4℃ until 20℃ per minutes,adjustable
Image Collection	1 frame per 1℃
Camera Resolution	1280*1024 Pixels
Temperature Display	℃/℉
Reducing Gas	$CO+CO_2$ /H_2+CO_2
Standard Calibration	Nickel, Gold, Palladium, Dextrin Powder
Optional Models	SDAF1600b

Highlights

High automation, high test efficiently.

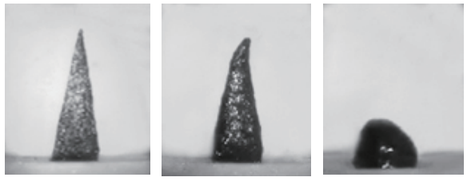
- Unique automatic sample loader. Operator only need to take it from the loader under room temperature.
- 10 sample positions. Fully automatic, test time less than 3 hours per batch.
- Max. temperature up to 1600℃, applicable to different test atmosphere and samples.

Optimized design, low operation cost.

- Designed for both coal and biofuel test. Except coal test, we also equip sample making mould and crucible for ash fusion test of biofuel.
- CE certified high definition camera and radiator reduce heat radiation and realize vivid picture and long service life.
- Single layer design for graphite cup increase utilization efficiency of graphite and bituminous coal. Test atmosphere in furnace is ensured.
- Anti-overflow slot in ash cone support can store spilled ash cone and prevent ash cone stick with the plate.
- Furnace adopts heat resistant and heat insulation material. Imported material for combustion tube and sample boat.
- Heating element by silicon molybdenum rod, resist to high temperature (max. temperature 1800℃), antioxidation and low aging.

Real time monitoring, precise and accurate result.

- The whole process of the experiment is monitored and recorded in real time, deformation temperature can be automatically determined by the image processing algorithm of the software.



- Manual observing and camera recording at same port. Good air tightness and low gas consumption.
- Gas leakage detection and alarm function make the instrument safe and reliable.

Smart control, easy to operate.

- Friendly interface, easy operation, real time display of image and data; All data can be stored, printed and uploaded.
- Windows-based operation system for automated testing.
- Multi-control with CAN bus.
- Balance connection and data transfer with RS232 serial port.