PREISER SCIENTIFIC

ISO 9001 Certified

Advanced Ash Fusion Systems

Ash Fusion System

(pictured with a single furnace)

Preiser Scientific, Inc.
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www.preiser.com

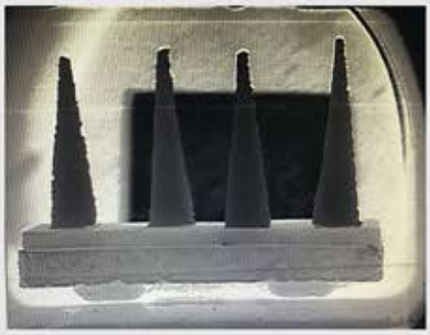
Ash Fusion System

Preiser Ash Fusion System with Single Furnace and Dual Control Tower

The Ash Fusion System is designed to determine ash cone deformation temperatures in coal, coke and biomass ash. The Ash Fusion System uses an nCompass Control System furnace controller coupled to a PC based operating and analysis software package developed by Preiser Scientific. The system can allow either one or two independent furnaces operating simultaneously. Single furnace units can be upgraded to dual systems if a dual control tower is purchased initially.

Better Image Quality

Excellent image enhancement of the contrast at the high operating temperatures.

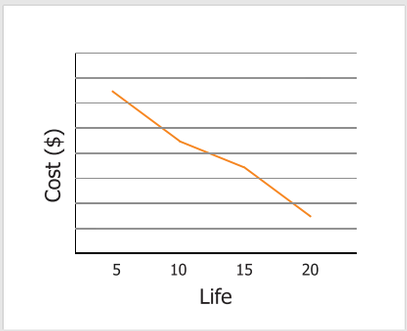


Intuitive Software

User-friendly test software provides for ease of operation. User configurable furnace control, image capture intervals as well as Auto-Suggest sample analysis.

Cost-Effective Operation

Low maintenance compact furnace design reduces operational cost with low gas and power consumption. Minimal replacement parts required.



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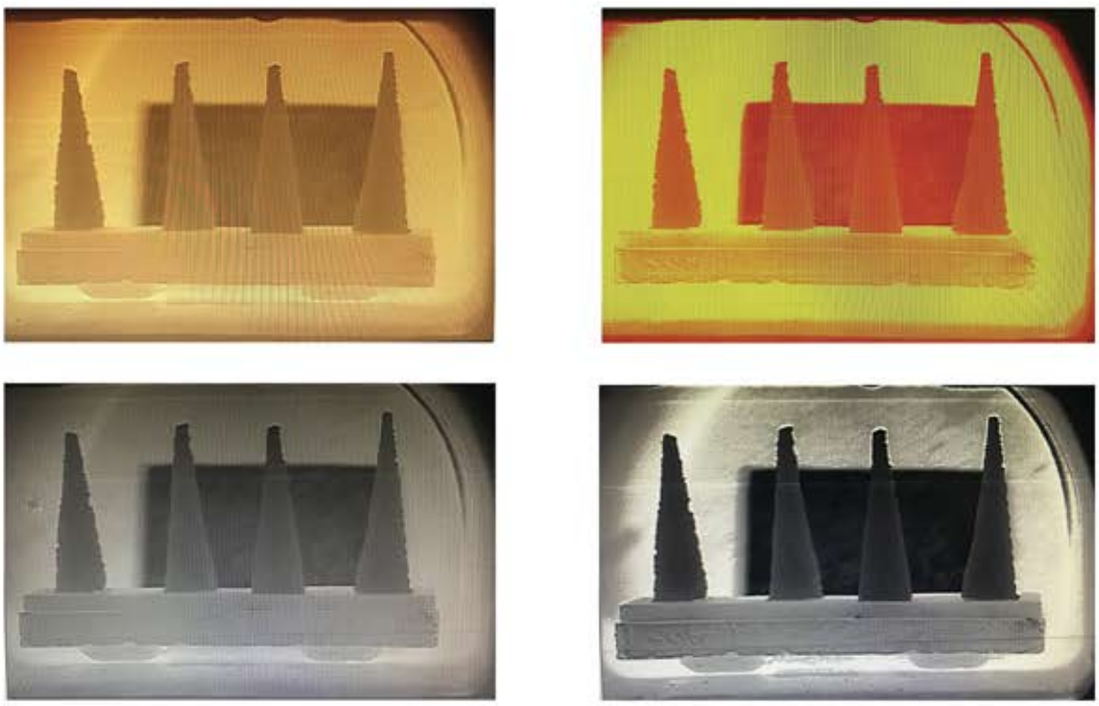
Better Image Quality

Preiser's proprietary processing algorithms allow significant image enhancement at the high operating temperatures where image contrast tends to be washed out by the bright furnace intensity. This method of histogram equalization assists the user in post-analysis image review by utilizing the premise that all shades of gray within an image are equally present. This methodology balances the original image's gray levels resulting in an image that is better defined and easier for the operator to visually determine the critical temperatures of the ash sample.



Original Image

Equalized Image

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Auto-Suggest Assisted Analysis

The Preiser Ash Fusion System provides an algorithmic sample identification system (referred to as Auto-Suggest) for initial evaluation of test runs. The results are provided for reference. The test technician can visually verify and fine tune results if needed. The Auto-Suggest can not only give help to the less experienced operator, but also improve the efficiency and accuracy of analysis.

Analysis Summary of Sample 1

	IT	ST	HT	FT
Auto Suggest	2004	2144	2210	2404
Previous	2004	2145	2220	2404
Difference	0000	- 0001	- 0010	0000

Auto Suggest results displayed in the box

Cost-Effective Operation

The compact furnace design consists of four high endurance heating elements for long life and operation. The efficient working chamber and minimal replacement parts required provides for reduced gas consumption and cost savings over the life of the unit. Increase analysis capacity and savings by purchasing a dual furnace system.

Single Furnace System
(Pictured with Dual Control Tower)

Dual Furnace System

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Specifications and Ordering Information

Instrument Compliant with ASTM D-1857 and ISO 540.

- Working Temperature Range: 399°C to 1538°C (750°F to 2800°F)
- Temperature Ramp Rate: User programmable from 1°C to 12°C/minute (1°F to 20°F/minute)
- Temperature Display: °C or °F (must specify when ordering)
- Maximum Sample Load: 12-16 samples per analysis (dual furnace), 6-8 samples per analysis (single furnace)
- Conforms to Methods: ASTM & ISO
- Ash Fusibility Determination: Manual with Auto-Suggest (IT, ST, HT, FT)
- Analysis Time: 3-4 hours typical cycle time (depending on ramp rate and temperature range) which includes furnace warmup time and cool down after test is complete
- Gas Requirement: Oxidizing 02 or air at 0.8 Lpm at 20 psi (1.7 bar) ±10%
  Reducing CO and CO2 mixtures 0.8 Lpm at 20 psi (1.7 bar)±10%
- Exhaust: 230 cfm flow, 6 inch axial exhaust fan
- Safety: Supplied with CO monitor
  Three level furnace over temperature protection (temperature controller, over temp controller, user PC monitor)
- Electrical Requirements: 230VAC/1ph/50-60Hz/40A for dual system
  230VAC/1ph/50-60Hz/20A for single system

Catalog Numbers:

Z90-8252-01 - Model PAF 2014 Single Ash Fusion System
Z90-8252-02 - Model PAF 2014 Dual Ash Fusion System

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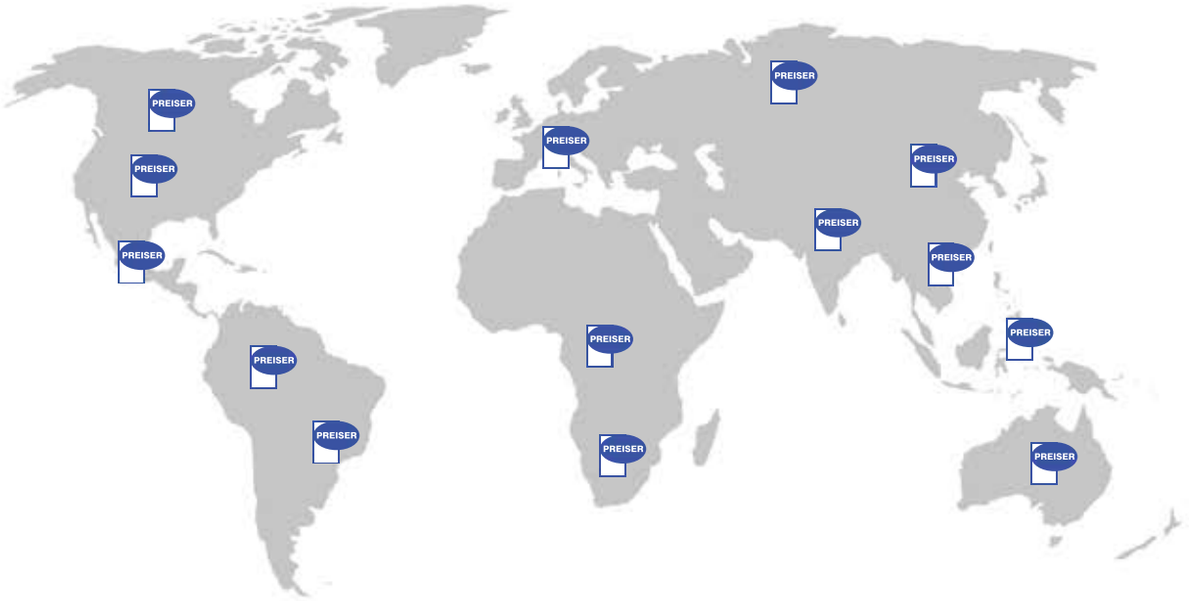
Trust The Brand That Is Used Worldwide



World-Class Service and Support

Preiser provides professional support at every level. We intend to increase your laboratory's productivity through the creation of a relationship for the lifetime of your instrument, providing service support, training and information.

- Fully trained professional service personnel
- Worldwide coordination for multi-national companies
- Technical support direct from Preiser via telephone or email
- Headquarters training courses for customers
- Web Seminars
- Sample and application consultancy
- Over 20 years active participation in ASTM and ISO committees

Everything we do at Preiser is focused on creating an outstanding experience for our customers. We leverage decades of industry knowledge to provide unparalleled technical service. We protect your equipment investment every day, from onboarding and setup through maintenance and training.

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www.preiser.com

Easy registration on our website provides you with valuable features:

- Product Information
- Ease in finding replacement parts and supplies
- Invitations to webinars
- Events and News

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Preparation

Coal Sample Crusher

Coal Sample Pulverizer

Separation

Rotary Sample Divider

Coal Sample Riffle

Analysis

Plastometer / Dilatometer System

Hardgrove Grindability Index Apparatus

About Preiser Scientific, Inc.

Preiser Scientific was established in 1924 and has continuously provided technical products and services to research, industrial, quality control, teaching, medical, education, environmental and government laboratories ever since. Offices are located in Louisville, Kentucky; Nitro, West Virginia; St. Albans, West Virginia; and Beijing, China.

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