



Model 2000 High-Speed Sort Gate



The Model 2000 High Speed Sort Gate is a rugged gate assembly for separating materials based on quality. The gate works in conjunction with ETI's Dual-Gamma Analyzer or Process Control Analyzer, and is automatically controlled based on the analyzer measurements taken vs. the set-points controlled by the operator. Manual controls are also supplied.

- **Sorting**
Real-time measurement of coal ash weight percent and a virtually unlimited flow capacity make the High-Speed Sort Gate a valuable sorting instrument. Run of mine coal – especially within seams of highly variable composition - can be efficiently sorted into specific market products, thereby reducing good product waste and improving profit margins.
- **Process Control**
Use of the High-Speed Sort Gate on the output of a prep plant allows for closed-loop feedback to control heavy media density in the coal circuit. Use of the High-Speed Sort Gate on a plant bunker feed belt allows for boiler operation adjustments to reduce boiler fouling and slagging and can lead to improvements in long-term heat rate.

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For more information on any of our products or services please visit us on the web at www.energytechinc.com.

SERVICES

ETI offers an flexible service contracts for all analyzer customers. Coverage includes radiation safety surveys, leak testing, calibration of all electronics and nucleonics, cleaning, and routine software/hardware maintenance

Technical Support

Installation and Setup

Maintenance

Application Support

Hardware Support

Guaranteed Warranty

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Design Features



Sort Gate Control Unit

Rugged Construction

- AR235 Plate Construction
- 1-3/4 inch (45mm) steel shaft
- 2 HP (1.5KW) Gear Motor

Rapid Response Time

- <1 second cycle time

Flexible Controls

- Automatically controlled by ETI Analyzers
- Includes Manual Control Unit
- Can be controlled by any system with 24 VDC outputs



Manual Control Unit

Technical Specifications

Performance

Gate Cycle speed	<1 Second
Response Time001 Sec

Construction

Gate structure	AR235 steel plate, 1/2 inch (13mm) thick
Shaft	1-3/4 inch (45mm) cold-rolled steel

System Inputs

Low/Mid/High Sort signals.....	24 VDC analog signals from ETI Analyzer, Manual Control Unit, or other device
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Environmental Conditions

Operating Temperature	Gate: -5°-120°F (-20-40°C) Electronics Enclosure: 40°-120°F (5-40°C)
Humidity	Gate: 0-100% Electronics Enclosure: 0-90%, non-condensing
Environment	Class II, Div.1 group F (G optionally available). All units are protected against dust and moisture (NEMA 4).

Electrical Requirements

Power Requirement	120 - 240 VAC, 50 - 60 Hz, 1 KVA
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Shipping Weight

Weight	750 lbs (340 kg)
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Options

Side-to-side or front-to-rear discharge, chute extensins