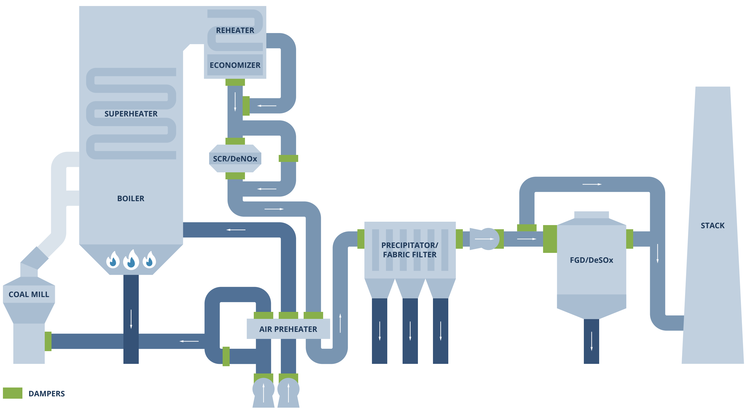
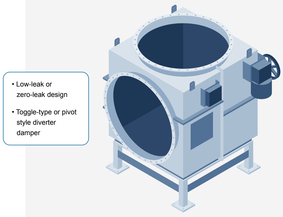
Dampers in the Coal-Fired Plant



Types of Dampers

DIVERTER



- Low-leak or zero-leak design
- Toggle-type or pivot style diverter damper

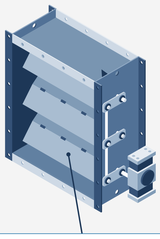
Diverter dampers provide extremely high-sealing efficiency in systems that require a through flow with bypass capabilities. Commonly used in HRSG applications.

Diverter dampers redirect hot gas flow from one outlet to another, and are commonly used in heat recovery steam generator (HRSG) exhaust stack applications.

LOUVER

Double louvers
Two banks of blades

Tandem louvers
One bank of blades with open space in-between blade assemblies



300% SAFETY FACTOR ON DRIVE SIZING FOR LONG TERM RELIABILITY

BOLTED DUAL AIRFOIL LOUVER BLADE DESIGN: minimize deflection and warping of blades

Parallel blade design offers tight shut-off. Opposed blade design offers flow control capability. Double and tandem louver designs offer zero leak isolation.

GUILLOTINE SLIDE GATE

Zero or low eak designs

Ducting sizes as large as 25' high by 16' wide

SEAL AIR SYSTEMS WITH 200% SAFETY FACTOR

Isolation capability with minimum pressure drop across the dampers. Available in low-leak and zero-leak designs.

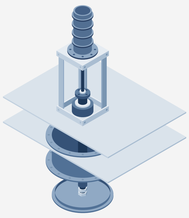
- Rack-and-pinion design for cost and reliability
- Heavy-duty engineered blades and housing
- Sealing design offers very tight shut-off
- Modular design to be shipped in compact modules

RADIAL VANE

Fan inlet control capability.

- Radial vanes (variable inlet vanes)
- Helps fans avoid low-volume stalling by directing flow in direction of fan rotation
- Enhances fan performance by directing flow

POPPET

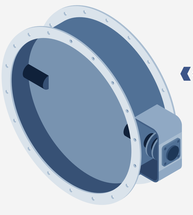


Poppet dampers are ideal for applications that require quick cycling time and tight shut-off and is used for isolation capabilities, fabric filter applications and incineration systems. Poppet dampers are designed to control the reverse gas flow, outlet flow, and bypass flow of gases, thus enhancing filtration.

- Constructed in single- and double-blade arrangements
- Robust disc blade
- Heavy-duty cylinders
- Fully calibrated blade seats, adjusted to allow for tight blade-to-seal contact and shut-off
- Packing gland design

BUTTERFLY / WAFER

2" diameter, to as large as 120"



Wide range of drive options from simple shaft mounted pneumatic actuation, to heavy-duty electric and hydraulic actuation with fail safe

Cost-effective tight shut-off capability for round ducts.

Heavy-duty blades and housing to provide maximum resistance to heat stresses, corrosion, metal fatigue and distortion.

CECO Effox-Flextor

CECO Effox-Flextor is the global leader in the design and manufacturing of heavy-duty utility and industrial dampers and expansion joints for use in solid fuel combustion and exhaust systems with more than 50 years of industry experience.

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