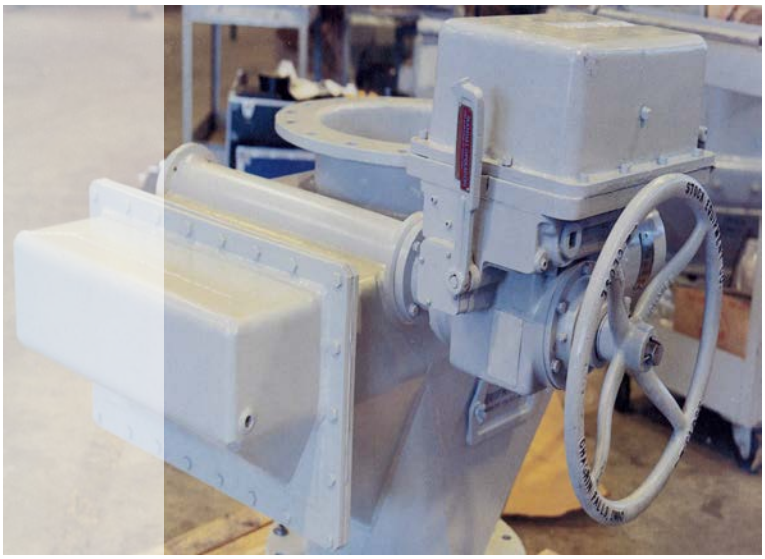
Stock® Air Coal Valves
Feeder to pulverizer isolation

- **Self cleaning, double rack and pinion valve**
- **Meets NFPA code to withstand a 50 psi explosion**
- **Restricts downstream flow of hot air and gases**
- **Dust tight body**
- **Custom sizes and options to fit your installation requirements**



The Stock® Air Coal Valve (ACV) is a double rack and pinion style valve used as a means of isolation below a feeder. The air-tight body provides positive shut-off to minimize hot air and gases from entering the feeder during maintenance. This is accomplished by means of a precision machined gate and inlet surface. The gate is supported on adjustable slide bars located between the gate surface and inlet skirt.

Stock® ACVs are constructed to meet National Fire Protection Agency (NFPA) code and will withstand a 50 psi explosion. Because the ACV restricts the flow of hot air and gases in the downstream system, a safe environment is facilitated for workers to carry-out routine maintenance above the valve.

The ACVs self-cleaning rack and pinion design eliminates the possibility of gate binding. The pinions drive through the gate ladder rack, crushing any material accumulation on the top of the gate rack so that it may pass through. Stock® ACV's have dust-tight bodies to prevent any gas or fine materials from escaping to the outer vicinity of the plant.

The rack and pinion design also allows for valve closure through a standing column of material. This ability is especially beneficial for emergency situations where positive closure is required due to a plugged downspout.

Air Coal Valve Design Options

Operator Location
Right- or left-hand operator mounting options are available.

Operation Type
- Electric Operation
- Hydraulic or Pneumatic
- Manual Operation
    - Pocket Sheave
    - Hand-wheel

End-of-Travel Indicator
Where local gate position indication is required, a highly visible pointer with legend plate is attached to the housing on the dead-end of the valve pinion shaft. If remote indication is required, cam-operated, NEMA rated limit switches and external housing are provided.

Custom Sizing
Valves can be made in any size to suit your application needs. Square, round, or rectangular inlets and outlets are available.

Customized Materials of Construction
A wide range of steel available: mild steel, 304 and 316 stainless steels. Other materials are available upon request, including various body liner materials. Upgrades are available for elevated temperatures.

Features of the Stock® Air Coal Valve

Access Openings
Dust-tight covers, fastened with wing nuts for easy removal, allow for routine maintenance and inspection of the inside of the valve without complete valve removal.

Deep "U" Shaped Gate
The gate is fabricated in the shape of a winged "U," which keeps the supporting rollers, racks, and pinions completely out of the material stream and minimizes potential corrosion from moisture in the material.

Double Rack and Pinions
To assure closure of the gate without cocking or binding, two pinions on the operating shaft engage ladder racks which run down each side of the gate. The pinions are located above the racks providing positive tooth engagement.

Dust-Tight Construction
All joints are welded and ground smooth to eliminate any ledges on which material could accumulate. The end cover, provided for gate removal and interior access, is equipped with a rubber gasket, assuring dust-tight integrity of the valve.

Gate Support Slide Bars
Slide bars allow for the adjustment of valve clearance to suit the application. The top surfaces is machined flat for dust elimination. The slide bars are placed on each side, away from material flow.

Gear Reducer
A gear reducer for ease of operation is supplied on all manually operated valves 30" and larger.

Manual Operation
Valves are equipped with either a hand-wheel or pocket sheave in order for the valve to be controlled manually by the operator. A hand-wheel is provided when the valve is within reach of the operator. A pocket sheave is supplied when the valve is not readily accessible to the operator.

Positive Shut-Off of Material Flow
Gates are designed with four-sided overlap closure which provides positive shutoff of material flow every time.

Self Cleaning Design
The ladder racks consist of a series of rectangular, tapered holes that prevent material accumulation, resulting in virtually jam-proof operation.

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