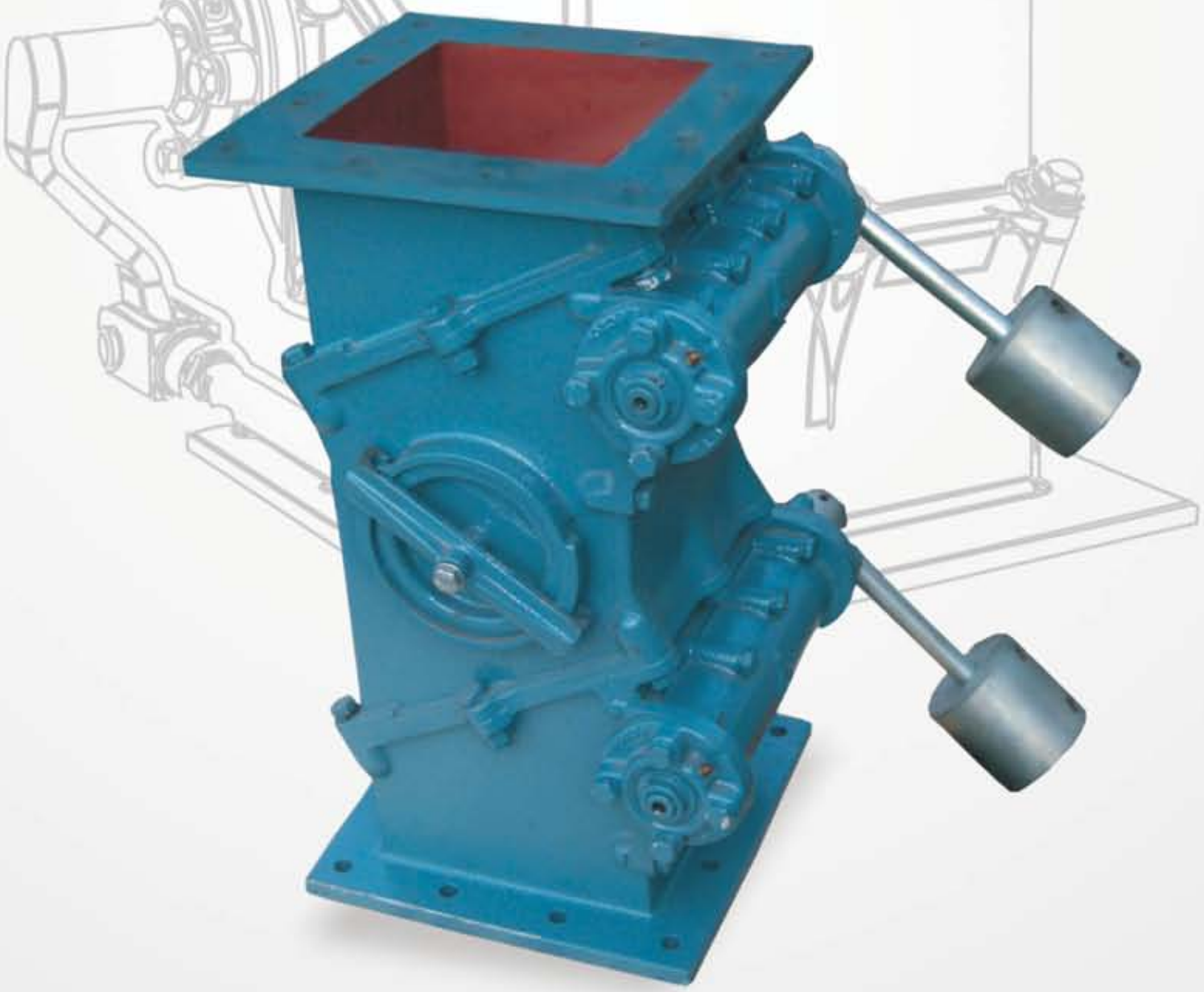
APPLICATION CASE STUDIES

DH SERIES

LOW COST, HIGH EFFECTIVE AIRLOCK IN VACUUM OR PRESSURE CONDITIONS



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Boiler Bed Drain Application in Thermal Power Plant
Iron Dust Handling in Electrostatic Precipitator
Handling Hot Clinker at Cement Plant

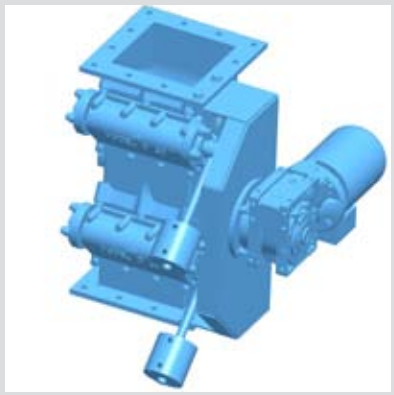
CLICK HERE to build the valve to suit your application

DH SERIES

Boiler Waste Purge

Thermal Power Generation

Temperature
900°C
Particle Size
<20 mm
Abrasiveness
High
Material
Bed Ash
Pressure
40KPa



The Anval DH Series Double Dump Valve has been developed to provide industry with a versatile air locking solution, enabling the discharge of solid material while restricting the back-flow of air.

The DH series is designed to operate in a highly efficient manner, emphasizing a continuous seal and uninterrupted discharge.

Failure Rate

A very high temperature tolerance enables the DH Series to operate consistently

Throughput

The DH Series valve has increased the operational capacity of each of the boilers on site by providing a higher throughput

Irregular Lumps

Sealing Critical

High Temperature

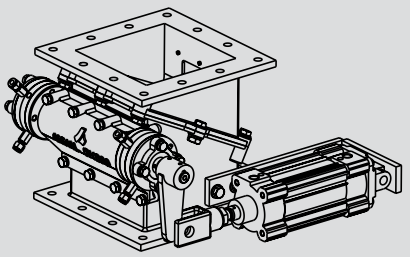
Regular Valve Jamming

Client

The client is a large, multinational engineering organisation that provides energy and environmental solutions in over 75 countries worldwide.

We are now their preferred valve supplier for Asia Pacific operations.

Anval were approached by the client after the existing valve supplier had repeatedly failed to provide an effective solution for draining the fluidized bed of coal fired boiler. Previously they experienced heavy material leakage that was due to the seizing of valve from the extreme temperature in the boilers. This was leading to frequent valve replacements, slowing production time across the plant.



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DH SERIES

Electrostatic Precipitator

Iron Dust Handling

Wear & Tear

Wear in valve body drastically reduced by positive locking cone and flap arrangement

High Wear & Tear

Air Seal Critical

Severe Leakage Issues

110°C Handling System

Material Buildup and Clogging

Client

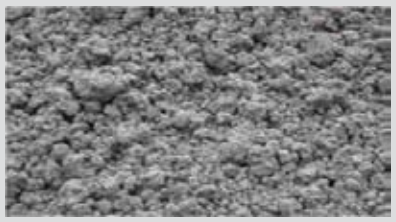
Our client is a global steel producer who have strong presence in Asia and North America with an annual capacity of 14 million tones with integrated manufacturing facilities comprises from ore beneficiation to pipe mill.

Material
Sinter Dust

Particle Size
<100 Micron

Abrasiveness
High

Pressure
13KPa



Sinter Dust

Process Efficiency

Dump Valve usage helped to avoid material accumulation and improved the process efficiency

Downtime

Material builtup and ESP electrode failure are drastically reduced with the usage of Double flap dump valve

Anval were approached to provide solution for rotary valve failure due to rotor jamming and wear in body which installed between ESP and water stream jet to carry away collected sinter dust.

Plant Output

Significantly decreasing inlet system leakage, leading to higher overall plant output

Anval suggested to replace the existing rotary valve with DH Series Double flap Dump Valve to handle wet sinter dust. This help to avoid material buildup and clogging in the vanes and the inlet pipe.

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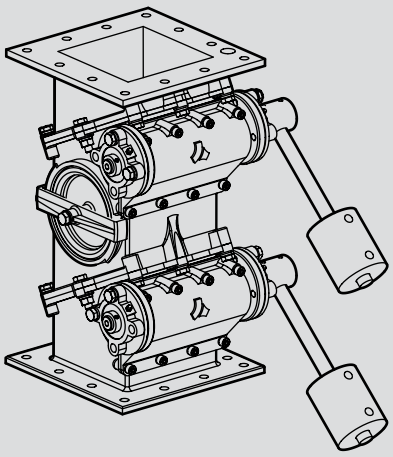
DH SERIES

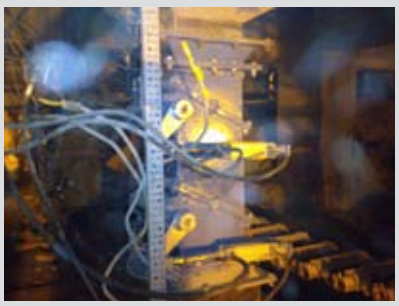
Cooling Under Grate System

Handling Hot Clinker in Cement Plant

Particle Size
<90 mm
Abrasiveness
Very High
Material
Hot Clinker
Pressure
15KPa
Temperature
200°C



High Wear Application



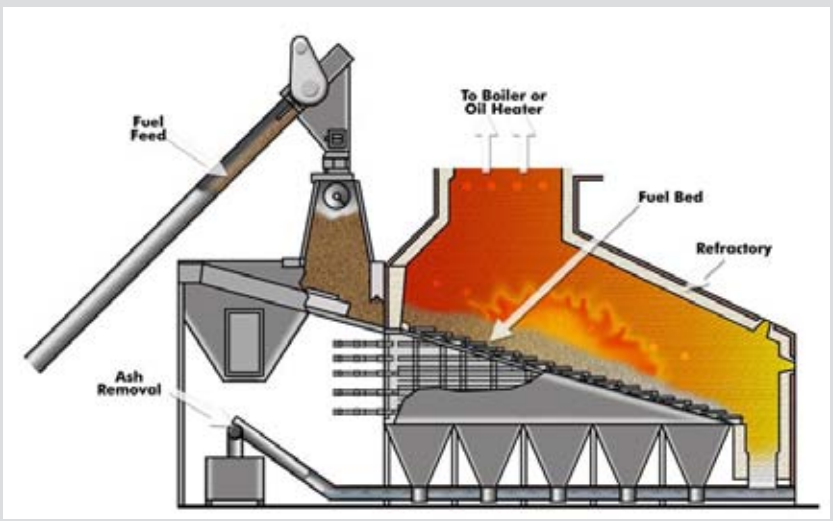
Downtime

Downtime due to material bloggage is drastically reduced.

Client

Our client is the world's largest manufacture of cement, refractories, cement plant and other heavy machinery including structural and mild fabrications.

Anval were approached with their specifications to convey the high temperature hot clinker to the cooler under grate system with a controlled flow of materials . As the abrasivess of the material is very high with 200°C temperature, which in turn creates several leakages, wear and jamming issues. As a solution provider, Anval recommended the client with our standard DH Double flap series.



Process Accuracy

Leakage almost reduced to zero and in turn improved the airlocking efficiency

DH Series versatile locking solution helped to discharge bulk solids restricting the back flow of air.

Anval DH Series dump valves are robustly designed by emphasizing on total sealing, continuous uninterrupted discharge, with long life and minimal maintenance.

Double dump valve works with two flaps assembled in a housing continually operating in an alternative fashion, while one flap is closed to collect the material and the other is open to discharge.

Regular Valve Jamming

Air Seal Critical

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