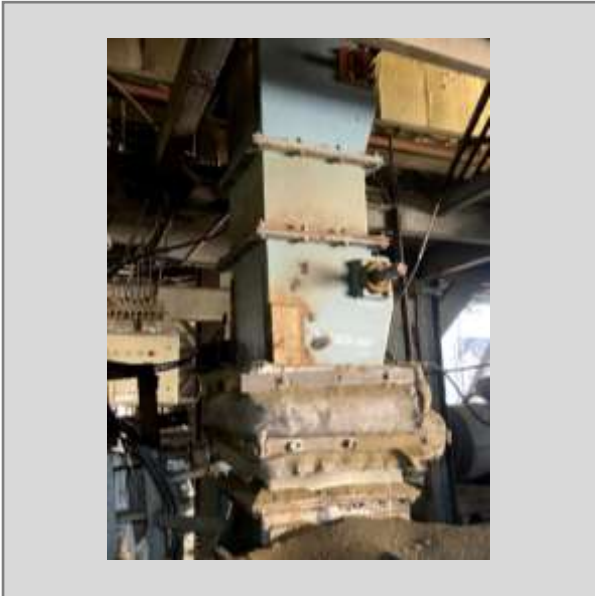


CASE STUDY REF: 012

## REDUCED WEAR AND MAINTENANCE COST WITH JASH DOUBLE FLAP GATE, MODEL DFG FOR CLINKER GRATE DISCHARGE



Damaged Isolation Valve at Customer's End.

Project Details	
<b>Customer</b>	ACC Limited
<b>Project</b>	Kymore Cement Works
<b>Location</b>	Madhya Pradesh, India
<b>Product</b>	Double Flap gate
<b>Model</b>	DFG
<b>Series</b>	C-401
<b>Size</b>	Sq.300
<b>Application</b>	Clinker Grate Discharge

Material Parameters	
<b>Opr. Temp</b>	780°C
<b>Opr. Press</b>	1.0 Bar
<b>Material Comp</b>	Clinker
<b>Particle Sizing</b>	Maximum up to 5 mm

DOUBLE FLAP  
VALVE  
MODEL – DFG SH  
SERIES: C - 401



### Background:

ACC Limited, a major producer of cement in India, has installed fabricated type double flap isolation gates in their clinker grate cooler discharge and were experiencing below problems regularly.

- Frequent wearing of flap gate and seat.
- Increased maintenance every 3 – 4 months.
- Higher downtime due to the removal of a complete valve.
- Wearing of housing tending to leakages.
- Complete replacement of valve in one year.

### Solution Provided:

To address the problem, ACC decided to try Jash Schutte Double Flap Gate due to the below-mentioned advantages.

- Angular operation of the gate to ease material flow thereby avoiding any retention of material.
- Mating faces of seat and flappers lapped to high accuracy for improved leak-tight performance.
- Replaceable type seat and flapper to prevent replacement of full housing due to wear.
- In situ replacement of seat & flapper saves downtime and man-hours.
- Robust construction and 3 years of replacement interval.

Initially, ACC was skeptical when dealing with Jash Schutte as our valve was slightly more expensive than their existing isolation valve. However, as the equipment was failing and demanding frequent maintenance it forced ACC to look upon a different solution and hence they considered our valve solution even though it was expensive.

### Application trials at Customers end:

ACC has considered our Double Flap Gate for installation in two discharge outlets of clinker grate cooler. As per the agreement ACC will be taking field trials for at least one year and will compare the operation, maintenance, and durability of the valve with their existing isolation valve. Also, Jash Schutte agreed to customize these valves to fit within the available height as ACC was having no options for modifications into the existing grate cooler discharge. Based on this agreement, Jash Schutte designed, manufactured and supplied two number special double flap valves to ACC in the Year 2020 for trials.

### Lower Maintenance and High Return on Investment!

Jash Schutte double flap gates are performing tremendously and customer's return of investment is significant as instead of replacing the complete valve they now have to replace internal wear parts only. Also, the routine maintenance schedule has been reduced to one year from six months. This saves a great deal of time and costs associated with downtime and maintenance.

ACC after evaluating the equipment has remarked our equipment performance has exceeded their expectations and they expect to recover their higher input cost in one and half year. They are happy to get associated with Jash Schutte. They have ordered a single lot of 32 Nos. double flap valves to replace all the existing fabricated type double flap gates at their plant.

The high performance of Jash Schutte Double flap gates also plays a critical role in the environmental compliance at the ACC facility. "One of our goals is to make sure there are no dust leaks" and ACC says, "Because the Jash Schutte valves function so well they help us meet this goal". ACC will again consider the use of Jash-Schutte Double Flap Valves in their other plants as well because of following reasons -

- Avoid costly unscheduled downtime
- Avoid the need to perform risky valve repair jobs
- Avoid costly environmental compliance issues
- Perform routine maintenance easily
- Responsive customer service

### Installation Photographs



Installation of our Double Flap Valve DFG 300 along side existing fabricated double flap gate.

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