



## Aravali Chemicals maintains continuous line flow with Emotron VFX drives



With two production plants, Aravali Chemicals of Alwar, Rajasthan is India's leading, privately owned ball mill group. Exports represent 85% of its current turnover, and the company's business activities include grinding raw materials (calcite or dolomite) in ball mills and producing materials for use in the paint, pipe and detergent industries. The mills produce 750 tons of processed powder every month. Aravali Chemicals has quadrupled its turnover and production in the last four years and is expanding further.



### Improved control and reliability – a challenge

Aravali's grinding process involves a ball mill, screw feeder and classifier. Their existing star delta starting system demanded regular maintenance due to jerk loading and the need for frequent stop/starts. Start/stop method used to control the material flow in the system, which was running at rated speed. Aravali was looking to improve both the control and reliability of this system.

## Varied speed and continuous line flow – the Emotron solution

Emotron VFX drives have now been installed for the ball mill, screw feeder and classifier. These prevent the starting current surge and jerk loading. Aravali can now vary the speed of the system and maintain continuous line flow.



Thanks to the Emotron VFX drives, the speed of the screw feed can now be varied between 44.5 Hz and 47 Hz; particle size is controlled by varying the speed of the classifier; and the density of the finished product can be controlled in the ball mill. The system is able to deliver the high torque demanded by the grinding process, with a rapid response to dynamic changes.

### IN BRIEF

#### Customer

Aravali Chemicals, Alwar, Rajasthan, India

#### Challenge

Deliver better control and improved reliability

#### Solution

Emotron IP20 VFX drives

110kW – Ball mill

11kW – Classifier

22kW - Blower

#### Benefits

High-torque, responsive system improves control and reliability over multiple process stages



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