Case Study - Regupol RAV400

Abu Dhabi Cement Mills

Client: Abu Dhabi Cement Mills
Contractor: CEMTEC
Area: 2,600m²

In brief
Regupol RAV400 was specified as a foundation isolation solution at Abu Dhabi Cement Mills – a turnkey grinding plant in the United Arab Emirates.

Project scope
The Cement Mills was constructed for a capacity of 115 tonnes/h (grinding of OPC with a fineness of 3300 Blaine). It also has to produce cement of an even higher fineness (up to 4800 Blaine) or slag of a very fine grain size (4400 Blaine).

Appropriate anti vibration materials were needed to prevent structural damage, nuisance noise and poor quality grinding. These factors are caused by powerful internal machine forces producing severe vibration and shock when grinding cement. According to the modal analysis, CEMTEC was required to meet a natural frequency of 11 Hz.

Regupol RAV400 was incorporated into the design of the cement mills to isolate the foundations of the grinding plant, measuring 22.3m x 14.3m x 4.5m. To achieve greater deflection and a lower natural frequency, the material was installed in four laminated layers, with each layer running 90° to the other.

Benefits
- High performing product with long and maintenance free lifespan
- Cost effective
- Polyurethane (PUR) bound rubber granulate material
- Standard material thickness of 15mm
- Environmentally friendly and fully recyclable
- Supplied in rolls, pads or strips to suit exact installation requirements
- Can withstand loads of up to 25 tonnes/m²
- Minimal creep

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