Low voltage motors for the mining and cement industry
Built to cope with the harshest conditions of all

Mining and cement production places very stringent demands on motors. The specialized motors must be built to withstand the harshest conditions imaginable. Further demands are placed on motors used in explosive environments, so-called Ex d motors.

Motor types
ABB supplies the following types of air-cooled low voltage induction motors for mining and cement applications.

<table>
<thead>
<tr>
<th>type</th>
<th>output power</th>
<th>frame sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>cast iron motors</td>
<td>from 0.18 to 1000 kW</td>
<td>from 71 to 450</td>
</tr>
<tr>
<td>motors for explosive atmospheres</td>
<td>from 0.18 to 710 kW</td>
<td>from 80 to 450</td>
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Harsh conditions, stringent demands
Mining motors must cope with everything from falling rocks to particle ingestion in order to maintain availability and performance.

Meanwhile, demands for reliability in mining and cement are among the most stringent there are. In these highly competitive commodities markets, the cost of any motor failure – and consequent production stoppage – can literally count in the millions of U.S. dollars.

Why you can rely on ABB’s motors
ABB mining motors deliver the highest reliability in the harshest environments. Here are some of the crucial factors that make these motors first choice for their reliability.

Robust design
The robust fan cover protects the fan against falling rocks. This prevents the risk of reduced cooling performance and costly repair downtime.

IP 66 protected
Efficient ingress protection is essential whenever dust and water are present. ABB motors are IP66 protected, preventing intrusion of particles as well as moisture from high-pressure water cleaning.

Sealed bearings
Specially designed seals prevent dust, water and other contaminants from entering the bearing housing, thus protecting the bearing grease and reducing the risk of premature bearing failure.

Efficient cooling
Unlike conventional motors, dust settling on the motor is no problem with ABB mining motors. Thanks to their superb tightness, they are easy to wash which ensures long-term cooling efficiency.
Special features for mining motors

ABB’s mining motors are built on proven, reliable platforms, with critical components being regularly upgraded to meet the challenges of the mining sector.

Reliability in operation

ABB mining motors are based on reliable designs, proven in thousands of mining installations, delivering highest productivity even in the most demanding conditions.

Support and service

ABB’s mining motors are covered by the global ABB sales, support and service network – the most extensive motor vendor network in the world. With presence in more than 100 countries, our support is never far away – regardless of the location of your production.