



**Industry:**  
Mining

**Application:**  
Horizontal SAG mill

**Problem/Requirement:**  
Uneven torque loads, shock loads and overloading can damage system components in ball and SAG mills

**Solution:**  
Autogard 820 Series Torque Limiter

**Result:**  
Autogard 820 Series Torque Limiter disconnects equipment as soon as the jam occurs, protecting equipment and eliminating maintenance downtime

## Autogard 820 Series Torque Limiters Protect Mining Equipment and Reduce Downtime

### Ball and SAG mills

Ball and Semi-Autogenous Grinding (SAG) mills are used in mining to crush materials into smaller, more manageable sizes, and to separate certain minerals. Ball mills crush by primarily using balls in a long-angled rotating cylinder, while SAG mills use both balls and the material itself for the process. Reliable power transmission is critical in this application for the daily requirement of driving the mill. The power transmission system must also be protected from the inevitable uneven torque loads, overloads and shock loads.

**The Autogard 820 Series Torque Limiter** protects equipment with very high-torque drives in heavy-industry applications, like horizontal SAG mill applications in mining. The torque limiter is designed using a modular principle that enables the trip torque capacity to be set to virtually any value. Each module is set to give repeatable and reliable disengagement in the event of an overload. The Autogard 820 Series Torque Limiter offers bidirectional protection and has an accuracy of +/- 5 percent in both directions. Upon overload, the modules can be reset in seconds to the original torque setting using standard tools, significantly reducing downtime.



**Autogard 820 Series Torque Limiter**

*Pictured above:* An Autogard 820 Series Torque Limiter installed in a ball and SAG mill mining application.