



BEARING & POWER TRANSMISSION SOLUTIONS

# Case Study

## Labyrinth Seal



### INDUSTRY

Mining

### PROBLEM

The SAG (semi autogenous grinding) Mill grinds the ore to a point where the ball mill can further grind the material down to particles less than 70 microns in size (fine beach sand) prior to extraction of the gold from the ensuing slurry. Ingress of contaminants via an inadequate OEM sealing setup was causing continuous failure of the Mill bearings and production stoppage.

### APPLICATION

Grinding Mill

### SOLUTION

BSC Engineering Services inspected the application and with the assistance of Garlock Sealing designed a bolt-around labyrinth seal to suit the application. The tortuous path labyrinth seal is ideal for two-way sealing; zero lubricant leakage and the total exclusion of contaminants.

### BENEFIT

**\$240,000 production downtime saving Costdown**

Our inspection, redesign and solution to SAG Mill reliability problem has been an outstanding success, culminating in a costdown of significant value.

