# **Polycorp JCL Discharge Grates**

Polycorp has a long, successful heritage in the mining industry as an international supplier of premium Mill Liners. Polycorp has supplied more than 500 mills worldwide.

Polycorp Mining fully supports all of its products, both before, and after installation in the field.

Polycorp Engineering can help assess your needs, and provide custom designed solutions engineered for your specific application conditions.



Polycorp specializes in the design and manufacture of High Pressure Moulded Wear Resistant Rubber,
PolyStI™ and Polycorp JCL Grates.

## **Polycorp JCL Grates**

Polycorp JCL Grates eliminate grate blockage caused by ball entrapment where they are 'hammered in' and virtually welded against steel grate slots. Polycorp JCL Grates are designed with slots of variable openings, allowing the larger grinding media to abandon the mill charge, before these reach the critical size to block the slot side with the smallest dimension. This keeps enough open area for the slurry to flow out of the mill.



# Self-Cleaning Effect

Polycorp JCL Grates are designed to be selfcleaning. When the grinding media is randomly pushed toward the narrower opening side of the slot, the center of gravity of the worn ball is separated from the internal grate face and returned back into the mill charge.









**Polycorp JCL Grates** are designed to reduce plugging in the grates and extends operational life. They are engineered as an arrangement of slots of variable openings that prevent plugging by worn grinding media.

### The Challenge

As the grinding media, typically steel balls, are worn down, the balls can reach a size similar to the grate slot. If the balls settle into the grate slots, they start to get 'hammered in' by the mill charge against the retaining grate element. Since the balls are still larger than the grate opening, they become trapped and virtually welded against the steel webs blocking the slot, with no chance to be removed back into the charge.



#### The Solution

**Polycorp JCL Grates** are designed with slots of variable openings that allow the larger balls to abandon the mill charge, before they can reach the critical size to block the slot side with the smallest dimension, keeping enough open area for the slurry to flow out of the mill.



