# CASEStudy
## Moly-Cop NG Trial

Moly-Cop

## Case Study:
The Customer

- Large copper mining operation in northern Chile
- Two parallel 36' x 17' SAG mills, recharging 5.5" balls

*SAG milling line operation*

### • The Trial

The fact that the selected site has two side by side SAG mills, provided a perfect opportunity to run a comparative trial. The trial commenced in March 2014 in the SAG 2 line, while the competitor was maintained in the SAG 1 line. Purge and reference periods, prior to the indicated evaluation period, were properly established.

### • The Results

The results of the trial have been very conclusive, **observing an estimated ball consumption reduction of 18.6%**, when compared to the consumption of the competitor's product in SAG 1. Worth recognizing that SAG 2 has historically demonstrated higher ball consumption rates, due to ore stockpile segregation.

Careful observation of the ball cores (scats) being rejected by the mill (when they reach the size of the grate discharge opening) proved there was almost no evidence of ball breakage. The usual ball 'clinking' typically heard when inspecting the mill charge after a grind-out was virtually eliminated.

**MOLY-COP NG**
*A new generation of grinding media*

### • The Summary

After two years of continuous development and in-house testing, Moly-Cop is now ready to launch a new generation of SAG ball products, the "Moly-Cop NG". The new product has been trialled at full industrial scale with excellent results, exceeding Moly-Cop's own expectations as commented by Eng. Hector Toro, Commercial Manager at Moly-Cop Chile S. A. "In this particular plant trial, Moly-Cop NG balls were consumed at a 18.6% lower rate, compared to the competitor product being charged in the parallel line", Eng. Toro said. "This improved performance implies a very significant cost reduction for the customer's operation".

The Moly-Cop NG SAG ball, with its innovative manufacturing process, has resulted in a grinding ball less prone to breakage and spalling, which have been identified as the two major sources of grinding ball consumption, particularly in modern, high impact SAG mills. Over the last 40 years, the operational practice of SAG mills has been characterized by a continuous increase in the severity of the impact conditions within the mill. Moly-Cop NG balls have been specifically engineered to sustain high severity impact environments. "We are now finalizing the necessary investments to make Moly-Cop NG available for the Americas during the second half of 2015", said Eng. Toro.

### Key Takeaways

- *Moly-Cop NG SAG balls are engineered to sustain high impact SAG milling environments*
- *Side by Side SAG mill trial*
- *The trial resulted in an estimated 18.6% reduction in ball consumption against the alternative supplier*
- *Moly-Cop NG to be available in the Americas from the second half of 2015*