

## Case Study: The Customer

- Large copper mining operation in northern Chile
- A single 36' x 19' SAG mill, recharging 5.5" balls

## • 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 of Moly-Cop Chile S. A. "In this particular plant trial, Moly-Cop NG balls were consumed at a 26.1% lower rate, as compared to the competitor's performance prior to the trial", 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 have taken several years in the product development phase and 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. "While we believe this is the best Moly-Cop SAG ball ever, we were extremely pleased by the performance of the product in this trial" added Eng. Toro.



SAG milling line operation

## • The Trial

The site has a single SAG milling line. The Reference Period (Pre-Purge) was undertaken between November 2013 and May 11, 2014. The Evaluation Period (Post-Purge) was defined between July 15, 2014 and November, 15 2014. During the latter period, the Moly-Cop NG product was charged to the mill.

## • The Results

The Moly-Cop NG product observed an estimated reduction in ball consumption of 26.1% when compared to the consumption of the competitor's product during the pre-purge period.



## Key Takeaways

- *Moly-Cop NG SAG balls are engineered to sustain high impact SAG milling operations*
- *Full scale SAG mill trial*
- *Estimated 26.1% reduction in ball consumption against the alternative supplier*
- *Moly-Cop NG to be available in the Americas from the second half of 2015*