

## XSTRATA NICKEL, STRATHCONA COMPLEX, ONAPING FALLS, ON

### AF-D ARMOUR GUARD

<b>PROJECT:</b>	51 Feeder Rehabilitation Strathcona Complex Onaping Falls, ON
<b>SPECIFIER:</b>	Xstrata Nickel
<b>CONTRACTOR:</b>	Technica Mining Group Inc. Lively, ON
<b>PRODUCT:</b>	AF-D Armour Guard
<b>QUANTITY:</b>	10 m <sup>3</sup> (350 ft <sup>3</sup> )
<b>COMPLETION:</b>	Summer 2005

Xstrata Nickel Mill Operations had been investigating available options to refurbish the No. 51 Feeder, which had sustained significant damage due to constant impact and abrasion. The feeder is a vital component to the operation of the mill as it is supplied with ore from other area Xstrata mine sites. It is fed using conveyor haulage trucks, which supply approximately 100000 tonnes of ore per month at 450 tonnes per hour. Relying on previous experience and expertise, Xstrata contacted King to provide recommendations for refurbishing and lining the feeder.

In addition to extreme wear associated with abrasion and impact, Xstrata was also concerned with the down time required to complete the project, therefore a two-day completion was targeted to minimize production interruption. As well, the feed bin would also have to be available for use immediately after the project was completed. Relying on past experience in other applications within the Xstrata mining operations, notably ore pass rehabilitation projects, King recommended the use of their AF-D Armour Guard to line the bin and protect it from damage caused by constant impact and abrasion. AF-D Armour Guard contains special, high performance cement, trap rock aggregates, steel fibers and other carefully selected admixtures. This combination of components provides superior resistance to impact and abrasion and it's extremely rapid strength gain provides these properties within hours after application.

After further researching AF-D Armour Guard and adopting King's recommendations, Xstrata tendered the project and awarded it to Technica Mining Group Inc. of Lively, ON. It should be noted that Xstrata compared the material and labour costs associated with refurbishing using steel plate lining with those of shotcrete applied AF-D Armour Guard.

It was quickly apparent that the application of AF-D Armour Guard was the most cost efficient method to rehabilitate the bin. Technica used an

Aliva AL 252.1 shotcrete machine to apply the AF-D Armour Guard, completing the project a full day ahead of schedule. Due to the success of the AF-D Armour Guard on this project, Xstrata will be considering the use of this product on future projects within the milling operations.

"As far as we're concerned, the job went perfect." , Xstrata.

