

E&MJ

ENGINEERING AND
MINING JOURNAL

INCORPORATING:

World Mining Equipment

Green Diesels Run Clean
—Improvements allow
miners to breathe easier

Optimizing Plant Design

AIMEX Preview 2013

JULY 2013 | www.mining-media.com

FEATURES

The Central Control Room: Improving Mine Operational Performance
Emerging technologies enable producers to apply new software systems in an integrated approach that provides usable mine- and plant-related information—not just data..... **30**

The Case for Going Gearless
Gearless drive systems for conveyors or mills can simplify installation, increase machine efficiency and reduce maintenance costs, according to a company that's been a pioneer in the technology..... **36**

South African Gold Enters Survival Mode
South Africa's gold industry is in a fight for survival. Declining production, rampant labor unrest and even deeper mines are crushing once mighty producers..... **40**

Eyes Aloft
Airborne drones extend remote sensing and interpretation capabilities..... **44**

Highlighting Diesel Technology
This year's bauma trade show in Munich, Germany, offered engine builders a showcase for the latest technologies, ready to meet the next stage in emissions-control requirements..... **46**

AIMEX Returns to Sydney in 2013
Vendors from around the world gather at Olympic Park to showcase new tools and services for Australian miners..... **54**

Hugo Chavez, Socialism for the 21st Century and Venezuela's Narcissistic Resource Nationalism..... **60**

New Diesels Deliver Clean Power to Underground Mines..... **66**

All Ships Headed to China
Prices will hold steady while grades decline and China will remain the most important customer—those were the key conclusions for the 12th World Copper Conference..... **68**

LEADING DEVELOPMENTS

Report: Net Profits for Top 40 Mining Companies Fell 49% in 2012..... **4**

Lundin Acquiring Eagle Nickel-Copper Project..... **5**

Freeport Declares Force Majeure..... **6**

Extractive Industries Reporting Transparency Draws More Attention..... **6**

Cliffs Suspends Chromite Project in Northern Ontario..... **6**

AROUND THE WORLD

U.S. & Canada: Pretium Advances Engineering Work on Brucejack Gold..... **8**

Latin America: Hudbay Secures Fleet Financing..... **14**

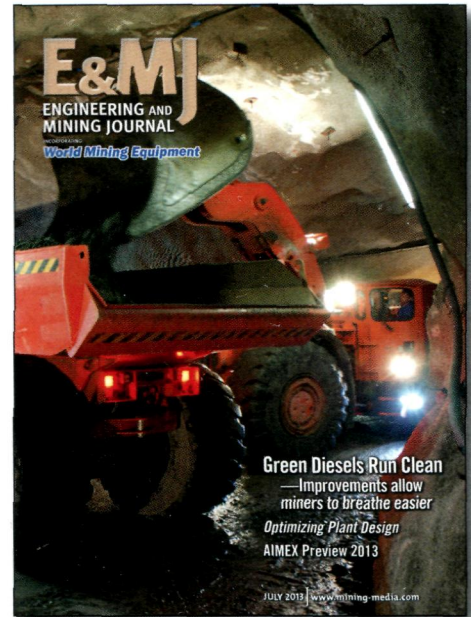
Australia/Oceania: Vista Reports PFS and Reserve Increase for Mount Todd..... **16**

Africa: Nevsun Adds Copper Flotation Circuit to Bisha Mine in Eritrea..... **18**

Asia: Petropavlovsk Extending Development Period for Pressure Oxidation Hub..... **20**

Europe: LKAB Opens New Main Level at Kiruna..... **22**

Exploration Roundup: Gold Fields Signs Earn-in Agreement Covering Yorbeau's Rouyn Property..... **24**



Diesel engine manufacturers are developing the technologies needed to meet new environmental standards. Being able to breathe easier, underground miners will be one group that benefits directly from these advancements. The new technologies should also ease the burden of ventilation as well. This month E&MJ offers three reports on diesel engines.

DEPARTMENTS

Calendar..... **28**

Classified Advertisements..... **86**

Equipment Gallery..... **82**

From the Editor..... **2**

Markets..... **88**

Operating Strategies..... **72**

People..... **12**

Processing Solutions..... **80**

Suppliers Report..... **76**

This Month in Coal..... **26**