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***Vol.3 No.1, January, 2019***

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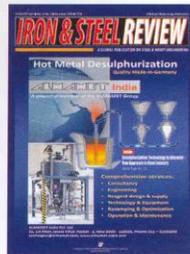
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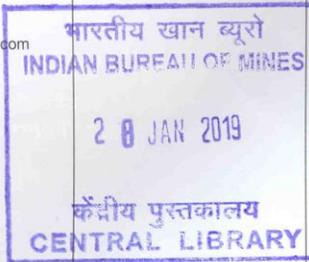
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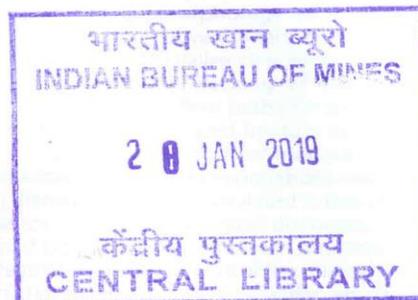
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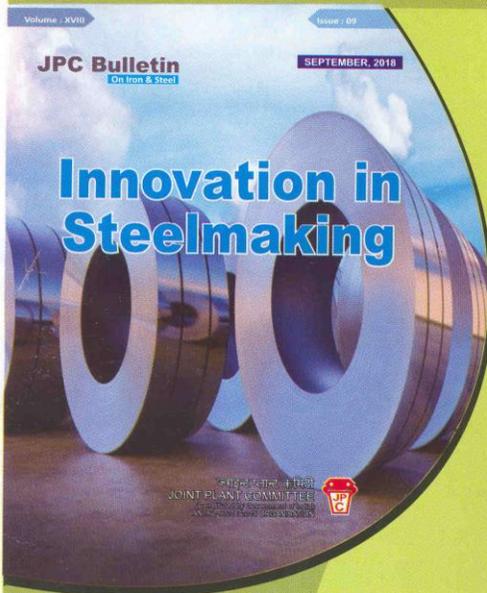
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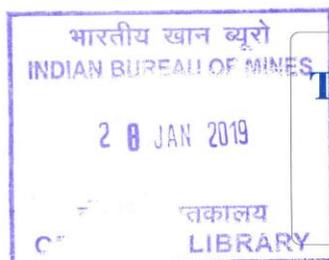
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## Cover

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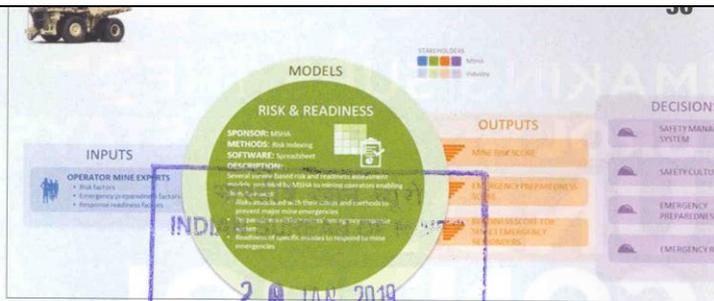
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NIOSH's Office of Mine Safety and Health Research provides and has the authority to award contracts to the development and implementation of new mine technology equipment, in accordance with the Mine Improvement and New Emergency Response Act of 2006. An update on the agency's activities begins on page 18. Research efforts into electric mining equipment, particularly in underground operations, is on the increase. This technology would save miners in fuel costs, as well as remove diesel particulate from underground mines, page 81. A proactive approach to mine emergency preparedness is discussed on page 35. Cover photo from Shutterstock.

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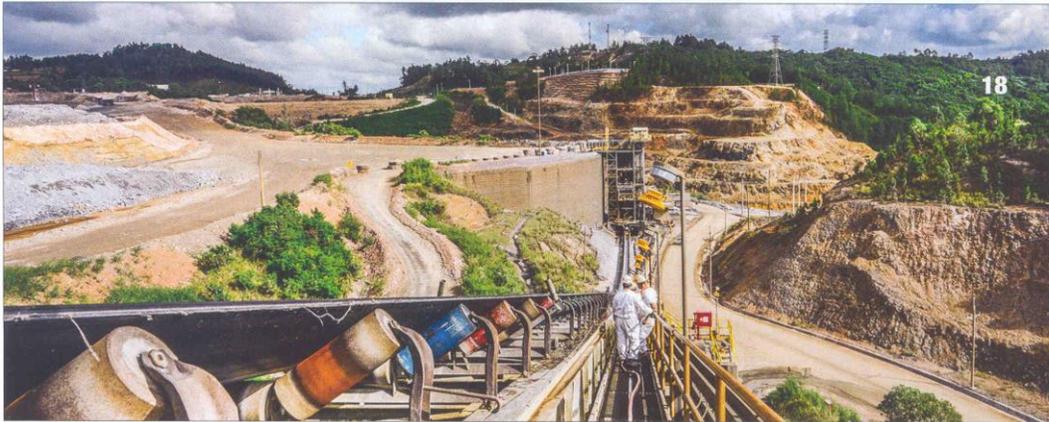
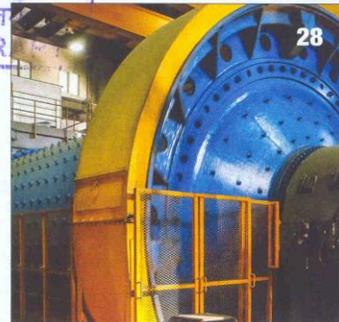
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## In This Issue

Higher production costs across all bulk handling segments of the mining process require increased efficiency at the lowest cost and in the most safe and effective manner possible. Swinderman discusses bulk handling technology for the future by innovating the present, page 18. A study was conducted by several authors to determine what media size addition will maximize any given plant ball mill's grinding efficiency. The results are examined beginning on page 28. SME's new THRIVE conference took place during the Society's midyear meeting in Pittsburgh. It focused on innovation in the industry. ME's Bill Gleason reports, page 38. Cover photo courtesy of Martin Engineering.

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# Mining Magazine, December 2018

## Collaboration is the future

The first Future of Mining Americas conference – which took place in Denver, Colorado, US, at the end of October – was a roaring success.

With over 65 expert speakers from leading companies across the global mining industry presenting to the nearly 300 senior mining executives in attendance, the key strategic and operational questions that affect the mining industry were discussed and debated.

Stephen de Jong, chairman of Integra Resources and CEO of VRify, chaired the two-day conference. He commented in his welcoming remarks: "It is exciting to see this much demand for innovation in our industry, and I personally am very excited to be able to experience a lot of this and go through it, having a bit of insight and talking to some of the panellists and moderators and the keynote speakers."

He added: "At these conferences, a lot of [the benefits] come from being able to listen in, see panels, see keynotes – you gain a lot from that experience, but you gain just as much from the experience of collaborating and discussing various ideas, and the two or three companies that just happen to have rooms together could come up with the next great idea.

"I'm a big believer that collaboration is the key to innovation in our sector, and in other sectors as well."

The presentations covered diverse topics on themes related to mining's future, such as digitalisation, automation, better connectivity, systems interoperability, the internet of things (IoT), artificial intelligence (AI) and change management.

There were also panel discussions on subjects such as the disruption of the mining industry, raising the bar on innovation, social license, understanding risk, the move towards a fully automated mine and the culture shift needed as mines prepare for the future.

Turn to page 9 to read in-depth coverage of some of the presentations from the event, and more can be found on the *Mining Magazine* website at [www.miningmagazine.com/tag/future-of-mining-americas](http://www.miningmagazine.com/tag/future-of-mining-americas).

"Great conversations are taking place," concluded De Jong at the end of the first day of Future of Mining Americas. "Some of us [here] are from the corporate side, and there are mining companies looking at how we can use innovation and technology to make ourselves more efficient. Others are from the service provider side, or the technology side, looking at how we make sure that we're not the next Blockbuster – but the conversations are taking place.

"One thing I think we all need to keep in mind is you can take the 'future of anything' conference and a lot of the things that we talk about – like machine learning, words like 'disruption' and 'Big Data' – these things are happening in every single industry across the board. One of the advantages that we have in the mining sector, and it's a word that came up in every single panel today, is collaboration.

"We're a little bit different [in the mining industry]; it's interesting that we're often criticised for our inability to collaborate, but where we're different [from other industries] is we own our claims ... we own our operations. If there's one industry that should collaborate more than any other, it's ourselves.

"My takeaway from today is that collaboration is key, and I think we all share that view."

**AILBHE GOODBODY, EDITOR**

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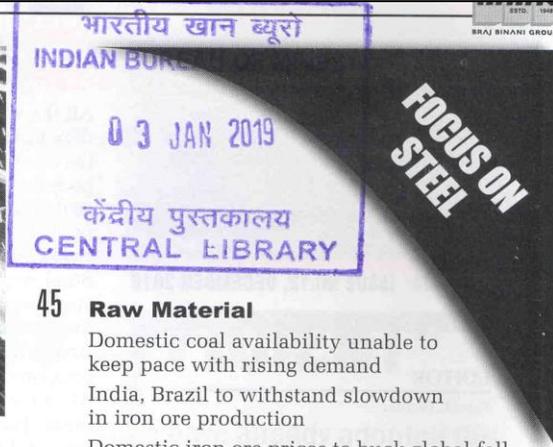
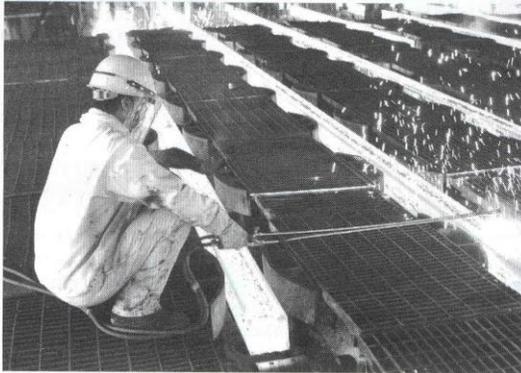
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