



तकनीकी पत्रिका विषय-सूची

CURRENT CONTENT

(Technical Journals)

(A Monthly Current Awareness Service from technical journals)

Vol.1, No.5 November 2017

The Central Library, IBM, Nagpur is subscribing the technical journals and also receiving them on complimentary basis on various subjects like Geology, Mining, Mineral Economics etc. These Technical Journals make up an important collection of latest scientific information. The library is rendering Reference Service to its users from these technical Journals. Central Library, IBM provides Current Content Service from these technical journals in the name of "GEM" since 2006 on half yearly basis in print form. To expand this service to the IBM Offices all over India i.e. H.Q., Zonal & Regional Offices and to take a call of time, the Controller General, IBM desired to make this service online on monthly basis. The library staff made efforts to make it successful. This is the 5th issue of this service named "**Current Content- a monthly current awareness service from technical journals**", **Vol.1, No.5, November 2017**. The online journal "World Metal Statistics" is also available for reference in central library upto November 2017.

It will be highly appreciated if the valuable feedback is reciprocated.

Mrs.D.H.Vairagare

Assistant Library & Information Officer



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CURRENT CONTENT

(Technical Journal)

*A Monthly Current Awareness Service
from technical journals*

Vol.1, No.5-November2017

by

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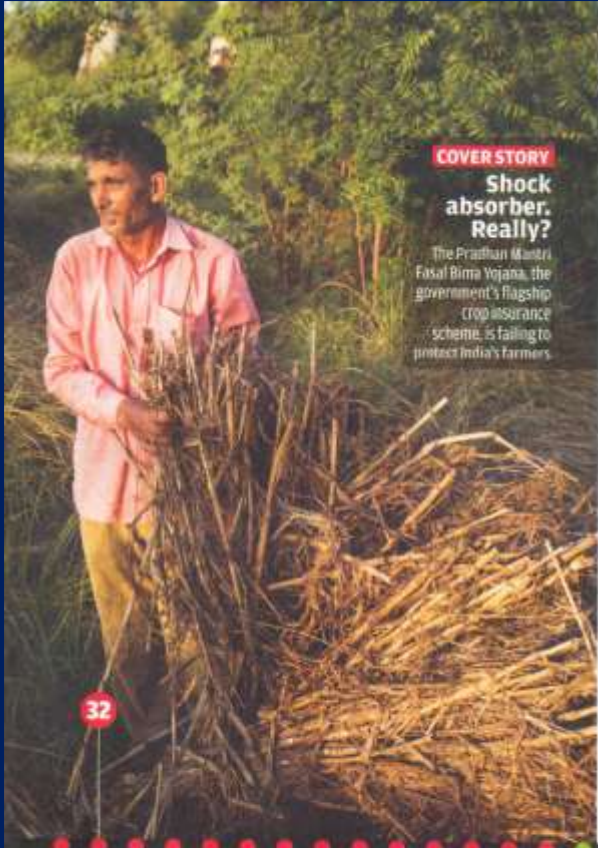
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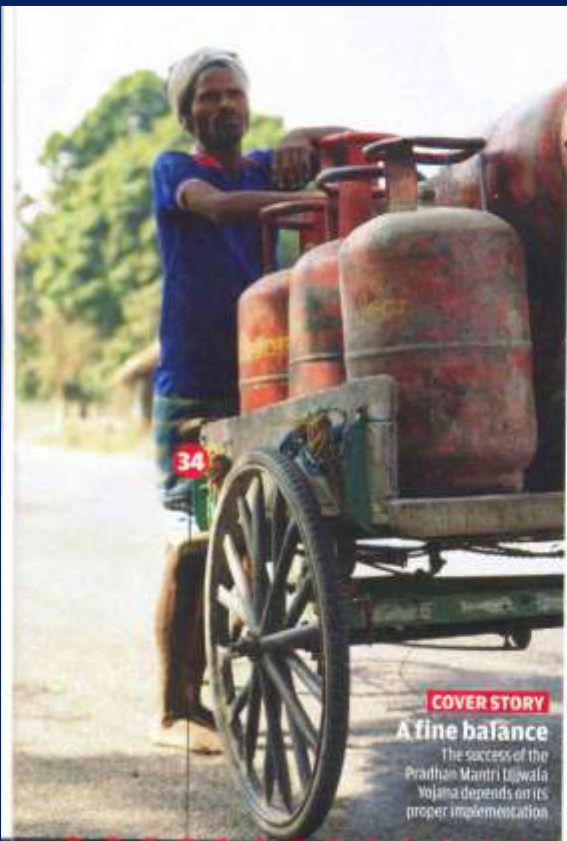
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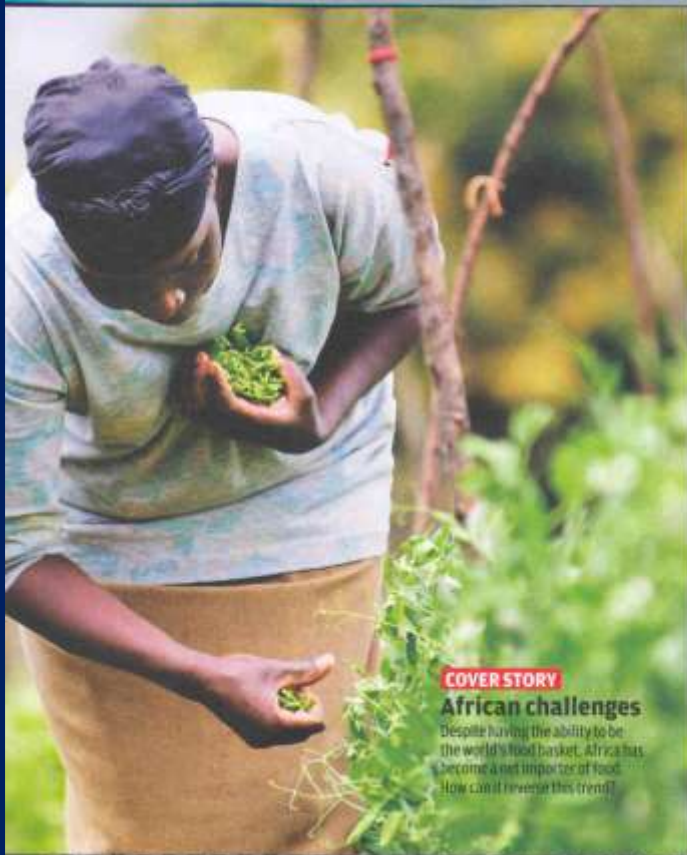
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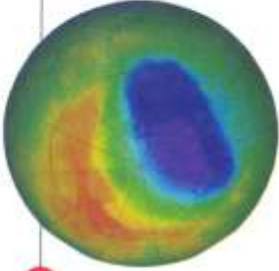
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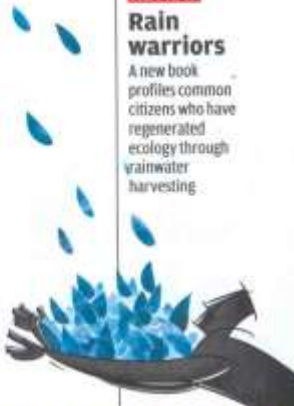
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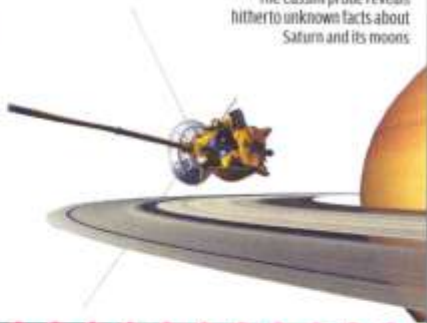
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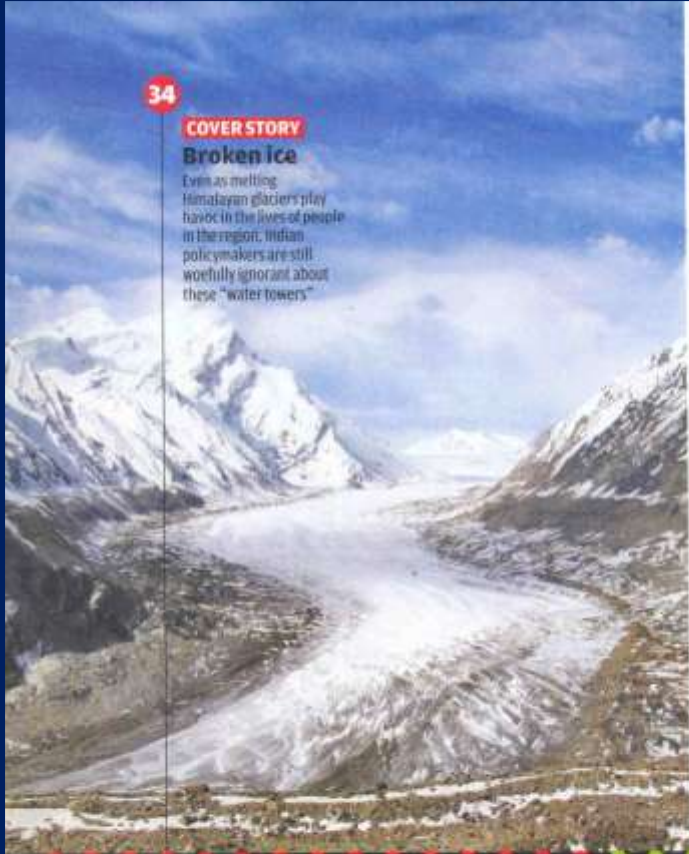
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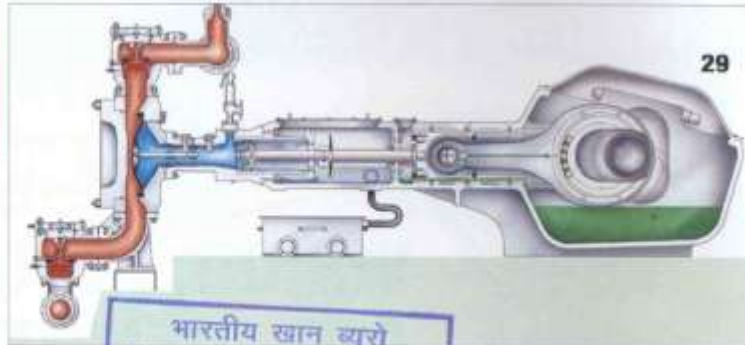
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In This Issue

A continual challenge for the mining industry is accurately reflecting the costs of and selling price of ore. An enduring characteristic of mining is the situation where the market typically determines the price of a commodity. The main control a company has on the bottom line is to control the cost of production. The feature article on page 16 discusses the all-in sustaining cost method of accurately reporting the cost of production. Anglo American installed two 52-km (32-mile) long pump stations at its Minas Rio iron ore pipeline. Included was a Weir phase shift controller to minimize the effect of hydraulic resonances. Shutterstock cover photo.

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2018: the year of electric vehicles

Details are starting to emerge of Atlas Copco spin-off company, Epiroc. The company that, all going to plan, will become a fully owned subsidiary of Atlas Copco next year, announced its board of directors in early September. This includes: Johan Forsell, Anders Ullberg, Ulla Litzén and Lennart Evrill. They will be led by Ronnie Leten, former Atlas Copco president and CEO, who was appointed chair of the board in April.

At Atlas Copco's AGM in April next year, shareholders will decide whether Epiroc should be listed on the Nasdaq and, provided the proposal passes, Atlas Copco will stay focused on creating value for industrial customers, while Epiroc will focus on the mining, infrastructure and natural resource sectors (although it seems a little late to back out at that stage).

The move, which surprised investors on announcement in January 2017, was better explained by Atlas Copco's new CEO, Mats Rahmström, in his first official interview conducted with the Financial Times and published on September 12.

Rahmström, who has been at the company for 29 years and took over the top job in April, said the creation of Epiroc would help to boost growth through digitalisation and innovation.

"I don't want to lose speed. It's about top line growth, and to stay on top with new technologies," he told the FT of the split. "The main reason is really the focus. When we are growing so much, mining is a bit different: there are different customers, it's more volatile."

The FT said the move was "a rare case of a simultaneous break-up and chief executive change being announced from a position of strength rather than weakness". It quoted Johan Sjöberg, analyst at Danske Bank, as saying: "There are no negative pressures behind the split of the company. It's more a focus on growth."

Rahmström was head of Atlas Copco's industrial technique division until earlier this year. This specialises in power tools and assembly systems for the automotive and aerospace. He said one potential growth area for the company could be new ways of joining together materials needed for electric vehicles. "There is potential to acquire businesses with an automotive application, especially for different joining techniques," he said.

Not coincidentally, electric vehicles are also a key growth area for Epiroc. Atlas Copco is one of the market leaders in battery electric vehicles for underground mines – it offers battery operated scoops and smaller trucks, and is looking to add larger vehicles in the near future. Speaking at the Women in Mining (UK) Battery Minerals Seminar on September 14, Petra Grandinson, the incoming general manager for Epiroc UK & Ireland, said: "The same revolution you're seeing in the automotive sector is just about to get started for mining."

"We can see that our customers are already looking at next year saying all their capital investment [will be in] battery vehicles. On the manufacturing side, neither we nor our competitors are fully there yet. We have quite heavy programmes to replace [diesel]."

And Epiroc is not alone. Mining's largest OEM, Caterpillar, announced this month that it is preparing to ship a proof-of-concept battery electric LHD to a mine in Canada. The initial build and validation testing of the R1300G began in early 2017 in Peoria, US, and the machine will begin moving material at a mine in 2018. The test model will employ a lithium-based energy storage solution, although Caterpillar was quick to point out that the concept does not represent a final design that will go to market. It plans to launch a new product introduction programme following a more in-depth, rigorous design and validation process.

I suspect there will be many more developments to follow in this space over the coming months.

CARLY LEONIDA, EDITOR

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"Mining is a bit different: there are different customers, it's more volatile"



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COVER

GIW's full scale hydraulic lab is one of the few in the world that can test slurry pumps with impeller diameters up to 2800mm in pipelines up to 1200mm. Research from a recent test allows users to more accurately predict slurry pipeline friction losses, pump spacing and motor sizing, which will lead to more efficient power usage and slurry transport. The findings are presented in the award-winning paper 'Comprehensive loop testing of a broadly graded (4-component) slurry', see page 23. www.giwindustries.com

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