

V Strength

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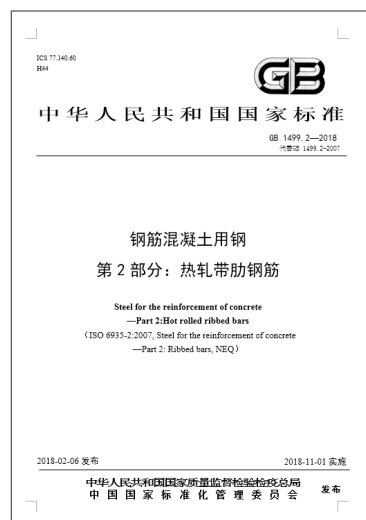
ISSUE NO. 8

Seminar Promotes Chinese Rebar Standard

Vanitec and the CISRI Vanadium Technology Centre hosted a successful technical seminar in Beijing on 22 May 2018 on the production process and application of the new Chinese micro alloyed high strength reinforcing rebar standard.

Over 140 representatives from Chinese rebar producers, government departments, universities and research institutes gathered so Vanitec and CISRI could promote the implementation of the Chinese government's newly revised rebar standard.

On 6 February 2018 the Standardization Administration of the People's Republic of China released a new high strength rebar standard intended to reduce the use of substandard steel and make buildings in China more earthquake resistant.



The new rebar standard, GB/T 1499.2-2018, eliminates low strength Grade 2 (335MPa) rebar and authorizes 3 different high strength standards: Grade 3 (400MPa), Grade 4 (500MPa), and Grade 5 (600MPa).

Implementation will commence 1 November 2018, however preparatory work has already begun in China at individual mills and producers.



Professor Yang Caifu, of the Chinese Central Iron & Steel Research Institute (CISRI) who leads the joint Vanitec/CISRI Vanadium Technology Centre noted that “for hot-rolled HS rebar, V content will be at 0.03% V in Grade 3, 0.06% V in Grade 4, and more than 0.1% in Grade 5 rebar so the implementation of the new standard will significantly promote the application of vanadium in Chinese rebar products.”

Vanitec CEO John Hilbert remarked “the technical seminar was well attended and vibrant, showcasing the advantages in application performance of vanadium micro alloyed rebars. Vanadium is the most common addition for high strength rebar because it offers the best combination of high strength, good ductility, bindability, weldability, and reduced sensitivity to strain ageing.”


The day prior to the rebar seminar, John Hilbert held a briefing in Beijing for current and prospective Vanitec members. He outlined all of the activities of Vanitec in Health & Safety, Energy Storage, and Market Development, urging those who were not yet members of Vanitec to join and help to continue grow and defend vanadium markets.



“Vanitec statistical data shows that consumption of vanadium in energy storage doubled year over year from '16 to '17. We are committed to marketing the VRFB as the only sustainable and environmentally friendly energy storage solution.”

- John Hilbert, CEO


4th Vanitec ESC Meeting Planned for July



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9 July, 2018 - Lausanne, Switzerland
@ International Flow Battery Forum

Vanitec's 4th
Energy Storage
Committee Mtg.



You are invited!
Please accept this complimentary invitation to attend the 4th Vanitec Energy Storage Committee (ESC) meeting which will be held immediately prior to the International Flow Battery Forum (IFBF) meeting at the SwissTech Convention Centre in Lausanne, Switzerland on Monday, 9 July, 2018 from 12:00 - 18:00.

There is no cost to participate in the meeting. Vanitec is a sponsor of the IFBF and is hosting the IFBF Monday evening reception and dinner at 19:30. Those not attending IFBF are still welcome to attend the 4th ESC Meeting.

The purpose of the meeting is to bring together VRFB developers, electrolyte producers and suppliers, and vanadium industry contacts.

Vanitec has started a large scale VRFB marketing program we are excited to share with all participants. Please see the agenda on the following page.

Interested participants are requested to RSVP your attendance for the meeting and the Monday reception to Dee.Thoren@Vanitec.org.

For more information on Vanitec, our VRFB work, and how to join the Vanitec Energy Storage Committee, check our website at <http://vanitec.org/vanadium/VRFB>.

Information on how to make hotel reservations and to register for the IFBF meeting itself can be found at <http://www.flowbatteryforum.com/registration>.

Vanitec will once again hold its Energy Storage Committee (ESC) meeting in conjunction with the International Flow Battery Forum (IFBF) to be held in Lausanne, Switzerland on 9 July, 2018.

Attendance is open to anyone interested in the Vanadium Redox Flow Battery (VRFB) and is free of charge. Vanitec is also one of the lead sponsors of the IFBF and will be hosting the IFBF Monday evening reception and dinner.

The agenda for the ESC meeting to held 12:00-18:00 is as follows:

- Registration & Arrival (lunch & coffee)
- Introduction & ESC Status
- Market Update (V production/demand)
- Next Steps on Electrolyte Standards
- VRFB Marketing Plan Presentation & Workshop
- Vanadium & VRFB Health, Safety & Environment Issues
- Wrap-up & Closing

Interested participants are requested to RSVP your attendance for the meeting and Monday evening dinner/reception to Dee.Thoren@Vanitec.org.

VRFB Marketing Guide Released

The Vanitec Energy Storage Committee (ESC) has made marketing and promotion of the VRFB a high priority activity in 2018.

The ESC's marketing plan was in full swing the first quarter of 2018, with social media platforms being set up and populated with interesting information about Vanadium, a key messaging guide for ESC member being distributed, and an energy storage focused newsletter being set up.

The marketing guide is seen as tool to allow all Vanitec members to use a common set of core messages, designed for maximum retention and impact. The 3 core messages for the VRFB are:

- The VRFB is available for implementation and use right now, not in the future, and is working in places already;
- With its long battery life, the VRFB offers truly sustainable energy while also being environmentally friendly; and
- The VRFB makes long-term sense for power utilities in terms of both cost and scale

The upcoming International Flow Battery Forum (IFBF) in July has also been a focus of marketing efforts.

Upcoming efforts will prioritize bringing to life some of the faces and names in the VRFB space through a series of short video clips which will be used across social media.

Vanitec members are once again asked to share their positive news, photographs and press releases with the ESC marketing team at esc@vanitec.org with any updates.

**A marketing guide
for Vanitec members**

2018



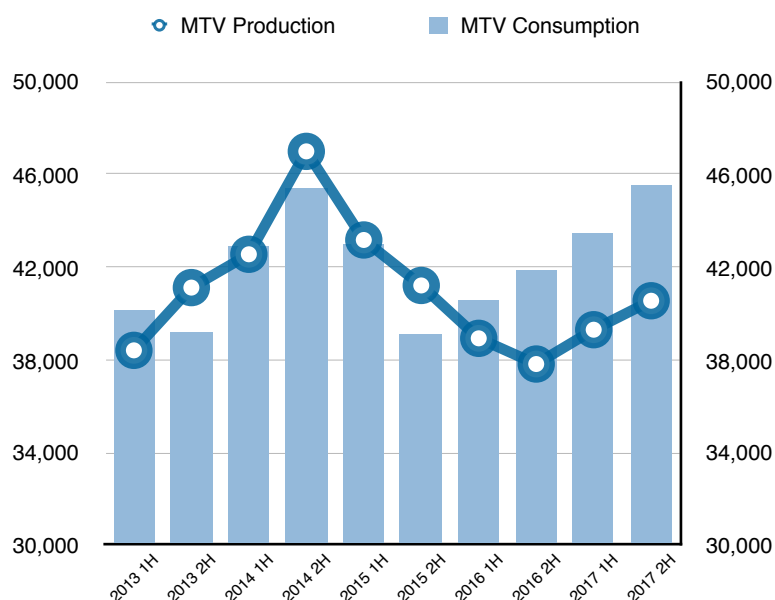


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2017 MTV Consumption Hits Record High

In its reporting, Vanitec defines vanadium production as MTV in all oxides produced, plus MTV in other V-compounds not produced via oxide route, plus MTV FeV not produced via V₂O₅-route. The data is not disseminated by Vanitec nor used for any purpose other than compiling overall statistics for the vanadium industry.

Detailed information such as individual region production, consumption and specific consumption rates are available to Vanitec members only. If you are interested in joining Vanitec as a full or associate member please contact us at info@vanitec.org.



Vanitec Welcomes Two New Members

Vanitec is pleased to announce that Dalian Bolong New Material Co Ltd of Dalian, China and Vanchem Vanadium Products of Witbank, South Africa have both applied for membership in Vanitec and meet our bylaw criteria.

For more information on how to join and see the benefits of membership, please contact John Hilbert at john.hilbert@vanitec.org or check out our website at www.vanitec.org.



Full membership is available to producers of vanadium and Associate Membership's are available to users, suppliers, exclusive agents, and academic institutions.

Vanchem Vanadium Products

Duferco GROUP

Members

[AMG Vanadium, Inc.](#)

[Atlantic Vanadium Pty Ltd.](#)

[Australian Vanadium](#)

[Bear Metallurgical Company](#)

[Beijing Zhongkaihongde Technology Company](#)

[BlackRock Metals](#)

[Bushveld Vametco](#)

[Chengde Iron & Steel Group](#)

[Chengde Jianlong Special Steel](#)

[China Iron & Steel Research Institute Group](#)

[Dalian Bolong New Material Co.](#)

[Desheng Steel](#)

[Duferco S.A.](#)

[Evraz NTMK](#)

[Evraz Vanady Tula](#)

[Ferrovan Oy](#)

[Glencore plc](#)

[Largo Resources Ltd.](#)

[New Zealand Steel Ltd.](#)

[Panzhuhua Iron & Steel Group](#)

[PVH Storage](#)

[Queensland Energy & Minerals](#)

[Treibacher Industrie AG](#)

[U308 Corp](#)

[VanadiumCorp](#)

[Vanchem Vanadium Products Pty.](#)

[Wogen Resources Ltd](#)

UPCOMING EVENTS

2nd Symposium on Plate Steels

Orlando, FL USA
3-6 June, 2018

4th Vanitec ESC Meeting

Lausanne, Switzerland
9 July, 2018

International Flow Battery Forum

Lausanne, Switzerland
10-12 July, 2018

95th Vanitec Meeting

London, UK
9-10 October, 2018

Materials Science & Technology (MS&T) 2018

Columbus, OH USA
14-18 October, 2018

Successful 94th Vanitec Meeting held in Brazil

Largo Resources hosted the 94th Vanitec meeting 9-12 April at Renaissance Hotel in Sao Paolo.

More than 50 participants representing over 20 member companies and guests were in attendance for the technical and social gatherings. The event kicked off 9 April with Vanitec Director's Meeting and a casual dinner at the hotel. 10 April was packed with HSE, MDC, and Members' Meeting.

In the meetings members received reports on our ongoing HSE work, full year 2017 stats, our marketing and promotion plans for both VRFB and steel customers, as well as updates on all of our current research efforts.



President of the Vanitec Directors, Duan Xiandong of Pangang reported on the associations' finances and announced several new Vanitec members and targets, reiterating the current strength of our industry. In addition, Directors Wei Hongru of Chengde and Rainer Schmidtmeier of Treibacher were re-elected to new two year terms. To coincide with Mr. Duan's presidency, Pangang will host next years' spring 2019 meeting in China. AMG will host in 2020.

The meetings culminated with Largo hosting the Vanitec Dinner at the Fig Tree Restaurant (Figueira Rubaiyat Restaurant) in Sao Paolo.



Largo Welcomed Vanitec Members to Maracas

Largo Resources hosted Vanitec members for private tour of their Vanadium mine and facility in Maracas, Brazil.

After the official Vanitec meeting, Largo arranged private charter flights and transportation from Sao Paolo to Salvador in route to their facility in Maracas for 40 guests. Again, Mark Smith, president & CEO of Largo Resources, provided a first class experience for all participants.

Once in Maracas, Vanitec members took part in safety briefings followed by an up close tour of the vanadium mine and processing facility in Maracas. Later that evening participants returned to Salvador for dinner. Great job Mark, Paulo Misk, Manoela Oliveira and your entire team!



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Vanitec is a technical and scientific committee (The Vanadium International Technical Committee), which brings together representatives of companies and organisations involved in the mining, processing, manufacture, research and use of

The objective of Vanitec is to promote the use of vanadium bearing materials and thereby to increase the consumption of vanadium across the range of steel, titanium and chemical applications.

Vanitec strives to provide those with a vested interest in Vanadium – users, educators, students, producers – convenient access to research, events, resources and publications regarding Vanadium.