Standards for Analysis of Important Raw Materials in ISO Technical Committee 226

Lorenz Petter Lossius[1], Matthieu Arlettaz[2] and Marcel Schulze[3]
1. Principal Engineer, Hydro Aluminium Metal, Årdal, Norway
2. Chair ISO TC226, R&D Carbon Ltd., Granges, Switzerland
3. Standards Manager, SNV, Winterthur, Switzerland
Corresponding author: Matthieu.Arlettaz@rd-carbon.com

Abstract

ISO/TC 226 is the ISO Technical Committee for "Materials for the production of primary aluminium", with the raw materials alumina, fluorides, anodes, carbon cell lining and carbon binders. In 2021 the stewardship of ISO/TC 226 was transferred from Norway to Switzerland, with Matthieu Arlettaz as new Chair and the SNV (Schweizerische Normen-Vereinigung) as Secretariat. Norway had headed the Secretariat for 16 years and the paper outlines some developments through those years. The main message is how to maintain and improve the standards, and the plans and ambitions of the new leadership of the committee.

The work in TC 226 is done in small, dedicated teams and needed work is mostly routine reapprovals. Sometimes there is a need for modernization as instruments improve or raw materials change and today there is an urgent need for Technical Experts in metal producing companies to support the ISO standards.

Keywords: ISO/TC 226 committee, ISO Standards for materials for primary aluminium production, Alumina standards, Carbon fluorides analysis.

1. The Technical Expert in the ISO World

From the outside, ISO might sometimes seem to be a quite difficult world to enter for a new and interested technical expert due to the specialized terms, the body of formalities and the several stages of ballots needed for revisions. This is unfortunate, as what ISO most of all needs is the totally practical experience of the users. We all use the sampling and analysis standards in TC 226 – the practical ISO business is taken care of by ISO itself. For maintaining and modernizing the standards we already have, we need the analysts with experience.

To a new, participating technical expert we can say that the formalities of ISO work will be handled by an ISO person in your national ISO body like Standards Australia, or Switzerland's SNV, or Standards Norway, DIN or ANSI. This person within ISO is responsible for the ISO/TC226 formalities on behalf of your country and the role of you, technical expert, will be to receive a draft, to review or revise as needed, adding comments from your experiences, and to return this to the technical expert who is responsible for the standard review or revision and who will collate and prepare for balloting.

At this stage it is worthwhile to list the material working groups, and in ISO/TC226, the material Working Groups (WGs) are as shown in Table 1.

Table 1. Material Working Groups in ISO/TC226.

ISO/TC226/WG 1	Carbonaceous binders, including pitch
ISO/TC226/WG 2	Cathodes and ramming paste
ISO/TC226/WG 3	Smelter grade alumina
ISO/TC226/WG 4	Smelter grade fluorides
ISO/TC226/WG 6	Anodes and coke

As can be seen, these are materials where the material quality is of critical importance for the metal production.

1.1 Information About ISO at the ISO Homepage

Everyone has a general idea about what standards are, and what ISO is. Go to iso.org for general pages, then to the next link here for a page with information on the different technical committees (this is a https page, but only the text is shown so as to not have live links in the paper).

www.iso.org/technical-committees.html

1.2 Information About ISO/TC226 on the ISO Website

Go here specifically for ISO/TC226 (this is also a https page)

www.iso.org/committee/363319.html

Figure 2. ABOUT ISO/TC226 (from iso.org).

Referring to Figure 2, the TPM and TPM managers sit in Geneva, at the ISO Central Secretariat. Mr. Marcel Schulze is Committee Manager or Secretary, and is with SNV, sitting in Winterthur, Switzerland. The Chair Matthieu Arlettaz represents SNV and R&D Carbon Ltd.

The site has information on the:

- 102 PUBLISHED ISO STANDARDS under the direct responsibility of ISO/TC226
- 2 ISO STANDARDS UNDER DEVELOPMENT
- 11 PARTICIPATING MEMBERS
- 14 OBSERVING MEMBERS

4. Conclusions

The work in TC 226 is done by small, dedicated teams and the work needed is mainly routine re-approvals. Occasionally, upgrading is necessary due to improved instrumentation or changes in raw materials. It is important that observer members become participants. And it is important that metal producing companies support ISO standard work with technical experts. There is an urgent need for technical experts to enable ISO to supporting technical and trade specifications.

Acknowledgement

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5. References

1. Raymond Brown, Jean-Claude Fischer, Xujin Xue, Lin Wu, Andreas Schnittker, Nigel Turner, Harald A. Øye, Lorentz Petter Lossius, Standard development work in ISO Technical Committee 226 “Materials for the Production of Primary Aluminium”, *Light Metals* 2015, 715-720.