Newsletter on ISO Standards in Powder Metallurgy

Welcome to the first newsletter from ISO TC119 related to powder metallurgy.

The purpose of this newsletter is to spread the information about activities of the technical committee ISO TC119 which has the responsibility to work out global standards to be used by companies with business in the field of powder metallurgy.
Another purpose of this newsletter is to invite any person or company to give input to the activities of TC119 either by comments to ongoing activities or by proposing new activities such as a new standard as well as modifications of existing standards. Please find contact information at the end of this newsletter.

It has been agreed with a number of Industry Associations to include these newsletters to their respective home pages with the objective to reach the global powder metallurgy community.

In this newsletter you will find the following parts:

1) Why ISO standards are important
2) A summary of the plenary meeting of ISO TC119 held in Madrid on October 13-14, 2011
3) Short information on organisation and responsibilities
4) Information on members and contacts of ISO TC119

Why ISO standards are important

Powder metallurgy is a rather young industrial technology. The first local industries were started mid last century. During the next 30-40 years business expanded primarily within the continents and since the last decade the rate of expansion has accelerated and today the business is truly global.

This global business requires new modern tools to support further growth and sharpening of the weapons to compete with other manufacturing technologies.
In this context ISO standards supports confidence in powder metallurgy and guides end users, often with global presence, to make the right choice to use components and solutions based on metal powder.

With representation in 162 countries International Standards Organisation is a truly global organisation and industries with presence in these countries can rely on the same ISO standard. This simplifies communication not only between customer and supplier but also between local subsidiaries of large industrial groups.

Summary of the plenary meeting of ISO TC119 held in Madrid on October 13-14, 2011

Five member countries participated with 18 persons representing Japan, USA, Germany, Spain and Sweden.

If you want to give input to any of the listed highlights below or any other issue related to ISO standards you are welcome to contact the responsible persons for the highlights, secretaries or chairmen. You can also contact the national ISO office in your country.

Some highlights from the meeting:

- *Specification of sintered metal materials (Standard ISO 5755)*
A new final draft of this standard extended with more than 10 new materials has been worked out and will be sent to ISO members for voting. The plan is to have the new standard ready for publishing spring 2012.

- *Specification of MIM materials (Standard ISO 22068)*
A final draft of this new standard has been worked out and will be sent to ISO members for voting. The plan is to have the new standard ready for publishing spring 2012.

-*Porous filter materials*
A working group will be formed to make recommendations for the development of a material standard for porous filter materials.
Responsible: Spain (Jesus Penafiel) and Germany (Klaus Dollmeier)

- *Determination of density (Standard ISO 2738)*
For the purpose of updating the existing standard investigations will be conducted to compare the reproducibility using different methods to seal the metal surface: with oil, paraffin wax, petroleum jelly and coal tar.
Responsible: Klaus Dollmeier

- *Testing criteria for PM gears*
The possibility to develop a new standard for testing criteria of PM gears was discussed. I.e. pitting and tooth root fatigue. It was decided to have as a first step a review of the existing standards on gears.
The review will be made by experts and the activity to be coordinated by Klaus Dollmeier and Jan Tengzelius.

- *Determination of compressive yield strength (Standard ISO 14317)*
A proposal for revision of this standard was put forward. It was decided to start a project with the objective to evaluate the proposed changes with the purpose to decide whether or not to make a revision.
Responsible: Brian James.

- *Seminar/Work shop on test methods for ejection characteristic.*
The possibility to work out a standard on test methods for ejection characteristics of PM compacts was discussed. Many different methods are used today but comparison between methods is not relevant. It was concluded that ejection characteristics are of great importance for efficient compaction of PM parts and quality of surfaces a united method should be useful.

It was decided to try to arrange a seminar/work shop in conjunction with the World PM Congress in Yokohama October 2012.
Responsible: Japan

- *Hall and Gustafsson flow measurements (ongoing working group project)*
Flow measurements using Hall flow-meter is not possible for many powder mixes used today. For this reason a new flow-meter design has been developed and tested by round robin tests including 16 different laboratories. The new design avoids “ratholes” and can be used also for powder mixes not possible to measure by the Hall method. The new method is named “Gustafsson method”.
Before finalizing a draft for a standard a guideline for the use of different funnel designs shall be worked out.
Responsible: Mats Larsson

- *Vocabulary (Standard ISO 3252:1999)*
Since the publication of this standard on powder metallurgy vocabulary in 1999 new terms related to the development which has taken place within powder metallurgy are being used. In order to specify the meaning of these new terms it would be valuable to update this standard. Jan Tengzelius agreed to try to engage an expert to extend the present vocabulary list with new terms.

Short information on organisation and responsibilities

Sweden holds the secretariat of TC119 and the secretary is Sanna Edlund.
Chairman is Jan Tengzelius
The technical committee ISO TC119 has four subcommittees covering the following areas:
SC2: Sampling and testing methods for powders.
Secretariat Sweden. Chairman Mats Larsson
SC3: Sampling and testing methods for sintered metal materials.
Secretariat Germany. Chairman Klaus Dollmeier
SC4: Sampling and testing methods for hardmetals.
Secretariat Germany. Chairman. Henk van den Berg.
SC5: Specifications for powder metallurgical materials (excluding hardmetals).
Secretariat USA. Chairman Joseph Tauber

Information on members and contacts of ISO TC119

Further information about ISO TC119 is found on the home page of ISO (www.iso.org/iso/standards_development). On this page a list of all technical committees is available. Just click on technical committee 119.
There you find information about the organisation, member countries, voting procedures, ongoing working groups and contact information to secretaries and chairmen.

I hope you have found this newsletter of interest. If you have any questions or comments, please do not hesitate to contact any of the delegates of TC119.

Yours sincerely

Jan Tengzelius, Chairman of ISO TC119