## **Standards Topics**



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## Report on ISO/TC 107 Meetings At SUR/FIN<sup>®</sup> '95 & NIST

The working groups of ISO/TC 107/SC 1, SC 2 and SC 3 met in Baltimore during the AESF SUR/FIN<sup>®</sup> '95 meeting. The highlights of these meetings follow.

ISO/TC 107/SC 3/WG 1, on Autocatalytic Nickel, met on June 26 under the chairmanship of convener Phil Stapleton with seven delegates in attendance. Comments to document TC 107/SC3/WG 1 N 19, proposed revision to ISO 4527 [Autocatalytic (Electroless) nickel-phosphorus specification and test methods], were discussed.

The written comments of Japan were accepted in principle. These and other changes agreed at the meeting will be incorporated into a revised document and distributed to the working group (WG) for written comments. The comments will be addressed at an SC 3/WG 1 meeting to be held November 6 in Norfolk, VA, in conjunction with the Fall ASTM B08 meeting. A finalized Working Draft will be forwarded to TC 107/SC 3 for discussion at the TC 107/SC 3 meeting in Berlin in June of 1996.

ISO/TC 107/SC 2/WG 1, on Microhardness, met on June 27 under the chairmanship of convener Chris Johnson with nine delegates in attendance. Delegates from Australia, Germany, United Kingdom and the U.S. participated. Document TC 107/ SC 2/WG 1 N 21, proposed revision of ISO 4516, Vickers and Knoop Microhardness Test, was considered by the WG. Following the inclusion of technical and editorial corrections decided at the meeting, the document will be forwarded to TC 107/ SC 2 for balloting as WD 4516. The WG also discussed Document TC 107/SC 2/WG 1 N 22 on Dynamic Microindentation Testing. The WG agreed to meet again in Berlin in June of 1996.

ISO/TC 107/SC 1/WG 1, on Revision of ISO 2079 and 2080, Surface Treatment and Coatings-Vocabulary, met on June 27 and 28 under the chairmanship of convener Rhodes W. Polleys, with 10 delegates in attendance. The WG considered and revised TC 107/SC 1/WG 1 N 1, which contained 58 pages of terms. It also agreed to integrate into the revised document the terms contained in ISO 2079, the submissions from CEN contained in N 3, the porcelain and vitreous enamel terms from ASTM B 08 contained in N 4. and the hydrogen embrittlement terms in N 5. The revised document will be distributed to Working Group members for comment and discussion at a WG meeting in Berlin in June 1996.

ISO/TC 107/SC 3/WG 3, on Hydrogen De-embrittlement, met on June 29 under the Chairmanship of A. W. Grobin, Jr. with four delegates in attendance. The WG reviewed the editorial comments received from Belgium, Italy and Japan on DIS 10587 (test for residual embrittlement in metallic-coated, externally threaded articles, fasteners and rods-inclined wedge method), and accepted them. Review was made of the negative comments received from Germany, France and Switzerland, which were not accepted. It was agreed, however, that work on a revision should be started immediately to try to make changes that would satisfy the negative comments and still be consistent with the needs of the other users.

## Meetings at NIST

On Saturday, July 1, the meetings venue was transferred to the National Institute of Standards and Technology (NIST) at Gaithersburg. On Sunday night a reception was held for the delegates attending the WG meetings in Baltimore, and the delegates arriving for the TC 107 Subcommittee meetings in Gaithersburg.

The meetings convened at 9:30 a.m. on July 3, in Conference Room A at NIST. The Secretariat introduced Dr. Belinda Collins, director of the Office of Standards Services at NIST, who welcomed the delegates on behalf of NIST and the United States Department of Commerce.

ISO/TC 107/SC 3, on Electrodeposited Coatings and Related Finishes, (Secretariat ANSI/ASTM) convened with Jim Menturweck (Enthone-OMI, U.S.) as chairman and Allen W. Grobin, Jr. (Grobin Associates, U.S.), secretary.

Participating in the meeting were 22 delegates from Australia, Poland, South Africa, Sweden, United Kingdom and the U.S.. Countries not sending delegations to this meeting participated by written comment.

The revision to ISO 4525, Electroplated Coatings of Nickel plus Chromium on Plastics Materials, TC 107/SC 3 N 450, was discussed. It was agreed that the STEP Test, ASTM B 764, needed to be included in the document. The U.S. was requested to submit the STEP test as a new work item for the TC 107 work program.

The revisions to ISO 2081, Electroplated Coatings of Zinc, and ISO 2082, Electroplated Coatings of Cadmium, were discussed. It was agreed that further comments to the documents would be accepted until September 1, at which time a revision would be circulated.

Two new work items were reported as accepted. The first item, mechanically deposited coatings of tin, based on the French standard, was assigned to WG 5. The second item, autocatalytic copper plating, was assigned to WG 4 on EMI Shielding Coatings. It was agreed to have WG 2 prepare a revision to ISO 1456, Electroplated Coatings of Nickel plus Chromium, and of Copper plus Nickel plus Chromium and ISO 1458, Electroplated Coatings of Nickel, to include the STEP test, and stress and hydrogen embrittlement relief treatments.

It was agreed to replace ISO 4522-3 and ISO 4524-6 with a general document entitled, "Test Methods for the Determination of the Presence of Residual Processing Salts."

It was agreed to have WG 2 prepare a revision to ISO 4526, Electroplated Coatings of Nickel for Engineering Purposes, to include stress and hydrogen embrittlement relief treatments. It was also agreed that a new work item proposal be submitted by the U.S. for electroforming with nickel and copper.

It was also agreed to have WG 2 prepare a revision to ISO 6158, Electroplated Coatings of Chromium for Engineering Purposes, to include stress and hydrogen embrittlement relief treatments.

It was agreed to withdraw ISO 4522-1 and 4522-2 after incorporating the tests into ISO 4521, Electrodeposited Silver and Silver Alloy Coatings. It was also agreed to withdraw ISO 4524-1, 4524-4 and 4524-5 after incorporating the tests into ISO 4523, Electroplated Coatings of Gold and Gold Alloys.

Lastly, it was agreed to formally establish a liaison with CEN/TC 262/ SC 1, Corrosion Protection of Metallic Materials—Coatings, in order to implement the Vienna Agreement of Cooperation.

On Tuesday the 4th of July, the delegates were hosted to a buffet dinner aboard the Spirit of Washington, with a front-row view of the national fireworks display.

ISO/TC 107/SC 2, on Inspection and Coordination of Test Methods, (Secretariat BSI) met on July 5 with Kenneth P. Carvalho (Retired, UK) as chairman, and Sheila C. James (British Standards Institution), secretary, with 20 delegates in attendance. The report from WG 1 was accepted and a revised CD 4516, Vickers and Knoop Microhardness Test, will be distributed for comment and voting.

The draft revision to ISO 3613, Chromate Conversion Coatings on Zinc and Cadmium Test Methods,



Allen Grobin, Jr., Secretariat TC 107/SC 3, addresses delegates at the June meeting. Others shown (L-R) are Dorota Hitczenko of Poland, and James Menturweck, U.S., chairman of TC 107/SC 3.

was discussed. The project leader, Dr. Paul Ray, will revise the document as agreed at the meeting, for distribution for comment and voting as CD 3613.

The report and recommendations by TC 107/SC 3/WG 3 on comments received to DIS 10587, Test for Residual Embrittlement in Metalliccoated, Externally Threaded Articles, Fasteners and Rods—Inclined Wedge Method, were accepted. The DIS, editorially amended, will be sent forward for publication. The WG will prepare a revision to take into account technical comments and suggestions not accepted for this edition.

Two new documents will be undertaken by the subcommittee, Guide for Selection of Sampling Plans, and Variables Sampling of Metallic and Inorganic Coatings. The U.S. will prepare working drafts for discussion at the next meeting in Berlin during June of 1996.

The secretary reported that the revision to ISO 2177, Measurement of Coating Thickness—Coulometric Method, was being sent forward as a DIS for voting. The revision to ISO 3892, Conversion Coatings on Metallic Materials—Determination of Coating Mass per Unit Area-Gravimetric Method, was being sent forward for DIS voting and for parallel voting in CEN under the Vienna Agreement. A revision to DIS 10111, Measurement of Mass per Unit Area-Review of Gravimetric and Chemical Analysis Methods, was being sent forward for voting.

ISO/TC 107/SC 4, on Hot-dip Coatings (galvanized, etc.) (Secretariat BSI/GA) met on July 6, with Dr. Frank Porter (consultant, UK) as chairman and William Smith (Galvanizers Association, UK), secretary, with 14 delegates in attendance.

It was agreed to set up a formal liaison with subcommittee 5 on thermal spraying for areas of mutual interest. It was also agreed to set up a liaison with TC 156/SC 4 on Corrosion of Metals.

Discussion on the amount of uncoated area requiring renovation resulted in a compromise that the minimum area is to be 10 cm<sup>2</sup> in the revision of CD 1461.3. It was further agreed that the revision of CD 1461 is being done jointly with CEN under the Vienna Agreement with a CEN lead, and that the CD is suitable to go forward as a DIS.

It was agreed that the preparation of NP 14713, "Guide for Protective Metal Coatings on Iron and Steel in Structures" is being jointly prepared with CEN TC 262/SC 1 under the Vienna Agreement with a CEN lead, and that CD 14713 is suitable to go forward as a DIS.

ISO/TC 107/SC 7, on corrosion tests, (Secretariat PKN/IMP) met on July 6 with James Menturweck (U.S.) as acting chairman and Dorota Hitczenko (Institute of Precision Mechanics, Poland), secretary, with 18 delegates in attendance. The subcommittee acknowledged, with grateful thanks, the many years of dedicated service by Professor Tadeusz Biestek and Dr. Ardrzej Kozlowski.

The comments to DIS 10289, ratings of Test Specimens and Manufactured Articles Subjected to Corrosion Tests, were discussed and it was agreed to accept the technical comments of the U.S. and to submit a second DIS to ballot. James Long of



Boris B. Joffe, left, and James Long, both of the U.S., at one of the TC 107 working sessions.

the U.S. was to prepare the revision by the end of August.

WD 4524-2, Test Methods for Electrodeposited Gold and Gold Alloy Coatings—Environmental Tests, was discussed. It was agreed that the U.S. will prepare a second draft by the end of December, taking into account the comments received. WD 14647, Determination of Porosity in Gold Coatings on Metal Substrates—Nitric Acid Vapor Test, was discussed. It was agreed that Dr. Simeon Krumbein of the U.S. and Lena Trangteg of Sweden will directly communicate to resolve their positions on clauses 5.5 and 9.1 of Document TC 107/SC 7 N 366 by the end of October. Following the resolution of these issues, a second draft of the document will be prepared by the U.S. by the end of December.

ISO/TC 107/SC 8, on Chemical Conversion Coatings, (Secretariat BSI) met on July 7 with Alan J. Koch (Brent International, UK) as chairman and Sheila C. James (British Standards Institution), secretary, with 16 delegates in attendance. The comments on DIS 11408 were discussed, and it was agreed to prepare a second DIS. The U.S. agreed to supply copies of relevant national standards to provide supporting data.

The U.S. was also requested to submit a new work item based on the draft ASTM standard for conversion coatings on magnesium.

A formal dinner for the delegates and their spouses was held on Thursday evening at a country inn. The delegates were welcomed on behalf of AESF by Ted Witt, CEF, executive director of AESF and by B.J. Mason, past president of AESF. They were also welcomed on behalf of ANSI (American National Standards Institute) by Henrietta Scully, and on behalf of ASTM by Nancy M. Trahey, past chairman. A welcome was also extended by Bryan Lyons of the American Welding Society, and Daniel Smith, staff manager of ASTM Committee B 08.

ISO/TC 107, on metallic and other inorganic coatings (Secretariat ANSI/ AESF) met on the afternoon of July 7, with Boris B. Joffe (consultant, U.S.) as chairman and Allen W. Grobin, Jr. (American Electroplaters and Surface Finishers Society), secretary, with 18 delegates in attendance.

The report of the Secretariat as amended, and the reports of the subcommittees were accepted as written. It was agreed to establish formal liaison with CEN TC 262/SC 1, CEN TC/240 AND CEN TC/139.

Offers to host the meetings of TC 107 and its subcommittees were received from Germany for 1996, Switzerland for 1997 and Portugal for 1998. The offers were accepted.

The committee authorized the Secretariat to determine the needs of the surface finishing community with regard to surface preparation and to report that information for discussion at the next meeting, to be held in Berlin in June of 1996.

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