# Working toward the international standardization of dental magnetic attachments

# - Commission report of the ISO Corresponding Committee in 2011 -

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#### Introduction

The international standardization of dental magnetic attachments has been continued for over six years since "Development and standardization of the dental magnetic attachment" supported by the NEDO grant was started in 2005. After NWIP (New Work Item Proposal) was presented in ISO/TC 106/SC2 in 2007 (Berlin meeting), a Japanese draft established by "The Magnetic attachment standardization committee (The ISO corresponding committee in JSMAD)" was approved as WD 13017 (Working draft) in 2008 (ISO/ TC 106 Goteborg meeting). WD 13017



was revised to DIS 13017 (Draft of International Standard) in Jun, 2011 through CD 13017 (Committee Draft) in ISO/TC 106 Rio de Janeiro meeting in 2010.

Our activities in ISO/ TC 106 Phoenix meeting in 2011 are reported and you can know progress in ISO/ DIS 13017, here.

## Working goal in 2011

The Magnetic attachment standardization committee set up the following targets.

- 1) In ISO/ TC 106 Phoenix meeting which will be held in September, 2011, we get acceptance of revised DIS 13017 and that of its FDIS voting.
- 2) We improve jigs used for measuring retentive force in order to standardize measurement methods and the jigs for the retentive force in detail before long.



Fig. 1 Members of the magnetic attachment standardization committee

#### **Activities**

DIS 13017 came into existence by DIS voting for CD 13017 in Jun, 2011 without a dissenting vote. (Fig.2).

Ballot Information			
Reference	ISO/DIS 13017	Committee	ISO/TC 106/SC 2
Edition number	1		
English title	Dentistry Magnetic attachments		
French title	Médecine bucco-dentaire Attaches dentaires magnétiques		
Start date	2011-01-20	End date	2011-06-20
Opened by ISO/CS on	2011-01-20 00:13:38	Closed by ISO/CS on	2011-08-22 00:14:54
Status	Closed		
Voting stage	Enquiry	Version number	1
Note	This DIS has become ISO VA Lead - parallel enquiry has been launched with CMC - ISO files have been corrected - ISOCS 2011-02-01		
Vienna agreement	ISO lead	CEN ballot type	CEN Enquiry Ballot
CEN reference	prEN ISO 13017	CEN committee	CEN/TC 55

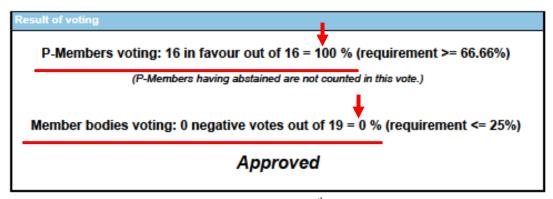


Fig.2 The result of DIS voting in 20<sup>th</sup> Jun, 2011

The first meeting of the magnetic attachment standardization committee was held in July, 2011 in Tokyo, and we set the working goal in 2011. In order to promote DIS 13017 to FDIS 13017, we discussed answers to comments from P-member countries such as introduction, material compositions, hazardous elements, and biocompatibility. After that, we revised the DIS 13017, and convener of WG 22, Dr. H. Mizutani who was our committee member sent new revised DIS 13017 to experts of P-member countries.

After ISO/ TC 106 Phoenix meeting held in September, 2011, the second meeting of the committee was held in Tokyo in November, 2011. The chairman of the committee reported the details of SC2/ WG 22 meeting. The convener of WG 22 also revealed that the revised DIS 13017 was approved and that FDIS voting for the DIS 13017 was determined next year (in 2012) in plenary of TC 106.

We also discussed improvements of jigs used for measuring retentive force with respect to friction of a liner motion bearing and addition of an X-Y stage for specimens.

## ISO/TC 106 Phoenix meeting

Five members of the magnetic attachment standardization committee, Dr. H. Mizutani (convener), Dr. Y. Takada (expert), Dr. Y. Nakamura (expert assistant), Dr. Kent T. Ochiai (convener assistant),

and Dr. H. Sasaki (obsever) attended the ISO/TC 106 Phoenix meeting. Reception banquet was given on 18<sup>th</sup> September by host country (U.S.A.) in Pointe Hilton Tapatio Cliffs Resort. (Figs.3 and 4)





Fig.3 Pointe Hilton Tapatio Cliffs Resort

Fig.4 Reception banquet

The five members made an effort to success SC 2/ WG 22 meeting till all hours of the night. (Fig.5) SC 2/ WG 22 meeting was held on 19<sup>th</sup> September at the same place. (Fig.6) The revised DIS 13017 was approved and FDIS voting for the DIS 13017 was determined next year (in 2012) in the meeting. The short minutes of the meeting was partially shown in Fig.7.





Fig.5 Small hours on previous day of the meeting

Fig.6 SC 2/WG 22 meeting

There was discussion on the revised DIS 13017 "Dentistry – Magnetic attachments". Each of the comments that were received from the different voting countries were reviewed and accepted or modified according to the consensus of the group. The "Introduction" and "Scope" of the document were revised and accepted by the group. It was resolved that the revised DIS be sent to the secretary of SC2 for circulation as a FDIS. It was further resolved that a half day meeting be held next year in subcommittee 2.

Fig.7 A part of the short minutes of the meeting

### Improvement of the jig

The committee continuously develops a pilot model of the jig, which can measure the retentive force with excellent accuracy and reproducibility because of the preparation for ISO/ TC 106 Paris meeting in 2012. (Fig.8)

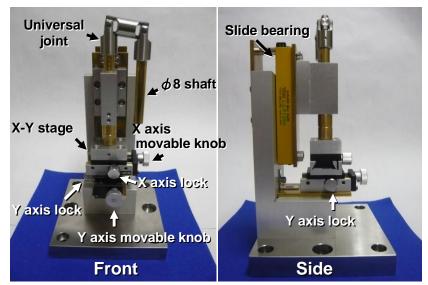


Fig.8 A pilot model of the Jig equipped with an X-Y stage and a new slide bearing

## **Future prospects**

The members of the Magnetic Attachment Standardization Committee are looking forward to a voting result of FDIS (Final Draft of International standard) in this year. If FDIS 13017 is carried in the voting, ISO 13017 (ISO standard of "Dentistry-Magnetic attachments") will come into the world in this year. In preparation for ISO/ TC 106 Paris meeting in 2012, the members make a challenge to a new standardization of measurement methods and the jig for the retentive force in magnetic attachments, now. The members' activity already allows obtaining the souped-up jig for measuring retentive force.

To readers,

We will do our utmost to live up to your expectations!

From all members of the Magnetic Attachment Standardization Committee (The ISO corresponding committee in JSMAD)