

JSA's Director General Visits North American SDOs

From July 12 through July 27, Dr. Shogo Sakakura, Director General of the Japanese Standards Association (JSA), conducted talks with Standards Development Organizations of Mexico, the United States, and Canada. He traveled first to Mexico, where he met on July 12 with representatives of The Instituto Mexicano de Normalización y Certificación (IMNC) in Cuahtemoc, Distrito Federal. Proceeding to Canada, he met on July 15, with representatives of the Canadian Standards Association (CSA) in Mississauga, Ontario, and on July 16, in Ottawa with representatives of the Standards Council of Canada (SCC). In the US, he met with representatives of four SDOs between July 17 and July 26: the American National Standards Institute (ANSI), the American Society of Mechanical Engineers (ASME), the American Society for Testing and Materials (ASTM), and the Institute of Electrical and Electronics Engineers (IEEE).

The purpose of Sakakura's visits was to exchange views on a wide range of topics of mutual interest and to discuss possibilities of cooperation on each. Discussions covered sales of standards, cooperative documentation, analysis of influence of web-based sales, joint standards development, new QMS, information security management systems, e-learning, and related matters. The emphasis placed on each of

these topics differed according to the various SDOs' needs.

Discussion at each meeting was wide-ranging, frank, and highly fruitful. ANSI, IEEE, ASTM, ASME, and IMNC expressed interest in cooperating on mutual standards sales. ANSI, IEEE, and ASME expressed interest in cooperative documentation; cooperation toward publication of such documentation will move forward. All the SDOs view web-based sales positively, with each responding somewhat differently to the problem of illegal reproduction. Further information on means of expanding electronic sales is needed. Concerning joint standard development, IEEE, ASTM, and ASME expressed interest. Display of "double logos" for Japanese Industrial Standards and counterpart SDO standards is desired. However, with the exception of IEEE's interest in Japan's Universal Access project (for stakeholders such as the elderly), full joint development is less likely than mutual translation of counterpart SDO standards. SCC, CSA, ANSI, and ASME expressed interest in new QMS supplementary to ISO 9000, and concern over reactions of industry. As a next step, Japan will provide further information on this topic. CSA and JSA will exchange further information on information security systems. Widespread interest exists in moving forward on e-learning.

Cooperation has gone furthest, however, between JSA and IMNC. We are currently working out a Cooperation Arrangement Draft covering a wide array of cooperative activities. We expect that the Draft will be completed by the end of the calendar year.

Dr. Sakakura's whirlwind tour may have left him somewhat fatigued, but it has energized us for the work of strengthening our cooperation with the vibrant SDOs of North America.

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Announcement of JIS formulation for Ecocement and TR for Melted Slag

On July 20, the Ministry of Economy, Trade and Industry established a JIS (Japanese Industrial Standard) for Ecocement, which consists primarily of ash from incinerated municipal waste, and also officially announced a TR (Technical Report) on Melted Slag Aggregate, which consists of melted and solidified household waste, sewage sludge, etc. (A TR can be thought of as a quasi-JIS, providing up-to-the-minute data regarding the specifications of new technologies in development, and may be adopted as a JIS three years later provided all concerned parties agree.)

Japanese Standards Association published the JIS and the TR on July 31.

1. Ecocement is a new kind of cement made by mixing the ash of incinerated municipal waste and sewage sludge together with raw materials used in conventional cement. Researched and developed through the cooperation of both public and private institutions, it is positioned to become a powerful method for the effective utilization of waste as a construction material. Many local governments and other organizations have called for standardization of Ecocement use, in light of needs to alleviate the pressures of waste disposal as well as to prevent environmental destruction.

Ecocement is eco-safe because the incineration process, which occurs at temperatures above 1300°C, converts hazardous substances found in incineration ash, such as dioxins, into harmless substances, as well as allows for the recovery of hazardous metals such as lead as chlorides.

2. Melted slag is prepared by melting and solidifying ash generated from incineration facilities for household waste and other waste materials. Melted slag is then utilized as melted slag aggregate for road construction or fine melted slag aggregate for concrete. In recent years, local governments have urgently sought out ways to utilize melted slag in public construction projects, thus it has become necessary to establish reliable utilization methods for the newly developed melted slag and to encourage the spread of the new waste disposal technology. In many local governments such as Tokyo, Chiba, and Mie, the departments in charge of environmental issues have pressed the Ministry to establish quality standards for melted slag utilization.

3. In April of this year, the Ministry of Economy, Trade and Industry disclosed details regarding the establishment of JISs for both Ecocement and melted slag in the "Action program for promotion of constitution of environmental JIS." The establishment of a JIS for Ecocement and the TR regarding melted slag are forerunners in their field. In addition, local governments beset by serious waste disposal problems will be greatly aided by the clarification these quality standards provide.

(Reference) Outline of provisions

JIS R 5214 Ecocement

This provision provides details related to quality, raw materials, production method, test method, examination, display, report items, etc., for Ecocement, which is a type of cement made of recycled materials. The primary material used for Ecocement clinker is the ash of incinerated municipal waste, the disposal of which burdens cities; if necessary, other wastes such as sewage sludge are used as secondary ingredients in Ecocement.

TR A 0016

Melt-Solidified fine aggregate for concrete derived from municipal solid waste and sewage sludge (Molten slag fine aggregate for concrete)

This technical report (TR) provides details regarding quality, test method, examination method, display, range of applications for concrete and reporting of fine aggregate used in concrete and prepared using melted and solidified substances of household waste and sewage sludge.

TR A 0017

General waste and sewage sludge etc. melt-solidified products derived aggregate for road construction (Molten slag aggregate for road construction)

This technical report (TR) provides details regarding the kind, classification and name, quality, test method, examination, display, and report items concerning melted and solidified aggregate used as road foundation and as bottoming for heated asphalt mixture.

JSA Web Store is now open.

JSA Web Store is a search/buy site of JIS standards and JSA publications.

URL: <http://www.jsa.or.jp/>

QMS Standard (Guidelines for Sustainable Development and Self-Assessment)

In December 2000, ISO 9001 and ISO 9004 were published by ISO, followed by the establishment and publication of JIS Q 9001 and JIS Q 9004. In Japan, as of December 2001 more than 27,000 certifications are based on ISO 9001/9002/9003.

ISO9004 (JIS Q 9004), on the other hand, is widely considered to be a mere guideline meant to supplement ISO 9001 (JIS Q 9001), even though this was not the originally intended purpose. As a result, ISO 9004 is regarded in many quarters as not having contributed enough to improving organizational competitiveness and performance.

We conducted a survey investigating the need for new quality management system standards (QMS) to supplement the ISO 9000 families of standards. Our survey identified a need to develop standards on QMS and supporting-techniques that encompass TQM techniques developed in Japan, as well as a need to assist organizations in realization of sustainable growth while responding to changing business.

TR XXXX (Quality Management Systems - Guidelines for Sustainable Growth) and TR YYYY (Quality Management Systems - Guidelines for Self-Assessment) have been developed based on our survey of public needs.

Overview of standards

TR XXXX focuses on improving QMS's effectiveness, efficiency, and innovation/learning in meeting the demands, needs, and expectations of customers, personnel, and other interested parties. This standard is intended to complement JIS Q 9001 and provide guidelines for a QMS that deals with creating customer value and social value, knowledge creation, learning and innovation. This standard can be used as guidelines that extend beyond the requirements specified in JIS Q 9001 to aid organizations in realizing sustainable growth.

TR XXXX is intended to serve as a guideline to help organizations promptly adapt themselves to rapidly changing business environments, while effectively and efficiently improving performance to ensure sustainable growth. This standard applies to all organization, regardless of the type, size and product provided. Rewrite as... "In addition to understanding internal and external environmental conditions, there are four essential keys to improving an organization's performance. First, it is vitally important that an organization comprehend its own current status to identify its strong

and weak points. Second, it must identify priority domains and elements in its QMS. Third, QMS must be constructed with the continued improvement of product quality in mind. And last, QMS must be continually improved. In line with these four essential keys, TR XXXX provides the concept of a "learning organization" equipped with the ability to continue the learning process and evolve its QMS to response to a rapidly changing environment.

Moreover, TR XXXX introduces the concept of self-assessment to stimulate organizations to transform themselves by objectively reflecting on their established practices and realizing their individual needs for strategy and innovation. TR YYYY is used to implement self-assessment.

TR YYYY is a self-assessment guideline, and is intended to help organizations improve their QMS and nurture organizational innovations through an understanding of their strong and weak points to identify domains requiring improvement.

TR YYYY specifies that an organization must first understand its current status, then must create assessment items, assessment criteria, and classify the weight of each item for self-assessment. TR YYYY introduces the concept of an "organization's maturity level" as a basis to assess the performance levels of an organization. The degree of maturity is classified into five levels. For example, the acquisition of ISO 9001 certification corresponds to level 2. Level 5 indicates optimal practices adopted by an organization to flexibly respond to rapidly changing internal and external environmental conditions.

The two aforementioned standards are designed to serve independently as QMS standards, but can also be used as complementary and consistent elements reflecting the same basic QMS principles. Both standards are also intended for combined use with JIS Q XXXX, JIS Q YYYY, and JIS Q ZZZZ as tools for the sustainable growth of organizations.

Future Move

TR XXXX (Quality Management Systems - Guidelines for Sustainable Growth) and TR YYYY (Quality Management Systems - Guidelines for Self-Assessment) will be published as a TR in 2003, and will be subject to necessary revision based upon the opinions of those concerned. Finally, both standards will be proposed as the next revised edition of ISO 9004 to ISO/TC 176.

In December 2000, ISO 9001 and ISO 9004 were published by ISO, followed by the establishment and publication of JIS Q 9001 and JIS Q 9004. In Japan, as of December 2001 more than 27,000 certifications are based on ISO 9001/9002/9003.

ISO 9004 (JIS Q 9004), on the other hand, is widely considered to be a mere guideline meant to supplement ISO 9001 (JIS Q 9001), even though this was not the originally intended purpose. As a result, ISO 9004 is regarded in many quarters as not having contributed enough to improving organizational competitiveness and performance.

We conducted a survey investigating the need for new quality management system standards (QMS) to supplement the ISO 9000 families of standards. Our survey identified an urgent need to develop standards on QMS and supporting techniques that encompass TQM techniques developed in Japan, as well as a need to assist organizations in realization of sustainable development while responding to changing business environment.

Based on the needs identified by our survey, JIS Q XXXX (Improved Performance in Management Systems - Guidelines for Management by Policy), JIS Q YYYY (Improved Performance in Management Systems - Guidelines for Procedures and Techniques for Continual Improvement), and JIS Q ZZZZ (Improved Performance in Management Systems - Guidelines for Quality Function Deployment (QFD)) have been developed.

Overview of standards

JIS Q XXXX, JIS Q YYYY, and JIS Q ZZZZ specify supporting techniques that have been developed in Japan. Organizations can use these standards to coordinate management systems effectively and efficiently in compliance with JIS Q9001 and JIS Q9004.

Focusing on policy-driven management, JIS Q XXXX serves as a guideline for quality management as well as for any issues related to management. Clauses 5 (Formulation of long/mid-term management plan) to 9 (Review of implementation status of policy and embodiment in next term policy) give detailed descriptions of each item to clarify the overall process of policy-driven management.

JIS Q YYYY serves as a guideline for procedures and supporting techniques used to manage an organization's activities when the organization moves forward with continual improvement. JIS Q YYYY describes the

basic philosophy behind continual improvement and prescribes how to coordinate and implement management systems. The standard also provides objectives and procedures for using the main techniques. While procedures for continual improvement focus on problem-solving types, the general idea of project-achieving procedures are also included in the standard, thus enabling the standard to be used for both types of improvement. The topics of some clauses are as follows: Clause 4 (Basic concept) describes the basic philosophy of and process for continual improvement; Clause 5 (Management of continual improvement) covers organizational systems; Clause 6 (Procedures for continual improvement) covers procedures for continual improvement based on QC story and 6Sigma, etc.; and Clause 7 (Techniques for continual improvement) details major techniques for continual improvement.

The guidelines provided by JIS Q ZZZZ allow organizations to analyze customer demands according to product quality characteristics, product components, and process components, thus allowing organizations to effectively embody customer demands in a product. It also provides guidelines to help organizations identify major practices and functions in assuring product quality. The topics in some clauses are as follows: Clause 4 (Basic concept) covers principles and axioms; Clause 5 (Quality chart) details important concepts; Clause 6 (Quality function deployment) covers a variety of deployment such as quality, technology, and job; Clause 7 (Guidance for application) and Clause 8 (Introduction and use in organizations) give general outlines of practical use; and Clause 9 (Relevant techniques) covers the various techniques concerned.

The three aforementioned standards are designed to serve independently, but can also be used in tandem as complementary and consistent elements reflecting the same basic QMS principles. These standards are also intended to serve as support techniques for specified requirements in TR XXXX (Quality Management Systems - Guidelines for Sustainable Development).

Future Move

Japan has proposed JIS Q YYYY (Improved Performance in Management Systems - Guidelines for Procedures and Techniques for Continual Improvement) to ISO/TC176/SC2 as an amendment that revises Clause 7 and Annex A of ISO9004-4 in ISO/TC176.

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