



Cryogenic trailers



Small cryogenic vessel

even more advanced, publication being expected by the beginning of 2004.

The main effort needs now to be placed on the standards for “accessories”, where no real difficulties are foreseen and which should be published by the end of 2005.

Finally, the main difficulties to tackle concern the stationary vacuum insulated cryogenic storage vessel. This is due to the fact that different design codes exist (mainly the standards developed by the CEN/TC 268 widely used in Europe, under the PED, and in several other countries, and the ASME code). The ASME code often uses a more conservative safety factor than the European code.

There is no worldwide regulation covering stationary vessels (contrary to the situation for transportable vessels as indicated above). Some regional regulations exist like the PED in Europe, but in some countries like the USA, these types of vessels are still governed by Federal Regulations, making the adoption of ISO standards more difficult.

Reducing the wall thickness of the vessels

Modern methods like “cold stretching” or “use of cold properties” are still not accepted in North America and Japan. These modern methods of designing and manufacturing stationary cryogenic vessels considerably reduce the wall thickness of the vessels. This method of reducing the price of cryogenic vessels by limiting the quantity of expensive materials used (such as stainless steel) is now widely used in Europe.

All efforts will be made however to produce efficient ISO standards for stationary cryogenic vessels before the end of 2005.

Harmonizing the design, construction and use of cryogenic vessels

There is a need for harmonizing the design, construction and use of cryogenic vessels all over the world. Considerable progress has been made in this respect since the creation of ISO/TC 220 in 2000. The full set of published standards is expected for 2004 (as far as transportable vessels are concerned). For stationary vessels, it might take another year or more. □



ISO. The source
of ISO 9000,
ISO 14000 and more
than 14 000
International Standards
for business,
government and
society.

“Kids’ ISO 14000 Programme” aims to promote environmental awareness among children worldwide



On 24 October 2003, ISO Secretary-General Alan Bryden (left) and ArTech Director General Prof. Takaya Kawabe (right) signed a Memorandum of Understanding (MoU) in Tokyo, Japan.

ISO is increasing its support for promoting and spreading the “Kids’ ISO 14000 programme” to develop environmental awareness among children around the world and enable them to take practical steps to improve the environment.

The “Kids’ ISO 14000 programme”, which draws on the organizing principle of the ISO 14000 environmental management system standards, was created and is operated by the Japanese non-profit, non-governmental organization ArTech. More than 50 000 Japanese schoolchildren have participated in the programme, launched in 2000, which is

now on its way to becoming an international one. The United Nations University (UNU) is cooperating on the programme and the United Nations Environmental Programme (UNEP) also supports it.

On 24 October 2003, ISO Secretary-General Alan Bryden and ArTech Director General Prof. Takaya Kawabe signed a Memorandum of Understanding (MoU) in Tokyo, Japan, confirming an earlier agreement between the two organizations in October 2002, since when ISO has lent its name and logo to the programme. Under the new MoU, ISO Central Secretariat pledges active support by using its communication media to promote the programme, and by encouraging its dissemination worldwide through ISO's network of national standards institutes in 147 countries.

“ISO 14001 enjoys recognition on the international scale as a tool for improving environmental performance.”

Alan Bryden commented: “Just about everyone is agreed on the need to ‘do something’ to control the negative impacts of man’s activities on the environment.” Practical tools for achieving this, and for improving environmental performance, are provided by International Standards like the ISO 14001 environmental management standard that is implemented by more than 50 000 organizations in 118 countries.

“Therefore, it is normal that ISO should respond positively to ArTech’s desire for cooperation because its programme demonstrates even to young children that the small, practical steps they carry out can have incremental, positive results.”

Prof. Kawabe explained: “The three principal aims of the Kids’ ISO 14000 Programme are:

- firstly, to stimulate environmental awareness among children;

- secondly, to teach children to implement a simplified form of the Plan-Do-Check-Act cycle at the heart of ISO 14001 and use it to monitor and reduce energy and water consumption in their homes, and,
- thirdly, to encourage the formation of networks of these children, both locally and worldwide, in order for them to work together on global environmental issues.

“In many cases in Japan, the parents of children participating in the programme work in business organizations that are implementing ISO 14001, and the families live in municipalities certified to ISO 14001, or seeking certification.

“ISO 14001 enjoys recognition on the international scale as a tool for improving environmental performance. ArTech is therefore happy to incorporate reference to the ISO 14000 family in the name of its programme because it aims on the international scale at educating children to the practical measures they can take to improve the environment, first in their homes, then in their communities.”

The international welcome for the Kids’ ISO 14000 Programme and the international recognition for ISO 14001 were both demonstrated by the venue for the signing of the MoU: the UNU headquarters in Shibuya-ku, Tokyo. UNU recognizes the benefits of ISO 14001 since it is the first UN organization to be certified to the standard, since early 2001 (see www.unu.edu/iso14001), and is seeking renewal of its certification in 2004. □

Packaging of dangerous goods for safer transport

A new International Standard will help prevent the release of dangerous substances into the environment and contribute to the overall safety of people and property.

Accidents and incidents can occur when transporting goods of any type, but when these goods are classified as being ‘dangerous’ the consequences can be very serious. For example, the spillage of dangerous goods can lead to fire, explosion or chemical burn. Although accidents associated with transporting dangerous goods carried by road, rail, inland waterway, or when in a harbour area, can never be completely eliminated, the packaging used for their transport plays a key role in greatly minimizing such risks.

“...Limiting human exposure to – and the release of – dangerous materials into the environment”

ISO 16104:2003, *Packaging – Transport packaging for dangerous goods – Test methods*, provides internationally recognized test methods for showing that the packaging used meets minimum international requirements in the worldwide transport of dangerous goods. It will help ensure the effectiveness of the packaging design in providing adequate physical safeguards for the given dangerous product. The standard is performance-based and imposes no design specifications other than a few general requirements.