

**COMMITTEE OF EXPERTS ON THE TRANSPORT OF
DANGEROUS GOODS AND ON THE GLOBALLY
HARMONIZED SYSTEM OF CLASSIFICATION
AND LABELLING OF CHEMICALS**

**Sub-Committee of Experts on the
Transport of Dangerous Goods**

**(Twenty-fourth session, 3-10 December 2003,
agenda item 2)**

TRANSPORT OF GAZ

Note by the secretariat

The secretariat reproduces hereafter a note transmitted by the International Organization for Standardization (ISO) concerning the progress of work of the technical committee ISO/TC220 on cryogenic recipients for the attention of the Sub-Committee.

2003-09-15

**NOTE ON THE WORK CARRIED OUT BY
THE TECHNICAL COMMITTEE ISO/TC 220 *Cryogenic vessels***

Transmitted by the International Organization for Standardization (ISO)

1. General

Technical Committee ISO/TC 220 was established on 1999-10-14. The first meeting was held in Paris (France) on 2000-06-22/23. Subsequent meetings were held in Arlington (USA) on 2001-06-20, in Montreal (Canada) on 2002-06-21 and in Rome (Italy) on 2003-06-20. This note provides information taking into account the results of these ISO/TC 220 meetings.

2. Title and scope

The following title and scope were adopted :

Title : *Cryogenic vessels*

Scope : *"Standardization in the field of insulated vessels (vacuum or non vacuum) for the storage and the transport of refrigerated liquefied gases, as defined in Class 2 of "Recommendations on the Transport of dangerous goods – Model regulation", in particular concerning the design of the vessels and their safety accessories, gas/materials compatibility, insulation performance, the operational requirements of the equipment and accessories."*

The Secretariat for this Technical Committee (ISO/TC 220) is assumed by the ISO Member Body for France (AFNOR). Mr. Eric Georges Fortuit, from Air Liquide, France was appointed as chairman of Technical Committee ISO/TC 220.

3. Membership

The Member Bodies from the following countries are recorded as participating (P) members of ISO/TC 220 :

- Australia, Austria, Canada, France, Germany, Iran (Republic of), Italy, Sweden, Switzerland, United Kingdom and USA.

The Member Bodies from the following countries are recorded as observer (O) members of ISO/TC 220 :

- Algeria, Argentina, Belgium, Bulgaria, Colombia, Croatia, Denmark, Egypt, Ireland, Japan, Lithuania, The Netherlands, Saudi Arabia, Serbia and Montenegro, Slovenia, Spain and Tunisia.

4. Liaisons

Liaisons with the following international organizations were established :

- Internal liaisons :

ISO/TC 11 *Boilers and pressure vessels*
ISO/TC 121 *Anaesthetic and respiratory equipment*
ISO/TC 197 *Hydrogen technologies*

- External liaisons :

UN/SCETDG & GHS
CGA
EIGA

5. Structure

The following working groups are established :

- ISO/TC 220/WG 1 *Design and construction*
(Convener : Mr. H. Bartélémy, France)
- ISO/TC 220/WG 2 *Operational requirements*
(Convener : Mr. Friedrich Kössl, Germany)
- ISO/TC 220/WG 3 *Supporting standards*
(Convener : Mr. Alex Varghese, USA)

6. Programme of work

6.1 *Design and construction*

6.1.1 *International standards*

The following International Standard is being published shortly :

ISO 21010 Cryogenic vessels - Gas/materials compatibility

6.1.2 *Final draft international standards*

The following Final Draft International Standards are being prepared for final vote :

FDIS 21028-1 Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 1 : temperatures below -80 °C
FDIS 21028-2 Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 2 : temperatures between -80 °C and -20°C

6.1.3 *Draft international standards*

The following Draft International Standards are being prepared for Member Body enquiry:

DIS 20421-1 Cryogenic vessels - Large transportable vacuum insulated vessels - Part 1 : Design, fabrication, inspection, tests
DIS 21029-1 Cryogenic vessels - Transportable vacuum insulated vessels of no more than 1000 l volume - Part 1 : Design, fabrication, inspection, tests

6.2 Operational requirements

6.2.1 Final Draft International Standards

The following Final Draft International Standards are being prepared for final vote :

- FDIS 21009-2 Cryogenic vessels - Static vacuum insulated vessels - Part 2 : Operational requirements
- FDIS 21029-2 Cryogenic vessels - Transportable vacuum insulated vessels of no more than 1000 l volume - Part 2 : Operational requirements
- FDIS 20421-2 Cryogenic vessels - Large transportable vacuum insulated vessels - Part 2 : Operational requirements

6.2.2 Draft International Standards

The following Draft International Standards are under Member Body enquiry:

- DIS 23208 Cryogenic vessels - Cleanliness for cryogenic service
- DIS 24490 Cryogenic vessels - Pumps for cryogenic vessels

6.3 Supporting standards

The following working drafts are under study :

- WD 21011 Cryogenic vessels - Valves
- WD 21012 Cryogenic vessels - Hoses
- WD 21013-1 Cryogenic vessels – Pressure relief devices – Part 1 : Reclosable relief
- WD 21013-2 Cryogenic vessels – Pressure relief devices – Part 2 : Non-reclosable relief
- WD 21013-3 Cryogenic vessels – Pressure relief devices – Part 3 : Sizing and capacity determination
- WD 21014 Cryogenic vessels - Cryogenic insulation performance

7. Next Meetings

The following dates are foreseen for the next meetings :

ISO/TC 220/WG 1	2004-01-03/04	Houston (USA)
ISO/TC 220/WG 3	2004-01-05/06	Houston (USA)
ISO/TC 220/WG 3	2004-06-14/15	Paris (France)
ISO/TC 220/WG 2	2004-06-15	Paris (France)
ISO/TC 220/WG 1	2004-06-16	Paris (France)
ISO/TC 220	2004-06-17	Paris (France)
