



Standards for business, government and society

Every ISO standard is important to the sector that requires its development. The following selection from 2003 illustrates the sheer scope of ISO's offering.

Wheels of industry

Developing standards that keep the wheels of industry turning efficiently was one of ISO's first vocations and basic technical and engineering standards continue to make up the lion's share of its portfolio. A good example is ISO 4308-1:2003,



Cranes and lifting appliances – Selection of wire ropes. Its unpretentious title gives little clue

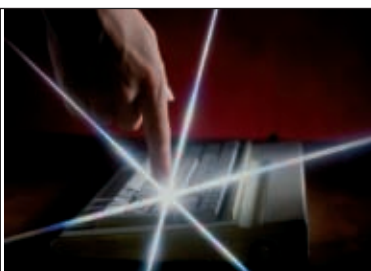
to its colossal importance in terms of safety and productivity given the estimated ten million cranes in use throughout the world in multiple industry sectors.

Another is ISO 10423:2003, *Petroleum and natural gas industries – Drilling and production equipment – Wellhead and christmas tree equipment*, which is a keystone standard for this important industry sector. The sector also provides an example of ISO's ability to forge a partnership with the users of its standards to deliver exactly what they need: in this case, ISO/TS 29001:2003, *Petroleum, petrochemical and natural gas industries – Sector-specific quality manage-*

systems – *Requirements for product and service supply organizations*. It is expected to become the common and unique basis for the oil and gas industry's quality management system requirements worldwide.

IT everywhere

While ISO standards continue to ensure the smooth functioning of industry, their scope has evolved in response to the penetration of information technology (IT). ISO 6011:2003, *Earth-moving machinery – Visual display of machine operation*, provides an example. Gone are the days of uniquely mechanical controls such as handles, levers and wheels – today's machine operator must be familiar with drive-by-wire and touch-screen controls.



Few of us will find ourselves at the controls of an earth-moving machine, but millions

of people around the world will benefit from ISO/IEC 14496-10:2003, *Information technology – Coding of audio-visual objects – Part 10: Advanced Video Coding*. This new video compression standard promises dramatic improvements in video quality. It is likely to find use in a wide variety of applications, from mobile phones to High Definition TV, and is destined to revolutionize video picture quality over networks such as the Internet, 3G Wireless and the PSTN. The standard is the achievement of the ISO/IEC and ITU-T Joint Video Team (JVT), a pre-eminent group of experts from the three apex organizations in voluntary international standardization, working in partnership.

The standards that don't make the news

Natural disasters and ones triggered by man's neglect – or criminal intent – get all the news coverage. Largely unsung goes the work of thousands of experts participating in the development of ISO standards to prevent or mitigate such disasters.



Examples of their achievements in 2003 were ISO 19338:2003, *Performance and assessment requirements for design standards on structural concrete* – a major contribution to the safety of increasingly big and tall buildings – and ISO/TR 15656:2003, *Fire resistance – Guidelines for evaluating the predictive capability of calculation models for structural fire behaviour* – an important step towards safer construction.

ISO also develops standards for those whose job it is to go in harm's way, such as the firefighters who had to deal with the huge forest fires that plagued many regions of the world in 2003. ISO 15384:2003, *Protective clothing for firefighters – Laboratory test methods and performance requirements for wildland firefighting clothing*, is expected to result in improved protection in the near future.

ISO's societal vocation

Efficiency and productivity are frequent benefits of ISO's engineering standards. At the same time, the organization also has a societal vocation in addition to the economic one. In fact, many ISO standards provide government legislators, responsible employers, designers and manufacturers with the technical

basis for addressing environmental, and health and safety issues.

An example of the latter published in 2003 was provided by the two-part ISO 12100:2003, *Safety of machinery – Basic concepts, general principles for design*, which is another standard with broad relevance across industry sectors.

In a more personal vein, yet just as important since the standard will improve safety in the home, ISO 22702:2003, *Utility lighters – General consumer-safety requirements*, is intended to protect children in particular.

There are few objects more personal than surgical implants and they are becoming increasingly common. ISO 17853:2003, *Wear of implant materials – Polymer and metal wear particles – Isolation, characterization and quantification*, responds to the need to evaluate the wear and durability of the materials used to produce implants and to thus to make improvements possible.



A safety standard of both personal and collective benefit is ISO 7010:2003, *Graphical symbols – Safety colours and safety signs – Safety signs used in workplaces and public areas*. It sets out to ensure that safety signs designed and used locally, anywhere in the world, will be recognized globally, everywhere in the world.

In turn, environmental issues have health and safety, social and

economic implications. No industry today can afford to ignore its environmental impact. In addition to the well-known ISO 14000 family of environmental management standards, ISO offers a wide-ranging portfolio of standardized sampling, testing and analytical methods that provide business and government with scientifically valid data on the environmental effects of economic activity. 2003 saw the publication of an important addition to this category – the two-part ISO 11338:2003, *Stationary source emissions – Determination of gas and particle-phase polycyclic aromatic hydrocarbons*. This sampling is an essential part of the environmental impact assessment of emission sources such as aluminium smelters, coke works, waste incinerators, power stations, and industrial and domestic combustion appliances.

Plastics have become ubiquitous and ISO 17556:2003, *Plastics – Determination of the ultimate aerobic biodegradability in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved*, for evaluating their biodegradability will therefore prove a useful tool – not least in finding solutions to the plastic bottles that litter our landscapes.

ISO 6289:2003, *Skis – Vocabulary*, may seem like the dulllest possible aspect of an exciting sport – but where else would you find authoritative, internationally valid definitions of “goofy snowboard” or “carving response”, and the difference between a “mountain ski” and a “mountaineering ski”?

ISO 10256:2003, *Head and face protection for use in ice hockey*, standardizes very visible and necessary protection for a popular sport and is notable for having achieved international consensus between conflicting regional positions – an ISO speciality.

Each to his or her own taste

ISO certainly has no ambitions to standardizing people’s tastes – especially where the culinary arts are concerned. In fact, ISO is helping to safeguard the authenticity of a rather unique ingredient to fine cuisine with ISO/TS 3632:2003, *Saffron (Crocus sativus L.) – Part 1: Specification*, and Part 2: *Test methods*. Saffron is a very expensive spice and there are lucrative methods of adulterating it with parts of other plants. This Technical Specification gives test methods for detecting such heresies – an example of how ISO standards ensure high standards.



All work and no play...

...makes Jack a dull boy – according to the nursery rhyme. ISO never has a

dull moment because it also develops standards for play – or “sport” as it is known by adults...

