

US Technical Advisory Group to ISO/TC 11
Commentary on
Background on ISO/DIS 16528

ISO/TC 11 began work on the ISO/DIS 16528 project in 1998 as a means to create a set of internationally acceptable criteria for pressure equipment standards. Previous attempts by TC 11 to write prescriptive rules for pressure equipment resulted in standards that were not used. TC 11 developed ISO/DIS 2694, Pressure Vessels in 1974 (it never achieved final approval), ISO R831, Rules for Construction of Stationary Boilers in 1968, and ISO 5730, Stationary Shell Boilers of Welded Construction (Other than Water Tube Boilers), in 1992. The technical experts who gathered at the 1997 plenary session agreed that no one in the industry used those standards. In fact, a survey of the TC 11 P-members showed that only one country had nationally adopted any of those standards, and that was done as a matter of policy, not market need. Meanwhile, existing national standards continue to successfully serve the international market needs for pressure equipment. The technical experts on TC 11 learned a lesson from this history. They agreed that any attempt to write prescriptive standards, regardless of good intentions and flawless effort, would yield the same result of non-use, and the resulting ISO standard would add no value to the international market. For these reasons, at the plenary session of TC 11 in 1997 (the first such meeting in 27 years), resolutions were passed to withdraw all existing ISO standards and DIS' under TC 11's responsibility, and these resolutions were confirmed by the full P-membership. In addition, the existing WG structure of the committee, which was based on one WG for each type of pressure equipment, was disbanded in favor of a single WG to embark on the proposed work item for a performance based standard.

The pressure equipment sector is a mature sector in terms of the technical state of the art of design and construction. In addition, due to the potential for serious personal injury and property loss in the event of equipment failure, it is a sector that has become highly regulated in almost every country about the world. Each country has an obligation to its citizens to establish an appropriate level of protection through regulation, and each will continue to reserve the right to choose which standards fulfill the needs of their regulations. On its own merits, no standards developer, ISO or otherwise, can impose its standards on any regulatory authority. The various national standards that have historically served the international pressure equipment market have done so by being responsive to what their developers perceive to be the needs of that industry, including its regulators. In this way, international trade in pressure equipment has flourished, and regulators have developed a high level of confidence in the standards that support it. Under the General Agreement on Tariff and Trade and the Agreement on Technical Barriers to Trade, 'international standards' have grown in importance. ISO/DIS 16528 has been developed to be in agreement with the principles of GATT and TBT, while

establishing market relevant and technically sound criteria for standards that are already supporting healthy international trade. Its purpose is to promote trade but it is not intended to, nor can it, impose any standard that is aligned with its criteria on any local, national or international laws or regulations. That responsibility is, and always will be, solely in the hands of the regulators of pressure equipment. What ISO/DIS 16528 can do is establish technical alignment of recognized standards to provide regulatory authorities with a high level of confidence that they meet basic criteria established by an experienced body of international experts. If a newly developed, prescriptive ISO standard were produced, it would take its place among the existing, proven, and already accepted standards as a candidate for meeting the needs of regulatory authorities. The result would be no regulatory recognition of such an unproven standard, as was demonstrated by the fate of ISO R831 and ISO 5730.

The technical experts comprising ISO/TC 11/WG 10 recognize that development of prescriptive boiler and pressure vessel standards will be a lengthy process. Recent experiences in the US and Europe prove that it takes between 10 and 20 years to develop a brand new pressure equipment standard. Attempting to do so in the ISO process, involving compromise among the member countries, will be even more time consuming. This is due in large part to the historically different approaches taken by each country's regulatory authorities and differences in the underlying design and construction philosophies of the countries that have experience in developing prescriptive product standards for pressure equipment. It is also recognized that experts in all countries are under increasing pressure to limit participation in standards development, and concentrate on those projects that have the most market relevance.

Given these real constraints, the technical experts comprising ISO/TC 11/WG 10 considered ISO/DIS 16528 to be the best realistic approach to facilitating world trade by providing for multilateral alignment of existing national and regional standards that have a proven history of supporting public safety and international trade. WG 10 believes this approach will promote better international communication and understanding, and facilitate implementation of international trade agreements. If the international pressure equipment industry is ever to migrate to a single standard, WG 10 considers ISO/DIS 16528 to be the best path to that goal.