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Standards India

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Every citizen of India should have access to high quality healthcare. This issue of Standards India highlights the work done by BIS for developing standards for medical devices. Our focus in the sector ranges from laboratory testing to patient safety during medical treatment. Given our population and the growth in medical technology, the use of medical devices will have an exponential growth. Huge share of requirements is met from imports. It is of great significance that devices comply with relevant standards.

BIS marks are a measure of confidence both for health care practitioner and patients. Compliance to standards are critical to guarantee quality and reliability. This issue highlights the importance of this topic, and I hope it will spark more discussion and discourse. Your feedback will be appreciated. Please write at dg@bis.gov.in.

Smt. Surina Rajan
Director General, BIS

भारत के प्रत्येक नागरिक को उच्च गुणवत्ता वाली स्वास्थ्य सेवाओं तक पहुंच होनी चाहिए। स्टैंडर्ड्स इंडिया पत्रिका का यह अंक चिकित्सा उपकरणों के लिए मानकों के विकास के लिए बीआईएस के काम पर प्रकाश डाल रहा है। इस क्षेत्र में हमारा ध्यान प्रयोगशाला परीक्षण से लेकर चिकित्सा उपचार के दौरान रोगी की सुरक्षा तक है। हमारी आबादी और चिकित्सा प्रौद्योगिकी में वृद्धि को देखते हुए, चिकित्सा उपकरणों के उपयोग में तेज़ी से वृद्धि होगी। आवश्यकताओं का बड़ा हिस्सा आयातों से पूरा किया जाता है। यह बहुत महत्वपूर्ण है कि उपकरण प्रासंगिक मानकों का अनुपालन करते हैं।

बीआईएस का चिन्ह स्वास्थ्य देखभाल व्यवसायी और रोगियों दोनों के लिए आत्मविश्वास की पहचान है। गुणवत्ता और विश्वसनीयता की गारंटी के लिए मानकों का अनुपालन महत्वपूर्ण है। यह अंक इस विषय के महत्व पर प्रकाश डालता है, और मुझे उम्मीद है कि यह अधिक चर्चा और विचार-विमर्श को बढ़ावा देगा। आपकी प्रतिक्रिया की सराहना की जाएगी। कृपया dg@bis.gov.in पर लिखें।

श्रीमती सुरीना राजन
महानिदेशक (बी आई एस)

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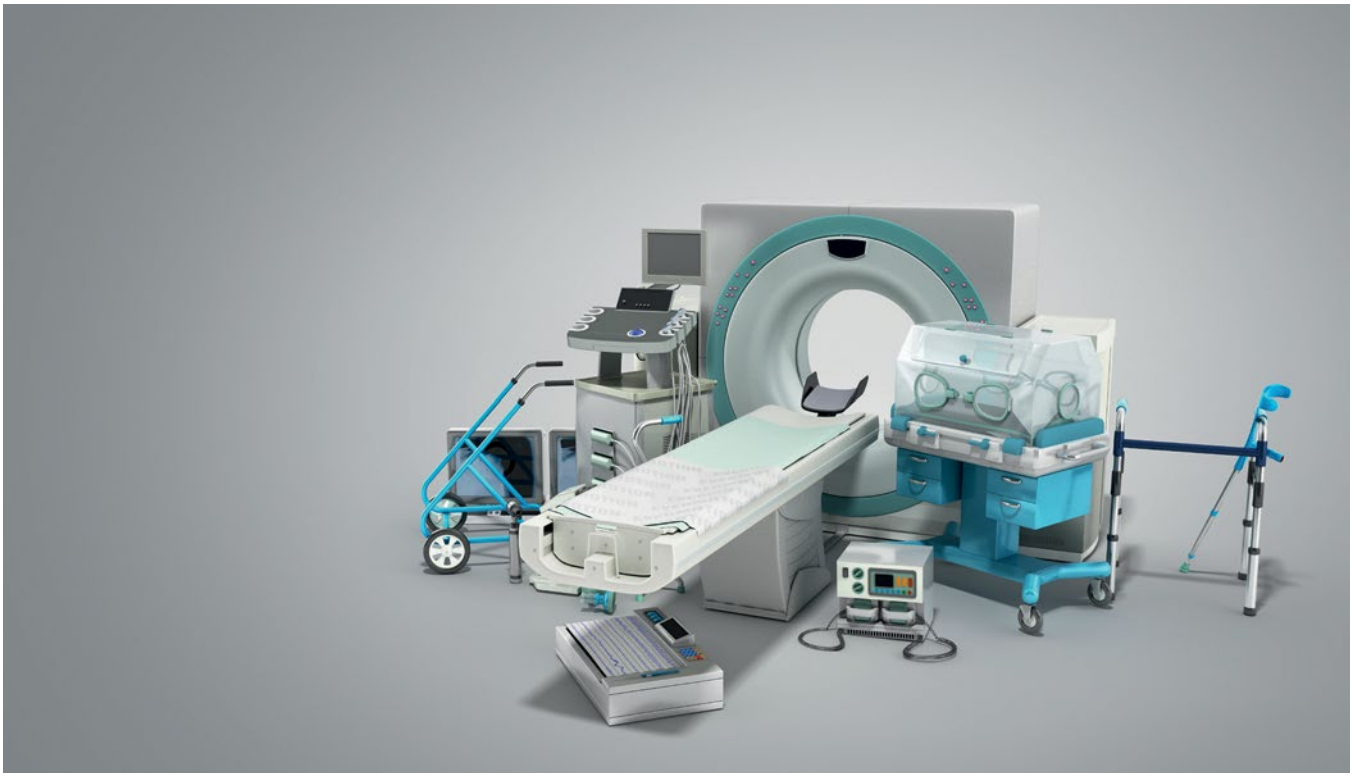

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FOR BUSINESS GROWTH

NEW ISO STANDARD LAYS DOWN SECRETS OF SUCCESS IN BUSINESS

By 2027, the average company on the Standard & Poor's 500 Index (S&P 500)—an index of 505 stocks issued by 500 large companies with market capitalizations of at least USD 6.1 billion—will last just 12 years, according to the 2018 Corporate Longevity Forecast. New technologies, economic shocks, disruptive competitors and failure to adequately anticipate and prepare for future challenges are the key reasons being cited for their demise.

The standard is a revised version of ISO 9004:2009, building on previous guidance to help organizations improve their overall performance by releasing the full potential of their quality management system

The freshly published ISO 9004, Quality management – Quality of an organization – Guidance to achieve sustained success, divulges the secrets and strategies of some of the longest lasting businesses around the world to help other organizations prepare for such challenges, optimizing their performance at the same time.

Charles Corrie, Secretary of the ISO committee that developed the standard, said it is about helping organizations not only survive, but achieve "sustained success." The standard is a revised version of ISO 9004:2009, building on previous guidance to help organizations improve their overall performance by releasing the full potential of their quality management system. It will help organizations move to the next level beyond ISO 9001 (quality management systems) by addressing topics such as the alignment and deployment of strategy, policy and objectives within the broader context of the organization's vision, mission, values and culture.

NATURE'S GOODS

UPDATES ON EXPORTING ORGANIC PRODUCTS TO TAIWAN

The Organic Program of the government of Taiwan places special emphasis on zero-detection of pesticide residues and prohibited additives for all organic products, and has a comprehensive program for market surveillance and residue testing. Unique to Taiwan, organic certifiers are held accountable for any products which they certify and which test positive for prohibited materials. Upon a positive detection, all products, regardless of ownership, brand, distributor or processor, certified by that certifier, can be held for batch-by-batch testing at the border prior to their entry into Taiwan. The Taiwan government has made it clear their no-detection policy is one of their highest priorities for imports into Taiwan.

The Organic Program of the government of Taiwan places special emphasis on zero-detection of pesticide residues and prohibited additives for all organic products

In order to prevent disruption to their clients' business, QAI is implementing mandatory testing for prohibited materials of all products being shipped to Taiwan, and proof of non-detection by the shipper of the product, prior to the issuance of TM11's (Taiwan export certificates). Products must be tested using the Taiwan protocol from an accredited lab. This policy would have gone into effect as of June 15, 2018.

WEATHER PATTERNS

POWERFUL NEW WEAPON IN THE FIGHT AGAINST CLIMATE CHANGE

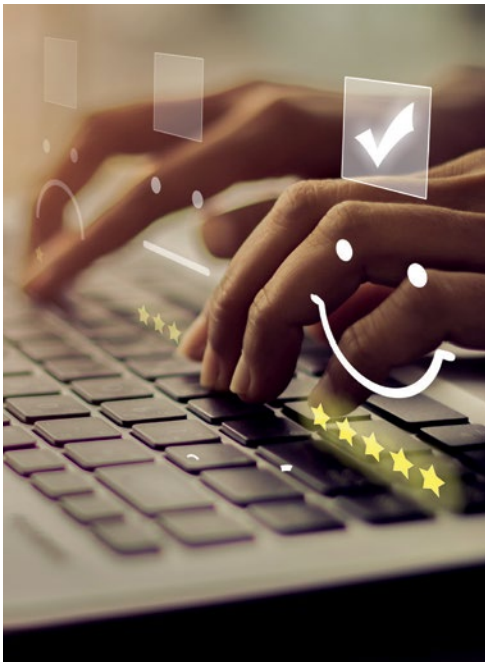
Increasing greenhouse gas (GHG) emissions, largely as a result of burning fossil fuels, is heating up the planet and bringing with it catastrophic weather, disruptions to food production and other societal stresses. And it is mostly caused by us. According to the United Nations, as the world's population and standards of living grow, so too do the carbon and other emissions we release into the atmosphere.

A key goal of the United Nations (UN) 2030 Agenda for Sustainable Development, then, states that taking action to combat this phenomenon is essential, and it must be taken with immediate effect.

The newly published ISO 14080, Greenhouse gas management and related activities – Framework and principles for methodologies on climate actions, directly supports the Paris Agreement to limit global warming to below 2 °C and the UN Sustainable Development Goals by helping governments and businesses around the world do just that.

ISO 14080, Greenhouse gas management and related activities – Framework and principles for methodologies on climate actions, directly supports the Paris Agreement to limit global warming

ISO 14080 was developed by working group WG 7 of ISO technical committee ISO/TC 207, Environmental management, sub-committee SC 7, Greenhouse gas management and related activities. Its secretariat is held jointly by SAC, ISO's member for China, and SCC, ISO's member for Canada.



THE RIGHT REVIEW

PUTTING THE TRUST BACK INTO ONLINE FEEDBACKS

Both a bane and a boon for companies, online reviews are often the first port of call for consumers, and the Internet is now awash with websites dedicated to the evaluation of everything from restaurants to lawyers. And we love them. A Forbes study showed that 90 percent of consumers read online reviews before visiting a business and those reviews impact 67 percent of purchasing decisions.

A new ISO standard just published aims to change all that by detailing requirements for organizations to effectively manage consumer review sites and featuring recommendations that will help increase consumer trust and protect suppliers from exploitation.

Aimed at review Websites as well as the companies themselves, ISO 20488, Online consumer reviews – Principles and requirements for their collection, moderation and publication, is the first International Standard published by ISO's technical committee for online reputation, ISO/TC 2902).

Reflecting international best practice throughout the process, from collection to moderation and to publication, it helps companies boost consumer confidence in online reviews, protect suppliers from mischief and improve the quality of products and services provide.

SAFE AND SOUND

NEW STANDARD TO IMPROVE SAFETY IN THE NUCLEAR SECTOR

While major accidents in the nuclear sector are rare, the consequences are unimaginable, making the nuclear industry a highly regulated business. This includes the safety and quality requirements of those in the supply chain that supply products and services important to the sector's safety.

A freshly published standard applies the principles of one of the world's most renowned quality standards, ISO 9001, to the nuclear sector, combining best practice in quality with the specific requirements of the nuclear industry.

ISO 19443 will not only improve the understanding of quality requirements by suppliers but encourage all major nuclear industry players to work in the same direction

ISO 19443, Quality management systems – Specific requirements for the application of ISO 9001:2015 by organizations in the supply chain of the nuclear energy sector supplying products and services important to nuclear safety (ITNS), will help to increase the safety culture in the sector and harmonize supplier assessments such as auditing.

Bertrand-Marie Nahon, Convenor of the working group1) that developed the standard, which is part of technical committee ISO/TC 85, Nuclear energy, nuclear technologies, and radiological protection 2), said ISO 19443 will not only improve the understanding of quality requirements by suppliers but encourage all major nuclear industry players to work in the same direction.

HEALTH FIRST

HOW ISO STANDARDS SUPPORT WORLD HEALTH DAY

Good health and well-being are amongst the UN Sustainable Development Goals, the United Nations' new roadmap to improve people's lives by 2030. World Health Day is part of the World Health Organization's (WHO) drive to support countries in moving towards Universal Health Coverage. Not only is the WHO one of our key partners, but we have more than 1 300 International Standards that focus on health across all kinds of sectors, from public health and medical devices to health informatics and traditional medicines.

ISO technical report ISO/TR 14639, Health informatics – capacity-based eHealth architecture roadmap, for example, provides best-practice guidance on the implementation and use of information and communication technology, and a framework for health authorities to use when building their own eHealth architecture, leading to better public healthcare services.

World Health Day is part of the World Health Organization's (WHO) drive to support countries in moving towards Universal Health Coverage

In addition, standards like ISO 13485, Medical devices – Quality management systems – Requirements for regulatory purposes, help ensure medical devices meet all the regulatory requirements for quality.

What's more, a new ISO technical committee has recently been formed to help reduce global healthcare costs of health facilities.

UNIFORM CHARGE

AUDITING STANDARD FOR MANAGEMENT SYSTEM STANDARDS NOW UPDATED

Management system standards are growing in popularity as organizations see how they can be applied to manage interrelated processes to achieve their objectives. From quality or energy management to food or traffic safety, the list of standards aimed at helping organizations put in place effective management systems is getting long.

ISO alone has over 70 management system standards, building on international expertise and best practice to help organizations perform better, save money and develop a competitive edge. In order to get the best out of a management system and ensure continuous improvement, regular auditing needs to take place. Not an easy task if, like most organizations, you have several management systems in place.

ISO 19011, Guidelines for auditing management systems, however, offers a uniform, harmonized approach, enabling effective auditing across multiple systems at the same time.

Denise Robitaille, Chair of the ISO project committee that revised the standard, said it was updated to ensure it continues providing effective guidance to address changes in the marketplace, evolving technologies and the many new management system standards recently published or revised.

PERFECT NOURISHMENT

NEW STANDARDS FOR TESTING INFANT FORMULA JUST PUBLISHED

Food labelling is rarely more important than for vulnerable consumers—such as babies. Codex Alimentarius, or the Food Code as it is known, is the Joint Food Standards Programme established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), which develops harmonized international food standards that protect consumer health and promote fair practices in the food trade. ISO 20635, Infant formula and adult nutritionals – Determination of vitamin C by (ultra) high performance liquid chromatography with ultraviolet detection ((U) HPLC-UV), and ISO 20636, Infant formula and adult nutritionals – Determination of vitamin D by liquid chromatography-mass spectrometry, are test method standards in support of the international Codex standard for infant formula and formulas for special medical purposes intended for infants.

Codex Alimentarius, or the Food Code, is the Joint Food Standards Programme established by the Food and Agriculture Organization of the United Nations (FAO) and the WHO

ISO 20635 and ISO 20636 are just two of a series of ISO International Standards that have been developed as part of the SPIFAN project (Stakeholder Panel on Infant Formula and Adult Nutritionals), managed by AOAC INTERNATIONAL in cooperation with ISO and the IDF, to develop standard method performance requirements and methods of analysis for 20 or more priority nutrients in infant formula and adult nutritionals.

News credits: ISO, NSF and QAI

BIS—THE GLORIOUS PAST

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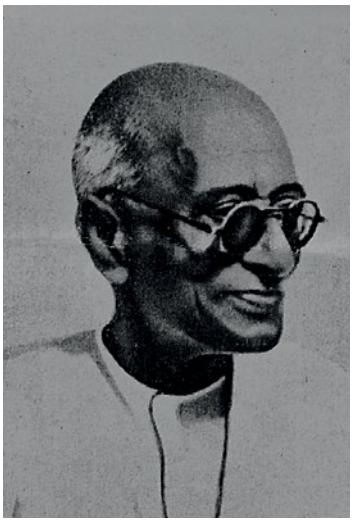

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1 Dr. Lal C. Verman; M. Jean Birle', Director General, AFNOR; M. Rene' Travernier, General Secretary, Standards Commissarat France, at the Plenary Session of ISO, Paris, June-July 1949

2 Mr. Gulzari Lal Nanda, Deputy Chairman of the National Planning Commission, and Mr. G.L. Mehta, Member, Planning Commission, visited the ISI Directorate on May, 3 1950

3 Dr. Syama Prasad Mookerjee, Minister for Industry & Supply, presides over the meeting of the General Council of the Indian Standard Institution in New Delhi on March 24, 1949. The Council elected Dr. K.S. Krishnan and Dr. L.C. Jariwala vice presidents for the next year

4 Prime Minister Jawaharlal Nehru lays the foundation stone for a new building for the ISI on August 21, 1954

5 Shri C. Rajagopalachari, the Governor General of India; President of ISI from March to August, 1947

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6 Heads and leaders of 25 delegations to the ISO Session at the reception given by the President of the French Republic at his Paris residence

7 Members of the Planning Commission visit the ISI Directorate on May 3, 1950

8 Members of the Planning Commission at the ISI Headquarters in 1950

9 Prime Minister Jawaharlal Nehru; Shri T.T. Krishnamachari, Minister for Commerce & Industry, and President ISI; and Dr. Lal C. Verman, Director, ISI, at the foundation laying ceremony for a new building for the ISI on August 21, 1954

FROM BANDAGE TO SPLINTAGE

THE NEW ERA OF PREVENTION

Bandaging has given way to splinting as the new phenomena

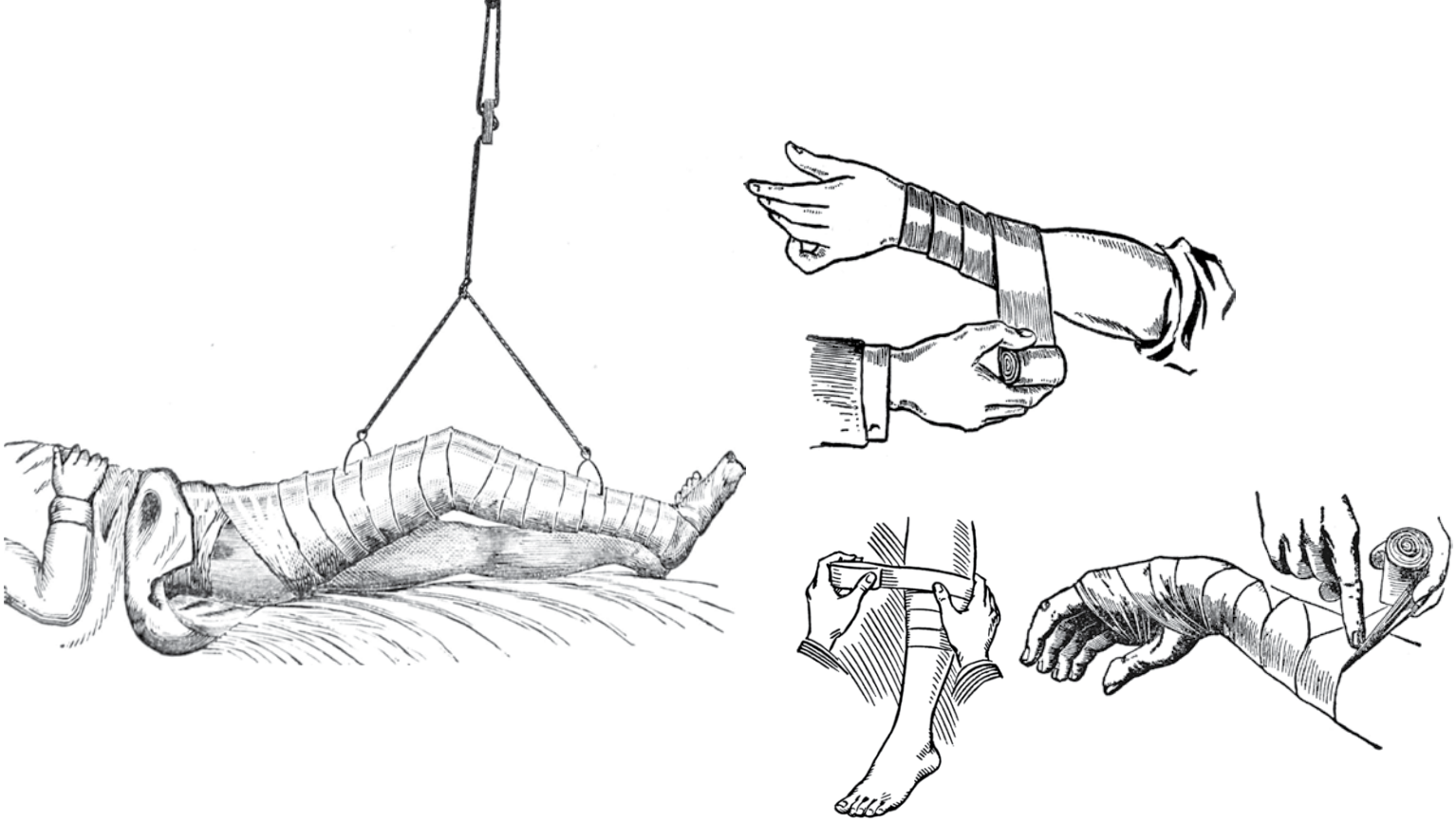
BY DR. CHITRA KATARIA

A splint is a device used for support or immobilization of a limb or the spine. The use of splint offers many advantages over the method of bandaging

All human beings undergo some form of injury in their life span. Immobilization of the injured part either due to pain or with the intention of preventing further movement has been done since the ancient times. The most effective ways of immobilization are bandaging and splinting. Although splinting and bandaging are used synonymously, these terms are different. A bandage is a piece of material used either for covering wounds, keeping dressings in place, or applying pressure and controlling bleeding. Bandaging is still used, however, it has evolved with different types of bandaging materials and techniques.

Bandaging and splinting have been gradually developed in the due course of time. Factors influencing splint development included disease, political conflict, advancements in medicine and technology, agency and organizational decision making, centers of practice, and availability of information. Infection, polio, war, technology, plastics, surgical advances, soft tissue remodelling, anatomy, biomechanics, government agencies, hand centers, seminars, professional organizations, publications, and a classification system have all played important roles in 20th century splinting practice. Splint use offers many advantages over bandaging. Splints are faster and easier to apply. They may be static (i.e., prevent motion) or dynamic (i.e., functional; assist with controlled motion). Because a splint is non-circumferential, it allows for the natural swelling that occurs during the initial inflammatory phase of the injury.

In the ancient era, the most common thing that was used for bandaging was a cloth. With evolution, humans developed an external device for protection of parts. They were called splints. A splint is a device used for support or immobilization of a limb or the spine. It can be used in multiple situations, including temporary immobilization of potentially broken bones or damaged joints and support for joints during activity. The main objectives of using splints are to maintain or improve the position of a body part, to improve soft tissue length and joint mobility, and to facilitate basic functioning. Disabilities is an umbrella term, covering impairments, activity limitations and participation restrictions.



An impairment is a problem in body function or structure but an activity limitation is a difficulty encountered by an individual in executing a task or action. Physical discomfort evokes an instinctive response to immobilize the painful part, and use of extrinsic devices to accomplish the immobilization process is inherently intuitive. The history of splinting and bandaging is very ancient. In early antiquity, splints were used primarily for treating fractures. Splints of leaves, reeds, bamboo and bark padded with linen have been dated to ancient Egyptian times, and some mummified remains have been found wearing splints for fractures sustained either before or after death.

Further, in medieval times (1000 A.D.), use of palm-branch ribs and cane halves for splinting continued. Plaster-like substances were made from flour dust and egg whites, and vegetable concoctions were made of mastic gum, clay, pulped fig, and poppy leaves. The Aztecs (1400 A.D.) made use of wooden splints and large leaves held in place by leather straps or resin paste. Although most ancient splints were applied to immobilize, Hippocrates' tibial distraction device was a clear example of a mobilization splint. Copper splints were used for treating burn injuries at that time. Distraction splint for reducing tibial fractures, which consisted of proximal and distal leather cuffs separated by multiple pairs of too-long, springy, narrow wooden slats were used. When in place on the lower leg, this splint distracted the fracture and brought the bones back into alignment. From a historical perspective, two parallel lines of splinting practice emerged around the mid to late 1880s, with both surgeons and orthotists (appliance makers) fabricating splints. This practice continued through the early 1900s, with few instances of cooperative ventures between the two groups. The great polio epidemics, however, changed this mutually imposed dual autonomy, and surgeons and orthotists worked together for the next four decades, along with practitioners of emerging disciplines—physical medicine physicians and occupational and physical therapists—to combat a powerfully over-whelming common foe, poliomyelitis.

Although the fabrication of splints by orthotists dates back to World War II, trend lines indicate that a major reciprocal shift in subject matter occurred between the 1970s and 1980s, changing to diagnosis-specific splinting

Although the fabrication of splints by orthotists dates back to World War II, trend lines indicate that a major reciprocal shift in subject matter occurred between the 1970s and 1980s, changing from materials, construction, and general splinting to diagnosis-specific splinting and principles of splinting.

In 1986, the American Society of Hand Therapists (ASHT) indentified the need for standardized terminology; therefore in 1992, it published the ASHT Splint Classification System. Descriptions were based on the function of the splint rather than its form. It identifies which joints are included in the splint for primary mobilization, immobilization or

restriction and then further describes the secondary joints included.

The history of foot orthosis is also interesting. The first known orthotic foot devices date back almost 2,000 years! Layers of wool were inserted into sandals to relieve foot strain and fatigue, giving the wearer — who almost certainly spent most of the day on his or her feet — a bit of extra cushioning. In 1910, Dr. William Scholl came out with a much lighter, more flexible metal support called the Foot-Easer.

The 1920s and 30s brought a wave of "corrective" shoe production. These shoes promised to prevent, correct, or relieve a wide variety of foot issues. Over time, these corrective shoes became a major part of the footwear industry—and a very lucrative one, too.

By the 1970s, therapists had enthusiastically embraced the field of upper extremity splinting and were off and running. The art and science of splinting knowledge rapidly expanded, alliances with hand surgeons were forged, professional hand therapy organizations were formed, a professional hand journal was launched, a certification commission was created, and therapists never looked back. Splinting expertise opened so many doors for therapists. While splints were frequently the initial impetus for communication, they provided excellent opportunities for therapists to demonstrate to surgeons that through teamwork, they could improve patient care not only by splinting but also by providing the highest quality therapy possible. It may be a long time before such rapid advancement is witnessed again.

During the years since that dramatic and exciting innovative phase, the methods of application and the uses of plastic have continued to evolve. Today, the majority of not only lower limb, but also upper limb and spinal splints are constructed using thermoplastic materials in their construction. Orthotists and technicians have learned how to vary the trim-lines, contour and cross-section of components, and to use inserts to alter and control their mechanical properties and hence the functions they will provide. Some efforts have been made to design plastic joints, mostly unsuccessfully; hence even today most jointed orthoses which employ plastic interface components still use metal joints.

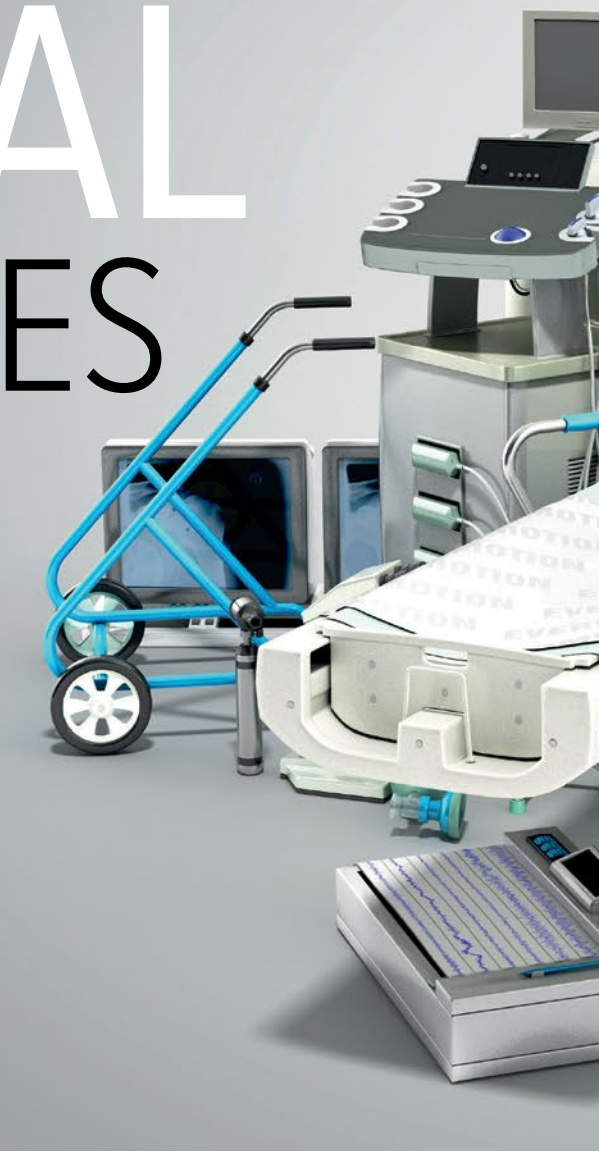
Splints are used both in orthopaedic and neurological cases. These range from spinal cord injuries, stroke, poliomyelitis, Gullian Barre syndrome to orthopaedic conditions such as de Quervain tenosynovitis, tennis elbow, patellofemoral pain syndrome. The use of splints in peripheral nerve injuries such as cock up splint for radian nerve injury is well known. Ankle brace is another very common splint used in the case of ankle sprain patients.

– The author is chief of rehabilitation services, Principal, ISIC Institute of Rehabilitation Sciences, Indian Spinal Injuries Centre, New Delhi

STANDARDS ON MEDICAL DEVICES

The understanding of standards on medical devices calls for understanding the term medical device, the classification process and phases of the medical device life cycle

BY DEEPAK AGGARWAL



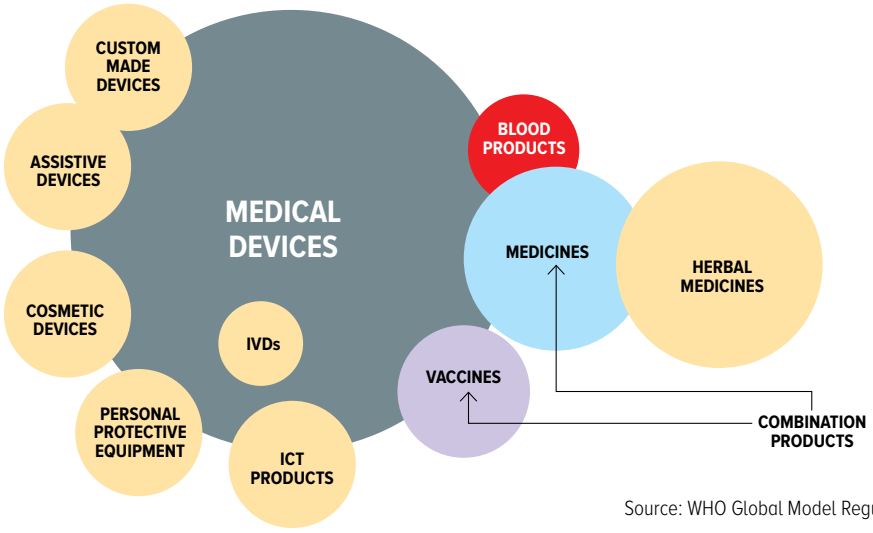
What is a medical device? An instrument, apparatus, implement, machine, appliance, implant, reagent for in-vitro use, software, material or other similar or related article, intended by the manufacturer to be used, alone or in combination, for human beings, for one or more of the specific medical purpose(s) of: a) diagnosis, prevention, monitoring, treatment or alleviation of disease; b) diagnosis, monitoring, treatment, alleviation of or compensation for an injury; c) investigation, replacement, modification, or support of the anatomy or of a physiological process; d) supporting or sustaining life; e) control of conception; f) disinfection of medical devices; g) providing information by means of in-vitro examination of specimens derived from the human body; and does not achieve its primary intended action by pharmacological, immunological or metabolic means, in or on the human body, but which may be assisted in its intended function by such means.(Source: IS/ISO/13485:2016)

However, many products are used in the delivery of healthcare, yet not all fit comfortably within an existing definition for a medical product, more specifically the term "medical device". Examples include medical gases, some laxatives, cosmetic articles, clinical laboratory reagents and articles of protective clothing worn by medical personnel during procedures. A diagrammatic explanation for interrelation of (medical) products inside and outside healthcare is shown in Fig 1:(Source: WHO Global Model Regulatory Framework for Medical Devices)

MEDICAL DEVICES CLASSIFICATION

The universe of medical devices is diverse and advancing rapidly. These devices also have wide variations in their potential severity of harm to the patient or user. The risk class of a medical device is determined by factors such as the level of invasiveness and the duration of use in the body and the duration in the body. The classification rules for medical devices other than IVDs depend on the features of the device, such as whether it is life supporting or sustaining; is invasive and if so, to what extent and for how long; incorporates medicinal products;

INTERRELATION OF MEDICAL PRODUCTS (FIG-1)



"Health technotogies" refers to the application or organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve the quality of lives. (WHA 60.29.)

Source: WHO Global Model Regulatory Framework for Medical Devices

incorporates human or animal tissues or cells; is an active medical device; delivers medicinal products, energy or radiation; could modify blood or other body fluids; is used in combination with another medical device.

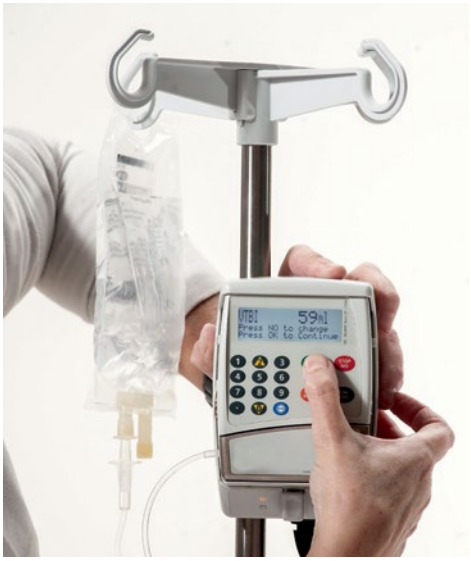
Medical devices are classified on the basis of parameters specified in Part I of the First Schedule, in the following classes, namely:

(i) Low risk: Class A; e.g Syringes, examination gloves, patient hoists, stethoscopes, wheelchairs, IVD instruments, microbiological culture media

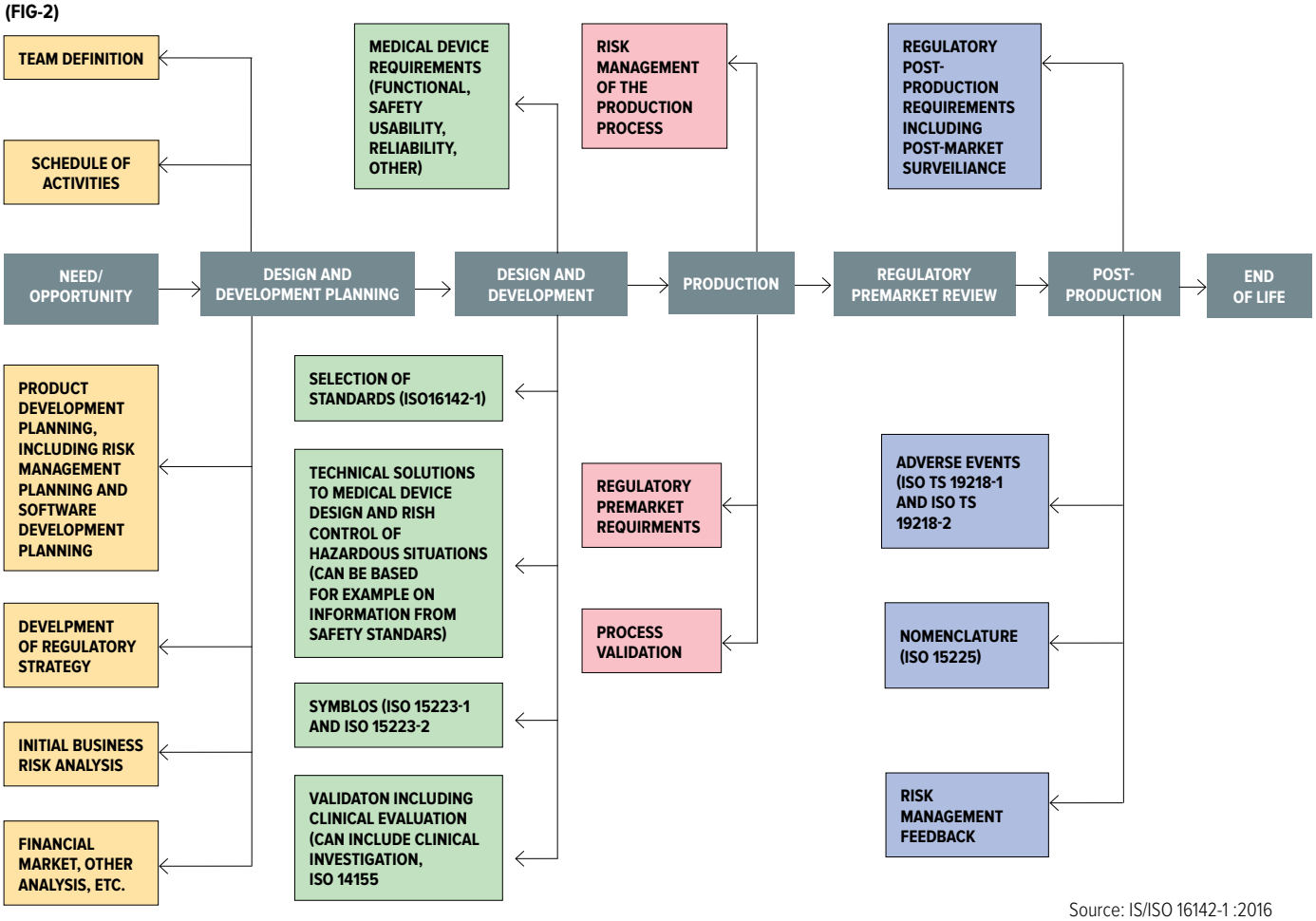
(ii) Low moderate risk: Class B; Surgical gloves, infusion sets, pregnancy tests

(iii) Moderate high risk: Class C; Condoms (unless with spermicide (class D)), infusion pumps, neonatal incubators, therapeutic and diagnostic X-ray, lung ventilators, haemodialysers, anaesthesia equipment, self-test glucose strips, IVDs for the diagnosis of Neisseria gonorrhoea

The medical device life cycle includes all phases, from initial conception to final decommissioning and disposal. During its life cycle, either process or product standards may be used to fulfil the essential principles



(FIG-2)



Source: IS/ISO 16142-1 :2016

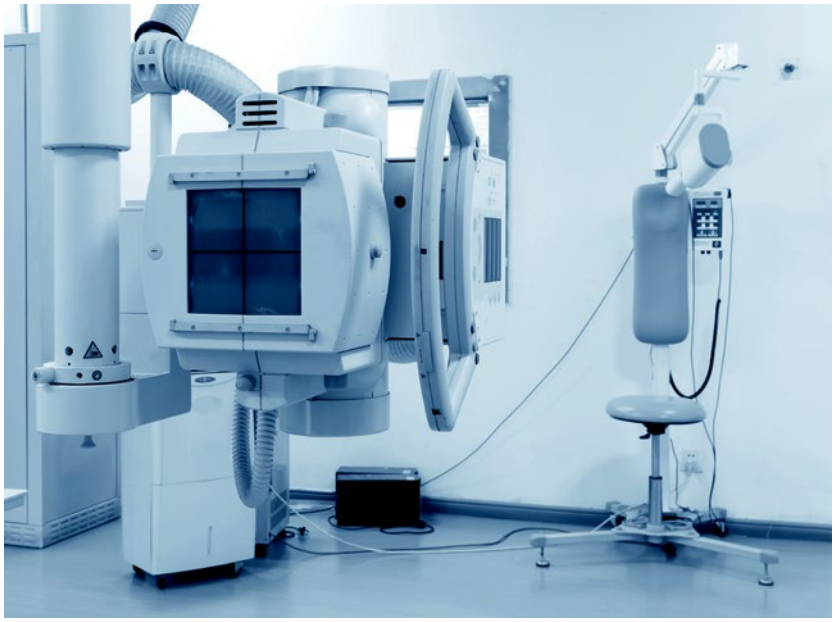
(iv) **High risk:** Class D. Implantable cardioverter defibrillators, pacemakers, breast implants, angioplasty balloon catheters, spinal needle, IVDs for the diagnosis of HIV, Hepatitis C or Hepatitis B. (Source: Medical Device Rules 2017 and WHO Global Model Regulatory Framework for Medical Devices)

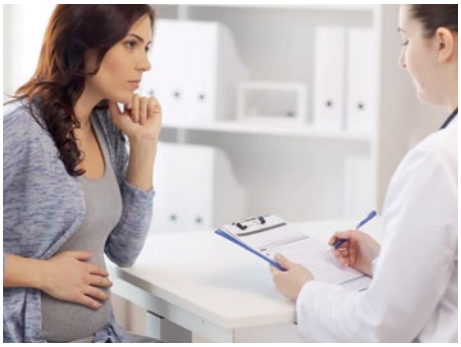
PHASES OF THE MEDICAL DEVICE LIFE CYCLE

The medical device life cycle includes all phases in the life of a medical device, from the initial conception to final decommissioning and disposal. During the medical device life cycle, either process or product standards may be used to fulfil the essential principles. Figure 2 depicts a sample life cycle of a medical device, including examples of International Standards that may be utilized during the distinct phases of the life cycle to meet the essential principles, and parallel process standards with distinct activities associated with each of the life cycle phases.

STANDARDS ON MEDICAL DEVICES

Medical device standards can largely be grouped into three categories: A) basic standards (also known as horizontal standards), which cover fundamental concepts, principles and requirements applicable to a wide range of products and/or processes, e.g. QMS, risk management system, clinical investigation; group standards (also known as semi-horizontal standards), which cover aspects applicable to families of similar products or processes with reference to basic standards, e.g. sterility, electrical safety, biocompatibility; B) product standards (also known as vertical standards), which cover safety and performance aspects of specific products or processes, e.g. standards for infusion pumps, X-ray machines, blood glucose meters for self-testing. Additionally, Process Standards can be either horizontal or vertical in nature and provide the requirements for manufacturers to develop, implement, and maintain processes applicable to





The Medical Equipment and Hospital planning Department (MHD) of BIS has published over 1,250 standards (as on date) on medical devices and related subjects

all stages of the life cycle of a medical device. (Source IS/ISO 16142-1 :2016)

BIS STANDARDS ON MEDICAL DEVICES

The Medical Equipment and Hospital planning Department (MHD) of BIS has published over 1250 standards (as on date) on medical devices and related subjects including product standards, test methods, code of practice, terminology, etc. through its 19 sectional committees covering various fields such as General Surgery, Gynaecology, ENT, Opthalmology, Neurology, Dentistry, Radiology, etc.

SECTIONAL COMMITTEE WISE STANDARDS FORMULATED BY MHD, BIS

Out of 1,250 Indian Standards on the subject, over 970 standards are specific product standards while the remaining standards are test methods, code of practice, terminology, etc. More than 360 standards out of 1250 have been harmonized with ISO/IEC standards by BIS.

In addition, the Ministry of Health and Family Welfare (MoHFW) through its procurement arm HITES Limited has sent a list of 454 commonly procured medical devices on which standards are required

on priority. MHD has initiated the above task on fast-track basis through the 'core group' comprising various industry associations such as FICCI, CII, AIMED, ADMI, ASSOCHAM, AMCHAM, USIBC, MTaI and AdvaMed and NHSRC , KIHT and HITES representatives. The task of standardization of commonly procured devices is being expedited by conducting fortnightly meetings of 'core group'.

STANDARDIZATION OF INNOVATIVE MEDICAL DEVICES FOR ENCOURAGING 'STARTUPS'

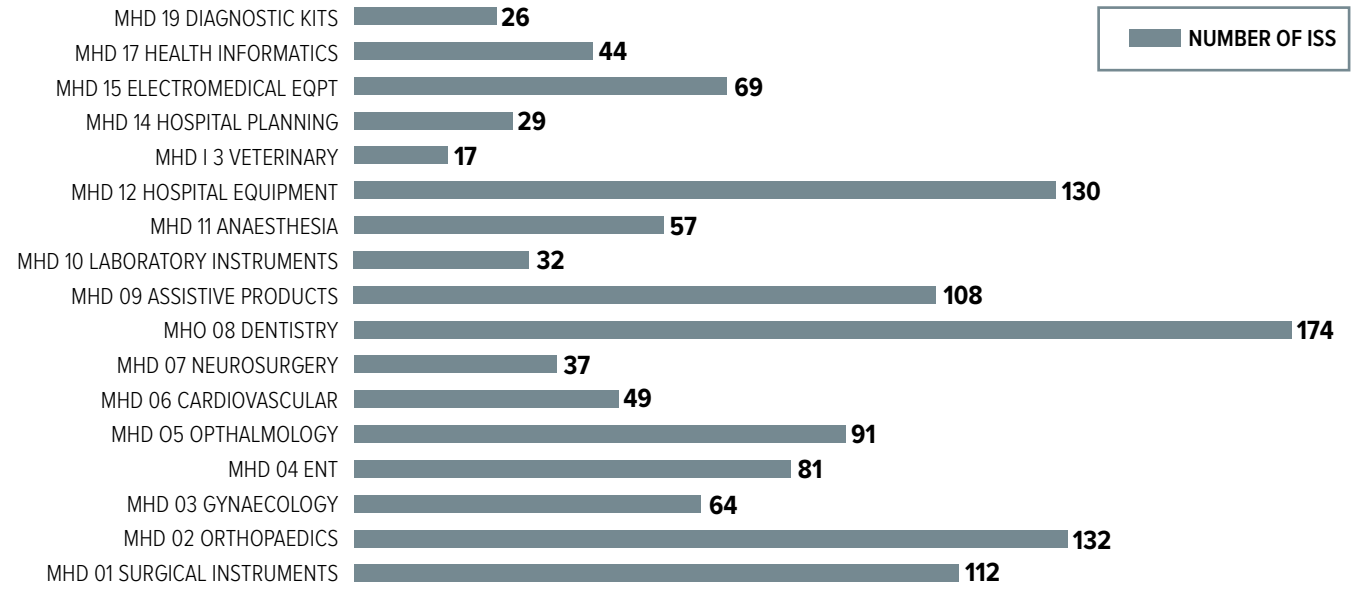
BIS has taken an initiative in association with ICMR and BIRAC to develop standards for innovative medical devices, thus encouraging the innovators/start-up units which would thus facilitate commercial production of these innovative devices and increased acceptability of these devices as standardized products in the market. Some of the innovative products for which standardization work has been taken up include Pedal Operated Resuscitator, Adjustable Modified Walker and Digital Otoscope.

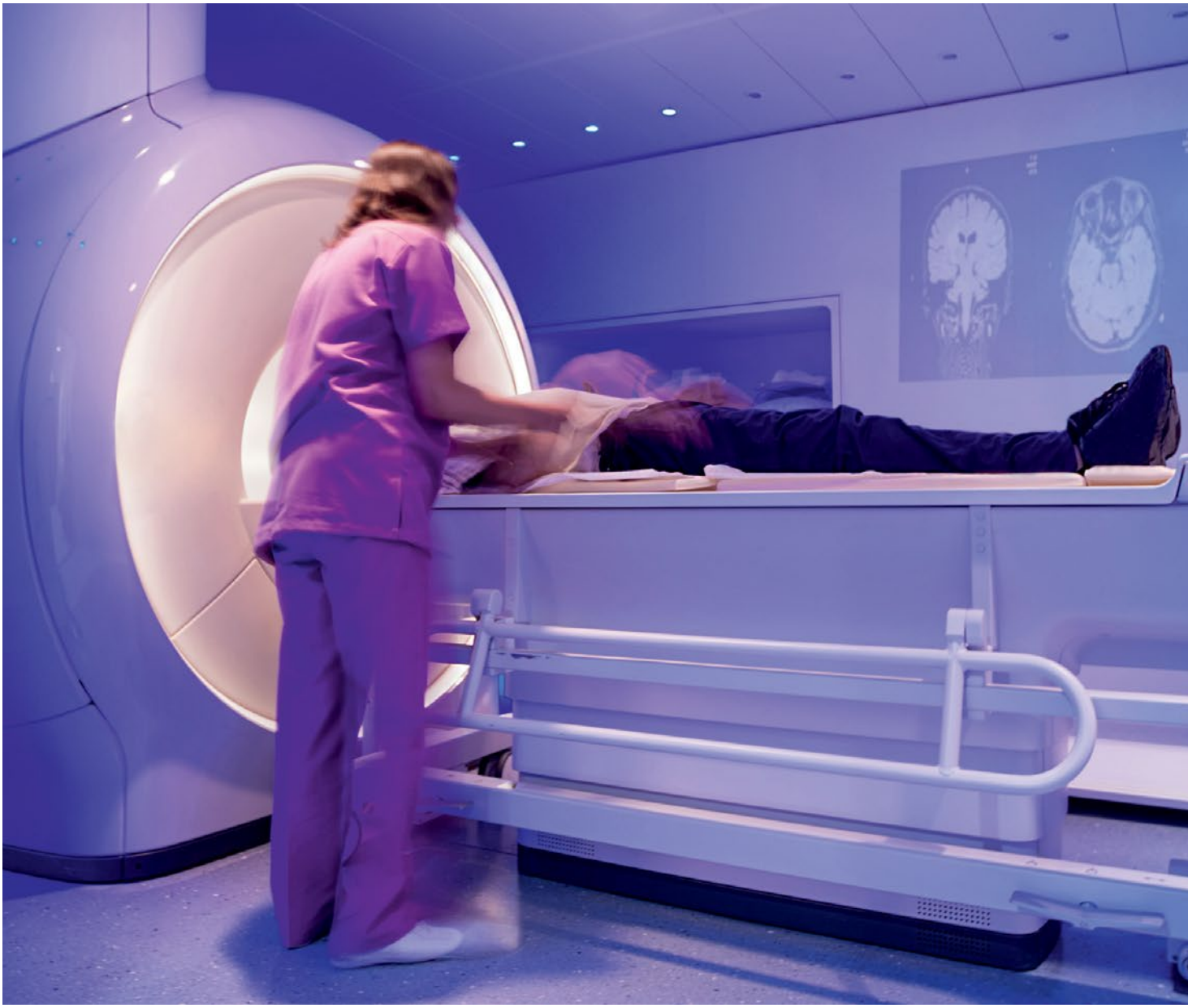
PARTICIPATION IN INTERNATIONAL STANDARDIZATION WORK ON MEDICAL DEVICES

BIS being a National Standards body represents India in the International Organization for Standardization (ISO) and International ELectrotechnical Commission (IEC). India is a 'P' (participating) member in 14 Technical Committees and 9 Sub committees of ISO and 'O' (observing) member in 10 Sub committees of ISO. India is 'P' (participating) member in IEC TC 62 and its subcommittees 62A, 62B, 62C, 62D of the Medical Electrical Equipment.

BIS has been actively participating in various standard formulation activities

STANDARDS ON MEDICAL DEVICES (AS ON DATE)





of ISO and IEC. MHD, BIS hosted the 35th meeting of ISO TC 157 'Non-systemic contraceptives and STI barrier prophylactics' and its working groups from 17-20 September 2018 at Chennai. In addition, BIS delegates participated in more than eight international meetings of ISO/IEC.

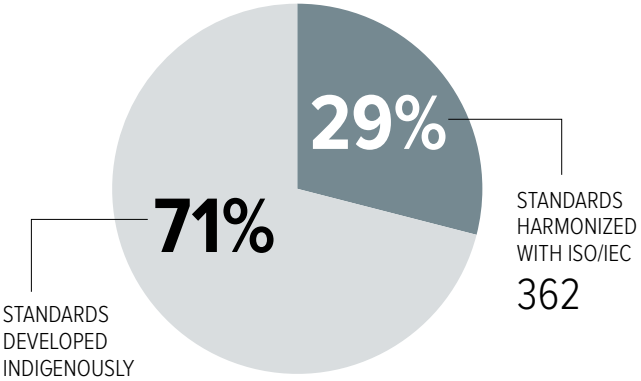
REGULATORY FRAMEWORK FOR MEDICAL DEVICESIN INDIA — ROLE OF STANDARDS

Medical devices in India are currently being regulated under the Medical Devices Rules 2017 (MDR 2017) implemented by the Ministry of Health and Family Welfare w.e.f. 1 Jan 2018. Chapter II of MDR 2017 has provision for conformity of medical devices to BIS standards; wherever available. In absence of BIS standards, ISO IEC standards are to be complied with and in case neither national nor international standards are available, manufacturers' validated standards can be utilized for conformity assessment. However, the MDR 2017 is applicable for only

In order to fill the regulatory gap and to develop an effective ecosystem of conformity assessment, a role for BIS is being envisaged by issuance of Quality Control Orders

STANDARDS PUBLISHED BY MHD (AS ON DATE)

TOTAL STANDARDS PUBLISHED BY MHD
1,256



23 categories of medical devices so far. Additional 12 device categories have also been notified under MDR 2017 but the notification is effective from the year 2020. The total devices regulated under MDR 2017 are about 600 out of the 5000 plus (as per WHO) devices being sold in India. This leaves a large gap in terms of regulatory requirements and conformity assessment of non-notified medical devices in the country. In order to fill this huge regulatory gap and to develop an effective ecosystem of conformity assessment, a broader role for BIS is being envisaged by the issuance of Quality Control Orders for mandatory certification of medical devices under the BIS Act 2016.

In addition, MHD, BIS is in the process of publishing IS 23485 Medical Devices-Quality Management System Requirements and Essential Principles of Safety and Performance by merger of ISO 13485 : 2016 and ISO 16142-1 : 2016 & ISO 16142-2 : 2017 and licensing is likely to begin shortly in order to provide a comprehensive mechanism to the industry for ensuring compliance to applicable horizontal standards by implementation of a single standard. A new certification scheme for integrating conformance of medical devices to the various horizontal and vertical standards required, is being devised by the Management System certification Department of BIS.

– The writer is Scientist 'E', Medical Equipment & Hospital Planning Department, BIS

STANDARDIZATION IN HEALTHCARE

THE CODES OF PRACTICE APPLICABLE IN HEALTHCARE PRACTICES AND MEDICAL LABORATORIES

TYPE	STANDARD NAME	INTENDED PURPOSE
Identification & Demographics	ISO/TS 22220 Health Informatics – Identification of Subjects of Health Care	Basic identity details of patient
Identification & Demographics	MDDS – Demographic (Person Identification and Land Region Codification) version 1.1	Complete demographic for interoperability with E-Governance systems
Patient Identifiers	UIDAI Aadhaar	Preferable identifier where available
Patient Identifiers	Local Identifier	Identifier given within institution / clinic / lab
Patient Identifiers	Government Issued Photo Identity Card Number	Identifier used in conjunction with local in absence of Aadhaar
Architecture Requirements	ISO 18308 Health Informatics – Requirements for an Electronic Health Record Architecture	System architectural requirements
Functional Requirements	ISO/HL7 10781 Health Informatics - HL7 Electronic Health Records-System Functional Model Release 2 (EHR FM)	System functional requirements
Reference Model and Composition	ISO 13940 Health informatics - System of Concepts to Support Continuity of Care	Concepts for care, actors, activities, processes, etc.
Reference Model and Composition	ISO 13606 Health informatics - Electronic Health Record Communication (Part 1 through 3)	Information model architecture and communication
Reference Model and Composition	openEHR Foundation Models Release 1.0.2	Structural definition and composition
Terminology	SNOMED Clinical Terms (SNOMED CT)	Primary terminology
Coding System	Logical Observation Identifiers Names and Codes (LOINC)	Test, measurement, observations
Coding System	WHO Family of International Classifications (WHOFIC) including ICD, ICF, ICHI, ICD-O	Classification and reporting
Imaging	Digital Imaging and Communications in Medicine (DICOM) PS3.0-2015	Image, waveform, audio/video
Scanned or Captured Records	JPEG lossy (or lossless) with size and resolution not less than 1024px x 768px at 300dpi	Image capture format

Scanned or Captured Records	ISO/IEC 14496 - Coding of Audio-Visual Objects	Audio/Video captureformat
Scanned or Captured Records	ISO 19005-2 Document Management - Electronic Document File Format for Long-Term Preservation - Part 2: Use of ISO 32000-1 (PDF/A-2)	Scanned documents format
Data Exchange	ANSI/HL7 V2.8.2-2015 HL7 Standard Version 2.8.2 - An Application Protocol for Electronic Data Exchange in Healthcare Environments	Event/Message exchange
Data Exchange	ASTM/HL7 CCD Release 1 (basis standard ISO/HL7 27932:2009)	Summary Records exchange
Data Exchange	ISO 13606-5 Health informatics - Electronic Health Record Communication - Part 5: Interface Specification	EHR archetypes exchange [Also, refer to openEHR Service Model specification]
Data Exchange	DICOM PS3.0-2015 (using DIMSE services & Part-10 media/files)	Imaging/Waveform Exchange
Other Relevant Standards	Bureau of Indian Standards and its MHD-17 Committee	Standards Development Organizations (SDOs)
Other Relevant Standards	ISO TC 215 set of standards	Standards Development Organizations (SDOs)
Other Relevant Standards	IEEE/NEMA/CE standards for physical systems and interfaces	Standards Development Organizations (SDOs)
Discharge/Treatment Summary	Medical Council of India (MCI) under regulation 3.1 of Ethics	Composition as prescribed
E-Prescription	Pharmacy Practice Regulations, 2015 Notification No. 14-148/ 2012- PCI as specified by Pharmacy Council of India	Composition as prescribed
Personal Healthcare and Medical Device Interface	IEEE 11073 health informatics standards and related ISO standards for medical devices	Device interfacing
Data Privacy and Security	ISO/TS 14441 Health Informatics – Security & Privacy Requirements of EHR Systems for Use in Conformity Assessment	Basis security and privacy requirements
Information Security Management	ISO/DIS 27799 Health informatics - Information Security Management in Health using ISO/IEC 27002	Overall information security management
Privilege Management and Access Control	ISO 22600 Health informatics - Privilege Management and Access Control (Part 1 through 3)	Access control
Audit Trail and Logs	ISO 27789 Health informatics - Audit trails for Electronic Health Records	Audit trail
Data Integrity	Secure Hash Algorithm (SHA) used must be SHA-256 or higher	Data Hashing
Data Encryption	Minimum 256-bits key length	Encryption key
Data Encryption	HTTPS, SSL v3.0, and TLS v1.2	Encrypted connection
Digital Certificate	ISO 17090 Health informatics - Public Key Infrastructure (Part 1 through 5)	Digital certificates use and management

DESIGNED TO HEAL

Emerging and evolving trends in healthcare design

BY SHAMIT MANCHANDA

The healthcare sector in India is poised for sustained growth over the next 20 years. The Indian healthcare sector is on a high-growth trajectory path, being pushed by domestic growth, public awareness and growing world interest in India's delivery capabilities. The total industry size is expected to touch USD280 billion by 2020. This is now being further boosted by "Ayushman Bharat", world's largest National Healthcare Program. The National Health Protection Scheme is targeted at 100 million poor and vulnerable families. As part of this "Ayushman Bharat" programme, the government will also launch 150,000 health and wellness centres, besides setting up new hospitals and upgrading the old ones. This will also see an increased number of Private hospitals being built and upgraded to cater to this demand. The numbers are huge.

Corporate Hospital chains have been immensely successful in the last 15 years in providing high-quality healthcare services to an educated and affluent urban population as well as the rising aspirations of semi urban and rural population. Though revenue is a key goal for these hospitals, emulating Western standards and ensuring

the best outcomes for patients is very important in order for them to attract and retain customers. To remain competitive in the market, hospitals are opting for external accreditation through international organizations such as JCI or India's NABH. Accreditation is also seen as an important process for improving patient safety and quality of care provided to patients. With medical tourism being an important driver, many private hospitals aspire to provide high-quality built environments similar to those found in U.S. and European hospitals.

The push now is going to be in Tier 2 and Tier 3 towns where these facilities have been broadly missing. Many Corporate hospital chains are moving into these smaller towns either by constructing new hospitals on their own but mostly by taking over existing hospitals adopting a Hub and Spoke model to expand their presence.

HEALTHCARE DESIGN

The art and science of designing a hospital is a very complex affair. Beyond complex technical requirements that modern medicine demands and rigid functional relationships between different medical departments, the designer has to cope with a host of more subjective issues like the anxiety of the patient, the stressful work environment of the staff and the need to build a sustainable and healing building.

TRENDS

Bed Mix: The Bed type mix in Private vs Government Hospitals are on two ends. In Govt. hospitals the emphasis has been to provide basic facilities to the poorer sections of society and has primarily focused on large multi bed wards (90% of total bed count). On the Other hand private hospitals provide a combination of multi-bed wards (15-20% total bed count), single occupancy rooms (around 75%), and luxury single rooms for high-paying customers (around 5%)

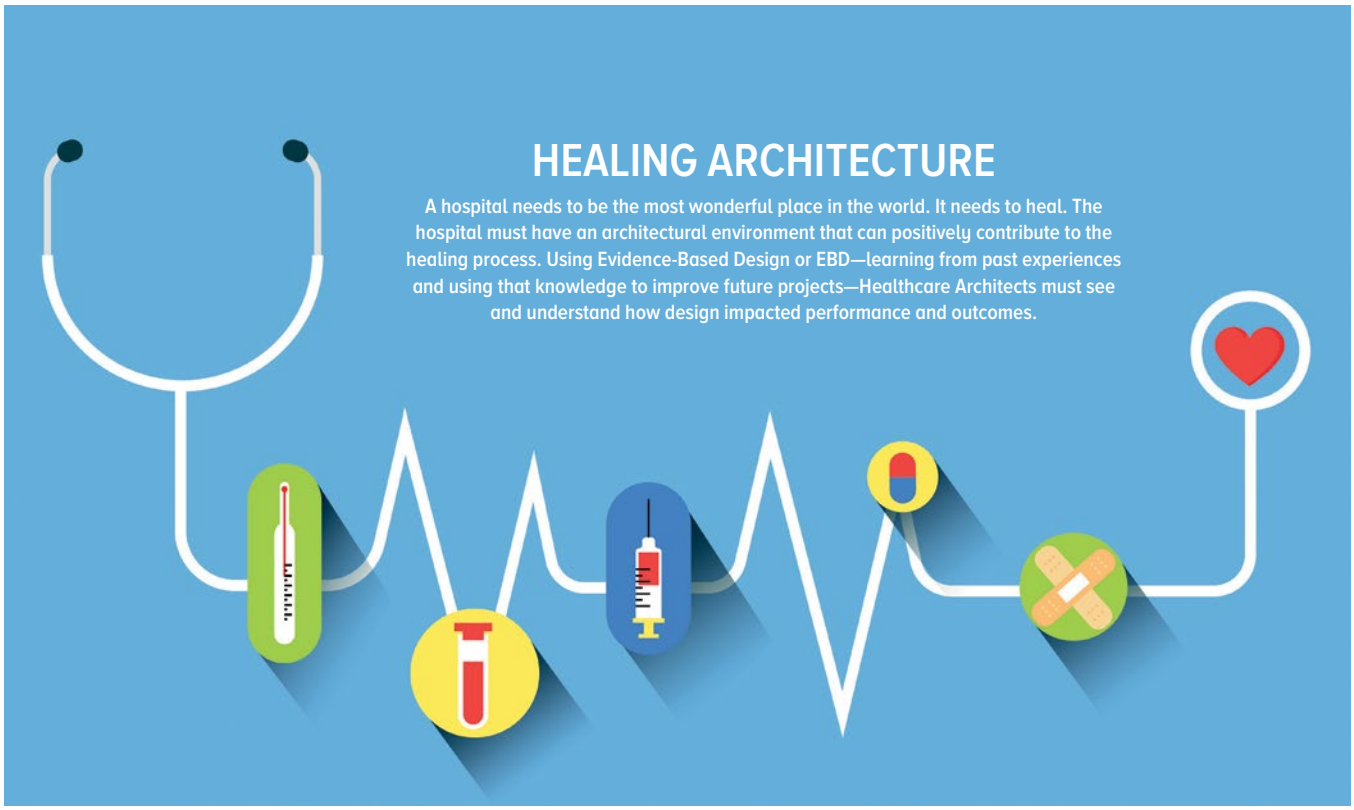
Shift towards Ambulatory / Day Care: With an increasing focus on wellness and short stays for noncritical procedures, ambulatory care centers are coming into prominence. These are designed to be one-stop shops that provide a range of diagnostic and patient care services.

New Technology: While there is a growing focus on patient centeric care, many new private hospitals are investing heavily in new technology and equipment. Today Hospitals are being planned with Hybrid OT and Brain Suites – a combination of the Imaging modalities being brought right inside the Operation Theaters. Hospitals are turning into Smart Hospitals with e-connectivity built into almost all medical equipment to patient rooms to Electronic Medical records etc.. All building services are connected via Inteligent Building Management systems to bring in optimum utilization and efficiency. Use of Tele-medicine is also on the rise.

There is a strong push toward sustainability in all public projects in India, including healthcare projects

Green and Sustainable: There is a strong push toward sustainability in all public projects in India, including healthcare projects. The GRIHA assessment is mandatory for public healthcare projects, and they are being designed with the goal of obtaining a minimum of a three-star rating. Some of the design features being considered for these projects include rain water harvesting, use of high-efficiency light sources, utilization of natural light, use of low VOC materials, Waste water recycling, energy recycling and use of renewable sources of energy. Though not mandated but the Private Hospitals also see the long term advantage of going Green and Sustainable.

Design for flexibility and expandability: Due to the complex nature of hospital organization and diverse factors such as operations and functions, alterations and expansion of buildings are varied and frequent. Buildings should be adaptable to the changing requirements. None of the varied elements are static for as technology develops, medical understanding progresses so do social demand and expectations.



Healthcare hotels: These are places for convalescence and supervised care - a hybrid cross between hotel, spa and hospital. These bring together comfort and healing.

Emphasis on Patient focused hospitals: Patients till the recent past had become more of an object on the scene than the focus of design. In a major shift, sensitivity to people's feelings and their need for sensory input have entered the vocabulary of facility planning and design. Design of healthcare setting should:

- Value human beings over technology
- Enable patients to fully participate as partners in their care.
- Provide flexibility to personalize the care of each patient.
- Encourage care givers to be responsive to patients and Foster a connection to nature and beauty.

The objective is to create a patient focused, patient centered architecture by offering an atmosphere of safety, security, cleanliness and physical comfort.

Create a Healing Architecture: A hospital needs to be the most wonderful place in the world. It needs to heal. The hospital must have an architectural environment that can positively contribute to the healing process.

Evidence-Based Design or EBD is learning from past experiences and using that knowledge to improve future projects. Healthcare Architects must see EBD as a way of understanding how design impacted performance and outcomes. What is important here is to use EBD data that is local and not from other parts of the world.

HOSPITAL OF THE FUTURE:

Redefined care delivery: Emerging features including centralized digital centers to enable decision-making, continuous clinical monitoring, 3-D printing for surgeries, and the use of smaller, portable devices will help characterize acute care hospitals.

Digital patient experience: Digital and artificial intelligence technologies can help enable on-demand interaction and seamless processes through a choice of devices to improve patient experience.

Operational efficiencies through technology: Digital supply chains, automation and robotics, can drive operations management and back-office efficiencies.

Healing and well-being designs: The well-being of patients and staff members—with an emphasis on the importance of environment and experience in healing—will likely be important in future hospital designs.

Technology will likely underline most aspects of future hospital care, but care delivery especially for complex patients and procedures may still require hands-on human expertise. Many future technologies can supplement and extend human interaction. Healthcare architects have an opportunity to bring together architecture and technology by creating dynamic settings that cater to the needs of patients and identifying opportunities for staff that broaden treatment options as well as where that treatment is provided.

– The author is Principle architect at C.P. Kukreja Associates

MOVING FORWARD IN GLOBAL HEALTHCARE

Medical scientists should stay aware about the tech-trends within the industry

BY DR. MUGDHA SRIVASTAVA

As technology continues to progress, it's important for medical laboratory scientists to stay aware about the trends within the industry.

A modern clinical laboratory is a primary requirement for the pursuit of clinical science. Scientific advances of this century have had a profound influence on the health, comfort and welfare of mankind. Whether it's the use of drones for transporting samples or automation, the importance of some key trends within medical laboratory science has been projected far into the future. Progressive technologies are likely to be built upon the foundation of these progressive technologies to make healthcare more available, efficient, and cost-effective.

Of late, the focus in healthcare is centered around the patient rather than the provider. Small handheld devices and desktop equipment is used for testing outside of hospitals, some even at home by the patient via home-based health monitoring systems. The information collected is transmitted through smart phones to centers where it is processed, and so the patient can

avoid spending a fortune on staying in an expensive facility.

• Point-of-care testing provides care in the comfort of the patient's residence. Small mobile devices are handy, and they can provide medical laboratory scientists with both qualitative and quantitative data. For critical situations, laboratory instruments can now be taken home as, although still large, they are no longer as bulky or complex as they used to be.

• Automation has become popular for medical laboratory scientists as a result of the pressure of producing quicker results, improving patient care and, at the same time, minimizing cost.

• Biobanks preserve biological specimens for utilization in the future, which may include transfusion, transplantation or R&D. Blood banking is the most common use of biobanks, but recent additions have included seeds, cells and tissues. Their capability to conserve biological data has made them indispensable for medical laboratory scientists, as well as for life and environmental scientists and biotechnologists.

• With an increasing aged population that have several health conditions, there has been a progressing trend of home-based monitoring in efforts to reduce costs and allow patients to remain comfortable in their homes, as opposed to expensive facilities that may be miles away. Wearable devices have greatly helped this trend, as they can monitor and record real-time data on physiological conditions that can be transmitted via smartphones, tablets or similar devices. Current and future medical laboratory scientists should look further into leveraging wearable sensors to develop faster results without having to restrict a patient to stay in a healthcare environment all the time. People heal faster when they feel comfortable.

• Drones are expected to be widely used for transporting specimens as they can quickly transport small amounts, without having to deal with typical transportation delays. A 2015 study found that samples of blood could be sent

ISO 15189 Medical laboratories — Requirements for quality and competence is an international standard that specifies the quality management system requirements particular to medical laboratories

via drones for testing without being adversely affected by the harsh conditions that may be experienced during drone transportation. In fact, in July 2016, samples from Madagascar villages were sent by drones to laboratories for analysis for disease detection.

Globally, trends appear to indicate that routine testing in the future could be delivered through POCT and home-based testing. Centralized laboratories are likely to concentrate more on esoteric testing. Automation and shifts in the sites where laboratory services are delivered will result in major shifts in laboratory staffing needs. Demand for skilled IT professionals, experts to monitor and service robotic equipment, and allied health professionals is likely to grow. Overall decreases in labor costs, however, will likely lead to decreases in the cost per test.

LABORATORY TESTING

Among the variables that influence medical decisions, laboratory tests are among the most important and frequently used. Establishing and maintaining laboratory quality standards is essential. The internationally accepted standards of the International Standards Organization IS/ISO 15189 and IS/ISO/IEC 17025 have set stringent requirements.

As per IS/ISO/IEC 17025 specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, non-standard methods, and laboratory-developed methods. It is applicable to all organizations performing tests and/or calibrations. These include, for example quality, administrative and technical operations. Laboratory customers, regulatory authorities and accreditation

bodies may also use it in confirming or recognizing the competence of laboratories.

Quality laboratory results are required to support clinical diagnosis, rationalize and monitor treatment, for epidemiological purposes, for the surveillance and control of diseases of public health importance, and to provide early warning of disease outbreaks. This improves the accuracy of health information and promotes effective national health planning. The purpose of establishing laboratory quality standards is to ensure the accuracy of test results, increase the confidence of patients, clinicians and communities in the value of thorough laboratory testing.

TABLE 1: INTERNATIONAL STANDARDS APPLICABLE TO LABORATORIES

- ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories
- ISO 15189 Medical laboratories – requirements for quality and competence
- ISO/IEC 17043 Conformity assessment – general requirements for proficiency testing
- ISO 13528 Statistical methods for use in proficiency testing by interlaboratory comparison
- OECD GLP OECD principles on good laboratory practice
- ISO Guide 34 General requirement for the competence of reference material producers
- ISO 8402 Quality management and quality assurance – vocabulary
- ISO 19011 Guidelines for quality and/or environmental management system auditing
- ISO 9001 Quality management systems – requirements.

The development of the modern laboratory required several conditions to be met at appropriate times in history. Obviously, technology was and is the primary force behind advances in medicine. Angiography, computer-aided tomography (CAT)scans, organ transplantation, and DNA analysis are just a few of the expensive but valuable technologies available to a modern physician.

Laboratory experts that keep pace with emerging IT have found more efficient ways to communicate and provide services; educate themselves, their staff, and clients; market their products; manage data and information. For example, a future trend in genetic testing is the focus on prevention. Predictive tests will screen for data, identifying important population genetic risk factors for diabetes, cancer, and autoimmune diseases. Nanotechnology promises to affect the clinical laboratory industry through the development of miniaturized components and devices for chemical processing and measuring sensors. This technology could prove to be extremely useful in the movement towards developing small, versatile point-of-care tests.

– The writer is MBBS from Aligarh Muslim University and a practising doctor at AMU

Information courtesy: Subject-specific research papers

STANDARDS FIRST

THE LIST OF INDIAN STANDARDS PUBLISHED/REVISED

No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC/TR 29163-2 : 2009 Information Technology—Sharable Content Object Reference Model (SCROM) 2004 3rd Edition Part 2 Content Aggregation Model Version 1.1	आई एस / आई एस ओ / आई ई सी / टी आर 29163-2: 2009 सूचना प्रौद्योगिकी–सारबल सामग्री वस्तु संदर्भ मॉडल (एस सी आर ओ एम) 2004 तीसरा संस्करण भाग 2 सामग्री एकत्रीकरण म०डल संस्करण 1.1
Date of Establishment संशोधन की सख्या और तिथि	28 Dec 2017	28 दिसंबर, 2017
No. & Year of the Amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 29990 : 2010 Learning Services for Non-Formal Education and Training—Basic Requirements for Services Providers	आई एस / आई एस ओ 29990: 2010 गैर–औपचारिक शिक्षा और प्रशिक्षण के लिए सीखने की सेवाएं–सेवा प्रदाताओं के लिए बुनियादी आवश्यकताएं
Date of Establishment संशोधन की सख्या और तिथि	28 Dec 2017	28 दिसंबर 2017
No. & Year of the Amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 61970-301 : 2013 Energy Management System Application Program Interface (EMS-API) Part 301 Common Information Model (CIM) Base	आई एस / आई ई सी 61970-301: 2013 एनर्जी मैनेजमेंट सिस्टम एप्लीकेशन प्रोग्राम इंटरफेस (ई एम एस–ए पी आई) पार्ट 301 क०मन इंफॉर्मेशन म०डल (सी आई एम) बेस
Date of Establishment संशोधन की सख्या और तिथि	28 Dec 2017	28 दिसंबर 2017
No. & Year of the Amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15968 : 2013 Ballasts for Tubular Fluorescent Lamps — Performance Requirements	आई एस 15968: ट्यूबलर फ्लोरोसेंट लैंप के लिए 2013 रोड़े – प्रदर्शन आवश्यकताएं
Date of Establishment संशोधन की सख्या और तिथि	28 Dec 2017	28 दिसंबर, 2017
No. & Year of the Amendment संशोधन की तिथि एवं वर्ष	IS 1534 (Part 1) : 1977 Specification for Ballasts for Fluorescent Lamps Part 1 For Switch Start Circuits (Second Revision)	आई एस 1534 (भाग 1): 1977 फ्लोरोसेंट प्रारंभ लैंप के लिए रोड़े के लिए विशिष्टता 1 स्विच प्रारंभ सर्किट (दूसरा संशोधन) के लिए
Date of Cancellation रद्द होने की तिथि	As on date	आज की तारीख़ में

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4003 (Part 2) : 1986 Specification for Pipe Wrenches Part 2 Heavy Duty (First Revision)	आई एस 4003 (भाग 2): 1986 पाइप रिंचों के लिए विशिष्टता भाग 2 भारी शुल्क (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	3 Jan 2018	3 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 2 September 2014	संशोधन नंबर 2 सितंबर 2014
Date Of Cancellation रद्द होने की तिथि	3 Jan 2018	3 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 8674 : 2013/ISO 1969 : 2004 Fibre Ropes – Polyethylene – 3- and 4- Strand Ropes (Third Revision)	आई एस 8674: 2013 आई एस ओ 1969: 2004 फाइबर रोप्स – पo लीइथाइलीन – 3– और 4– स्ट्रैंड रस्सियाँ (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	15 Dec 2017	15 दिसंबर 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 2 December 2017	संशोधन नंबर 2 दिसंबर 2017
Date Of Cancellation रद्द होने की तिथि	15 Dec 2017	15 जनवरी 2017
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 11066 : 2014/ISO 1141 : 2012 Fibre Ropes – Polyester - 3-, 4-, 8-, and 12- Strand Ropes (Second Revision)	आई एस 11066: 2014 / आई एस ओ 1141: 2012 फाइबर रोप्स – पoलिएस्टर – 3–, 4–, 8–, और 12– स्ट्रैंड रोप्स (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	15 Dec 2017	15 दिसंबर 2017
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 December 2017	संशोधन नंबर 1 दिसंबर 2014
Date Of Cancellation रद्द होने की तिथि	15 Dec 2017	15 दिसंबर 2017
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 11069 : 2017 Refined, Bleached, Hydrogenated, Winterized and Deodorized (RBHWD) Soybean Oil - – Specification (First Revision)	आई एस 11069: 2017 परिष्कृत, प्रक्षालित, हाइड्रोजनीकृत, विखंडित और दुर्गन्ध (आर बी एच डब्लू डी) सोयाबीन तेल – – विशिष्टता (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 11069 : 1984 Refined, Bleached, Hydrogenated, Winterized and Deodorized (RBHWD) Soybean Oil – Specification	आई एस 11069: 1984 परिष्कृत, प्रक्षालित, हाइड्रोजनीकृत, विखंडित और निर्जलित (आर बी एच डब्लू डी) सोयाबीन तेल – विशिष्टता
Date Of Cancellation रद्द होने की तिथि	12 Jan 2018	12 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16480 : 2017 Earth Moving Machinery – Rubber Tyred Machines – Steering Requirements	आई एस 16480: 2017 अर्थ मूविंग मशीनरी – रबर टायर मशीनें – स्टीयरिंग आवश्यकताएँ
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16602 (Part 1) : 2017/ ISO 28560- 1 : 2014 Information and Documentation– RFID in Libraries Part 1 Data Elements and General Guidelines for Implementation	आई एस 16602 (भाग 1): 2017/ आई एस ओ 28560– 1: 2014 सूचना और प्रलेखन म्समउमदजे पुस्तकालयों में आर एफ आई डी भाग 1 डेटा तत्व और कार्यान्वयन के लिए सामान्य दिशानिर्देश
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16663 : 2017/ IEC/ TS 62727 : 2012 Photovoltaic Systems – Specification for Solar Trackers	आई एस 16663: 2017 / आई एस सी/ टी एस 62727: 2012 फोटोवोल्टिक सिस्टम – सौर ट्रैकर्स के लिए विशिष्टता
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16689 : 2017/ ISO 6527 : 1982 Nuclear Power Plants– Reliability Data Exchange – General Guidelines	आई एस 16689: 2017 / आई एस ओ 6527: 1982 न्यूक्लियर पावर प्लांट्स विश्वसनीयता डेटा एक्सचेंज – सामान्य दिशानिर्देश
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16692 : 2017/ ISO 2889 : 2010 Sampling Airborne Radioactive Materials From the Stacks and Ducts of Nuclear Facilities	आई एस 16692: 2017 / आई एस ओ 2889रू 2010 सैम्पलिंग एयरबोएक्टिव रेडियोधर्मी पदार्थ ढेर और नलिकाओं से
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16693 : 2017/ ISO 8769 : 2010 Reference Sources – Calibration of Surface Contamination Monitors – Alpha-, Beta- and Photon Emitters	आई एस 16693: 2017 / आई एस ओ 8769: 2010 संदर्भ स्रोत – भूतल संदूषण मॉनिटर्स का अंशांकन – अल्फा–, बीटा– और फोटॉन एमिटर
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 19785-2 : 2006 Information Technology – Common Biometric Exchange Formats Framework Part 2 Procedures for the Operation of the Biometric Registration Authority	आई एस / आई एस ओ / आई ई सी 19785–2: 2006 सूचना प्रौद्योगिकी – बॉयोमीट्रिक पंजीकरण प्राधिकरण के संचालन के लिए सामान्य बॉयोमीट्रिक विनिमय प्रारूप फ्रेमवर्क भाग 2 प्रक्रियाएं
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

NEWS YOU CAN USE

THE NUMBERS

During the period, 11 BIS sectional committee meetings were held, 10 new standards were formulated and 16 standards were revised. Besides, 38 draft standards were issued for wide circulation and 5 draft standards were finalized. Also, 108 standards were reviewed and were reaffirmed. As on May 25, 2018, 19,427 standards were in force.

NEWS YOU CAN USE

HALLMARKING CERTIFICATION

During the month of May, 347 licences for hallmarking of gold and 30 licences for hallmarking of silver were granted, whereas 90 licences for hallmarking of gold and 7 licences for silver were cancelled/expired. The total number of operative licences under this scheme as on May 25, 2018 stood at 22,034 and 1,806 for gold and silver respectively. During the month, 16 Assaying & Hallmarking Centres were recognized. As on May 25, 2018, 633 Assaying & Hallmarking Centres recognized by BIS were in operation.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 19794-14 : 2013 Information Technology – Biometric Data Interchange Formats Part 14 DNA Data	आई एस / आई एस ओ / आई ई सी 19794-14: 2013 सूचना प्रौद्योगिकी - बॉयोमीट्रिक डेटा इंटरचेंज प्रारूप 14 भाग डी एन ए डेटा
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 29109-5 : 2014 Information Technology – Conformance Testing Methodology for Biometric Data Interchange Formats Defined in ISO/IEC 19794 Part 5 Face Image Data	आई एस / आई एस ओ / आई ई सी 29109-5: 2014 सूचना प्रौद्योगिकी - बायोमीट्रिक डेटा इंटरचेंज फॉर्मेट्स के लिए अनुरूपता परीक्षण पद्धति आई एस ओ / आई ई सी 19794 भाग 5 फेस इमेज डेटा में परिभाषित
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 62538 : 2008 Categorization of Optical Devices	आई एस / आई ई सी 62538: 2008 ऑप्टिकल उपकरणों का वर्गीकरण
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1391 (Part 2) : 2017 Room Air Conditioners – Specification Part 2 Split Air Conditioners (Third Revision)	आई एस 1391 (भाग 2): 2017 कक्ष एयर कंडीशनर चंतज विशिष्टता भाग 2 स्प्लिट एयर कंडीशनर (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 1391 (Part 2) : 1992 Room Air Conditioners Specification Part 2 Split Air Conditioners (Second Revision)	आई एस 1391 (भाग 2): 1992 कक्ष एयर कंडीशनर विनिर्देशन भाग 2 स्प्लिट एयर कंडीशनर (दूसरा संशोधन)
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1448 (Part 132) : 2017 Methods of Test for Petroleum and its Products Part : 132 Determination of Moisture Content in Raw and Calcined Petroleum Coke (First Revision)	आई एस 1448 (भाग 132): 2017 पेट्रोलियम और उसके उत्पादों के लिए परीक्षण के तरीके भागरू 132 कच्चे और कच्चे पेट्रोलियम कोक में नमी सामग्री का निर्धारण (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 1448 (Part 132) : 1989 Methods of Test for Petroleum and its Products Part : 132 Determination of Moisture Content in Raw and Calcined Petroleum Coke	आई एस 1448 (भाग 132): 1989 पेट्रोलियम और उसके उत्पादों के लिए टेस्ट के तरीके भागरू 132 कच्चे और कच्चे पेट्रोलियम कोक में नमी की मात्रा का निर्धारण
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4333 (Part 3) : 2017/ ISO 7971- 3 : 2009 Methods of Analysis for Foodgrains Part 3 Determination of Bulk Density, Called Mass Per Hectolitre (Second Revision)	आई एस 4333 (भाग 3): 2017 / आई एस ओ 7971- 3: 2009 खाद्यान्नों के विश्लेषण के तरीके भाग 3 थोक घनत्व का निर्धारण, जिसे मास प्रति हेक्टोलिट्रे (द्वितीय संशोधन) कहा जाता है
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 4333 (Part 3) : 2002/ ISO 7971-2 : 1995 Methods of Analysis for Foodgrains Part 3 Determination of Hectolitre Weight (First Revision)	आई एस 4333 (भाग 3): 2002 / आई एस ओ 7971-2:1995 खाद्यान्नों के विश्लेषण के तरीके भाग 3 भ्मबजवसपजतम वजन का निर्धारण (पहला संशोधन)
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7302 : 2017 Valve Fittings for Self Contained Breathing Apparatus (SCBA) and Self Contained Underwater Breathing Apparatus (SCUBA) –Specification (First Revision)	आई एस 7302: 2017 वाल्व फिटिंग के लिए स्व-नियंत्रित श्वास उपकरण (एस सी बी ए) और स्व-नियंत्रित अवर जल श्वास तंत्र (एस सी यू बी ए) पपिबंजपवद विशिष्टता (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 7302 : 1974 Specification for Valve Fitting for Gas Cylinder Valves for Use with Breathing Apparatus	आई एस 7302: 1974 श्वास नलिका के साथ उपयोग के लिए गैस सिलेंडर वाल्व के लिए वाल्व फिटिंग के लिए विशिष्टता
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7631 : 2017/ISO 22915-4 : 2009 Industrial Trucks – Pallet Stackers, Double Stackers and Order-Picking Trucks with Operator Position Elevating up to and Including 1 200 mm Lift Height – Verification of Stability (Second Revision)	आई एस 7631: 2017 / आई एस ओ 22915-4: 2009 इंडस्ट्रियल ट्रक्स - पैलेट स्टेकर, डबल स्टैकर्स और अ०र्डर-पिकरिंग ट्रक, ऑपरेटर पोजीशन के साथ ऊपर उठने और इसमें शामिल होने के लिए 1 200 मिमी लिफ्ट ऊँचाई ँज सत्यापन की स्थिरता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 7631 : 1993 pallet Stackers and High Lift Platform Trucks-Method of Stability Test (First Revision)	आई एस 7631: 1993 पैलेट स्टेकर्स एंड हाई लिफ्ट प्लैटफॉर्म ट्रक्स ट्रक-मेथड ऑफ स्टेबिलिटी टेस्ट (प्रथम संशोधन)
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7718 : 2017 Recommendations for Inspection, Testing and Maintenance of Fixed Wheel and Slide Gate (Second Revision)	आई एस 7718: 2017 फिक्स्ड व्हील और स्लाइड गेट के निरीक्षण, परीक्षण और रखरखाव के लिए सिफारिशें (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 7718 : 1991 Recommendations for Inspection, Testing and Maintenance of Fixed Wheel and Slide Gate (First Revision)	आई एस 7718: 1991 फिक्स्ड व्हील और स्लाइड गेट के निरीक्षण, परीक्षण और रखरखाव के लिए सिफारिशें (पहला संशोधन)
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10766 : 2017/ISO 3842 : 2006 Road Vehicles – Fifth Wheels – Interchangeability (Second Revision)	आई एस 10766: 2017 / आई एस ओ 3842: 2006 सड़क वाहन - पाँचवाँ पहिए - विनिमेयता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 10766 : 2004/ ISO 3842 : 2001 Road Vehicles – Fifth Wheels – Interchangeability (First Revision)	आई एस 10766: 2004 / आई एस ओ 3842: 2001 सड़क वाहन - पाँचवाँ पहिये - विनिमेयता (पहला संशोधन)
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13730 (Part 38) –2017/IEC 60317-38 : 2013 Specifications for Particular Types of Winding Wires Part 38 Polyester or Polyesterimide Overcoated with Polyamide-Imide, Enamelled Round Copper Wire, Class 200, With a Bonding Layer	आई एस 13730 (भाग 38) -2017 / आई ई सी 60317-38: 2013 वाइंडिंग तारों के विशेष प्रकार के लिए विनिर्देशों भाग 38 पॉलिएस्टर या पॉलिमेस्टराइड पॉलियामाइड-इमाइड के साथ ओवरकोलेटेड, एनामेल्ड राउंड क०पर वायर, क्लास 200, एक बॉन्डिंग लेयर के साथ
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15611 (Part 1) : 2017/ ISO 22915-5 : 2014 Industrial Trucks – Single-Side-Loading Trucks – Verification of Stability (First Revision)	आई एस 15611 (भाग 1): 2017 / आई एस ओ 22915-5: 2014 औद्योगिक ट्रक (सिंगल-साइड-लोडिंग ट्रक (स्थिरता का सत्यापन (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 15611 (Part 1) :2005/ ISO 13563-1 : 2001 Single Side Loading Fork-Lift Trucks Part 1 Stability Tests	आई एस 15611 (भाग 1): 2005 / आई एस ओ 13563-1: 2001 सिंगल साइड लोडिंग कांटा-लिफ्ट ट्रक भाग 1 स्थिरता टेस्ट
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16108 (Part 2) : 2017/IEC/TR 62471-2 : 2009 Photobiological Safety of Lamps and Lamp Systems Part 2 Guidance on Manufacturing Requirements Relating to Non-Laser Optical Radiation Safety	आई एस 16108 (भाग 2): 2017 / आई ई सी / टी आर 62471-2: 2009 लैम्प और लैम्प सिस्टम की फोटोबोलॉजिकल सेफ्टी पार्ट 2 गैर-लेजर ऑप्टिकल विकिरण सुरक्षा से संबंधित विनिर्माण आवश्यकताओं पर मार्गदर्शन
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16108 (Part 3) : 2017/IEC/TR 62471-3 : 2015 Photobiological Safety of Lamps and Lamp Systems Part 3 Guidelines for the Safe use of Intense Pulsed Light Source Equipment on Humans	आई एस 16108 (भाग 3): 2017/ आई ई सी / टी आर 62471-3: 2015 मनुष्यों पर गहन स्पंदित प्रकाश स्रोत उपकरण के सुरक्षित उपयोग के लिए लैंप और लैंप सिस्टम पार्ट 3 दिशानिर्देशों की फोटोबोलॉजिकल सुरक्षा
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 Jan. 18
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16561 (Part 5) : 2017/ ISO 11064-5 : 2008 Ergonomic Design of Control Centres Part 5 Displays and Controls	आई एस 16561 (भाग 5): 2017 / आई एस ओ 11064-5: 2008 नियंत्रण केंद्रों के एर्गोनोमिक डिजाइन भाग 5 प्रदर्शन और नियंत्रण
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 Jan. 18
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16562 (Part 2) : 2017/ ISO 15536 (Part 2) : 2007 Ergonomics — Computer Manikins and Body Templates Part 2 Verification of Functions and Validation of Dimensions for Computer Manikin Systems	आई एस 16562 (भाग 2): 2017 / आई एस ओ 15536 (भाग 2): 2007 एर्गोनॉमिक्स - कंप्यूटर मानिकिन और बॉडी टेंप्टर भाग 2 कंप्यूटर मानिकिन प्रणालियों के लिए कार्यों का सत्यापन और आयामों का सत्यापन
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	19 Jan. 18
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16564 : 2017/ ISO 24504 : 2014 Ergonomics — Accessible Design — Sound Pressure Levels of Spoken Announcements for Products and Public Address Systems	आई एस 16564: 2017 / आई एस ओ 24504 :2004 एर्गोनॉमिक्स - एक्सेसिबल डिजाइन - प्रोडक्ट्स और पब्लिक एड्रेस सिस्टम के लिए स्पोक प्रेशर स्तर की ध्वनि दबाव स्तर
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16565 : 2017/ ISO 24503 : 2011 Ergonomics — Accessible Design — Tactile Dots and Bars on Consumer Products	आई एस 16565: 2017 / आई एस ओ 24503: 2011 एर्गोनॉमिक्स - एक्सेसिबल डिजाइन - उपभोक्ता उत्पादों पर टैक्टाइल डॉट्स और बार्स
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16567 : 2017/ ISO 24501 : 2010 Ergonomics — Accessible Design — Sound Pressure Levels of Auditory Signals for Consumer Products	आई एस 16567: 2017 / आई एस ओ 24501: 2010 एर्गोनॉमिक्स - एक्सेसिबल डिजाइन - उपभोक्ता उत्पादों के लिए श्रवण संकेतों का ध्वनि दबाव स्तर
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16569 : 2017/ ISO 11429 : 1996 Ergonomics — System of Auditory and Visual Danger and Information Signals	आई एस 16569: 2017 / आई एस ओ 11429: 1996 एर्गोनॉमिक्स - श्रवण और दृश्य खतरे और सूचना सिग्नल की प्रणाली
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16595 (Part 20) : 2017/ ISO 9241-20 : 2008 Ergonomics of Human — System Interaction Part 20 Accessibility Guidelines for Information/ Communication Technology (ICT) Equipment and Services	आई एस 16595 (भाग 20): 2017 / आई एस ओ 9241-20: 2008 मानव का एर्गोनॉमिक्स - सूचना ६ संचार प्रौद्योगिकी (आईसीटी) उपकरण और सेवाओं के लिए सिस्टम इंटरेक्शन पार्ट 20 एक्सेसिबिलिटी दिशानिर्देश।
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

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THE HEALTH RANK

The five countries with the highest levels of healthcare access and quality in 2016 were Iceland (97.1 points), Norway (96.6), the Netherlands (96.1), Luxembourg (96.0), and Finland and Australia (each with 95.9). While the countries with the lowest scores were the Central African Republic (18.6), Somalia (19.0), Guinea-Bissau (23.4), Chad (25.4), and Afghanistan (25.9). There were major gains in healthcare access and quality in many countries in sub-Saharan Africa and Southeast Asia between 2000-2016. The authors also analysed healthcare access and quality locally within Brazil, China, England, India, Japan, Mexico, and the USA. They found that China and India had the widest disparities in healthcare access and quality with 43.5 and 30.8 point differences, respectively. Japan had the narrowest differences with a 4.8 point difference.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16595 (Part 154) : 2017/ ISO 9241-154 : 2013 Ergonomics of Human-System Interaction Part 154 Interactive Voice Response (IVR) Applications	आई एस 16595 (भाग 154): 2017 / आई एस ओ 9241-154: 2013 मानव-प्रणाली सहभागिता का एर्गोनॉमिक्स भाग 154 इंटरएक्टिव वॉयस रिस्पांस (आईवीआर) अनुप्रयोग
Date Of Establishment संशोधन की सख्या और तिथि		19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60958-1 : 2014 Digital Audio Interface Part 1 General (First Revision)	आई एस / आई ई सी 60958-1: 2014 डिजिटल ऑडियो इंटरफेस भाग 1 सामान्य (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan. 18	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS/IEC 60958-1 : 2004 Digital Audio Interface Part 1 General	आई एस / आई ई सी 60958-1: 2004 डिजिटल ऑडियो इंटरफेस भाग 1 जनरल
Date Of Cancellation रद्द होने की तिथि	19 Jan. 18	19 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4572 : 2014/ISO 1140 : 2012 Fibre Ropes – Polyamide – 3-, 4-, 8- and 12 Strand Ropes (Fourth Revision)	आई एस 4572: 2014 / आई एस ओ 1140: 2012 फाइबर रोप्स – पॉलियामाइड – 3-, 4-, 8- और 12 स्ट्रैंड रोप्स (चौथा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 December 2017	संशोधन नंबर 1 दिसंबर 2017
Date Of Cancellation रद्द होने की तिथि	12 Jan 2018	12 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 5175 : 2014/ISO 1346 : 2012 Fibre Ropes – Polypropylene Split Film, Monofilament and Multifilament (PP2) and Polypropylene High-Tenacity Multifilament (PP3) – 3-, 4-, 8-, and 12-Strand Ropes (Third Revision)	आई एस 5175:2014/ आई एस आ 1346:2012 फाइबर रोप्स – पॉलीप्रोपाइलीन स्प्लिट फिल्म, मोनोफिलामेंट और मल्टीफिलामेंट (पीपी २) और पo्लीप्रोपाइलीन हाई-टेनैसिटी मल्टीफिलामेंट (पीपी ३) – ३-४, ४- 8- और १२- स्ट्रैंड रोप्स (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	12 Jan 2018	12 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 December 2017	संशोधन नंबर 1 दिसंबर 2017
Date Of Cancellation रद्द होने की तिथि	12 Jan 2018	12 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60947-3 : 2012 Low Voltage Switchgear and Controlgear Part 3 Switches, Disconnectors, Switch-Disconnectors and Fuse- Combination Units (First Revision)	आई एस / आई ई सी 60947-3: 2012 कम वोल्टेज स्विचगियर और कंट्रोलगियर भाग 3 स्विच, डिस्कनेक्टर्स, स्विच- डिस्कनेक्टर्स और फ्यूज-कoम्बिनेशन यूनिट्स (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan 2018	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS/IEC 60947-3 : 1999 Low Voltage Switchgear and Controlgear Part 3 Switches, Disconnectors, Switch-Disconnectors and Fuse- Combination Units	आई एस / आई ई सी 60947-3: 1999 कम वोल्टेज स्विचगियर और कंट्रोलगियर भाग 3 स्विच, डिस्कनेक्टर्स, स्विच- डिस्कनेक्टर्स और फ्यूज-संयोजन इकाइयां
Date Of Cancellation रद्द होने की तिथि	18 July 2018	18 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60947-4-1 : 2012 Low- Voltage Switchgear and Controlgear Part 4 Contactors and Motor-Starters Section 1 Electromechanical Contactors and Motor-Starters (First Revision)	आई एस / आई ई सी 60947-4-1:2012 लो-वोल्टेज स्विचगियर और कंट्रोलगियर भाग 4 संपर्ककर्ता और मोटर-स्टार्टर धारा 1 विद्युत रासायनिक संपर्ककर्ता और मोटर-स्टार्टर (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan 2018	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS/IEC 60947-4-1 : 2000 Low-Voltage Switchgear and Controlgear Part 4 Contactors and Motor- Starters Section 1 Electromechanical Contactors and Motor-Starters	आई एस / आई ई सी 60947-4-1: 2000 कम-वोल्टेज स्विचगियर और कंट्रोलगियर भाग 4 संपर्ककर्ता और मोटर-स्टार्टर धारा 1 विद्युत रासायनिक संपर्ककर्ता और मोटर-स्टार्टर
Date Of Cancellation रद्द होने की तिथि	18 July 2018	18 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60947-5-1 : 2009 Low- Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements Section 1 Electromechanical Control Circuit Devices (First Revision)	आई एस / आई ई सी 60947-5-1: 2009 लो-वोल्टेज स्विचगियर और कंट्रोलगियर पार्ट 5 कंट्रोल सर्किट डिवाइसेस और स्विचिंग एलिमेंट्स सेक्शन 1 इलेक्ट्रोमैकेनिकल कंट्रोल सर्किट डिवाइसेस (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	19 Jan 2018	19 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS/IEC 60947-5-1 : 2003 Low-Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements Section 1 Electromechanical Control Circuit Devices	आई एस / आई ई सी 60947-5-1: 2003 लो-वोल्टेज स्विचगियर और कंट्रोलगियर पार्ट 5 कंट्रोल सर्किट डिवाइस और स्विचिंग एलिमेंट्स सेक्शन 1 इलेक्ट्रोमैकेनिकल कंट्रोल सर्किट डिवाइस
Date Of Cancellation रद्द होने की तिथि	18 July 2018	18 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 8887 : 2017 Bitumen Emulsion for Roads (Cationic Type) — Specification (Third Revision)	आई एस 8887: 2017 बिटुमेन इमल्शन फ०र रोड्स (ब्जपवदपब ज्लचम) –सुधार (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 8887 : 2004 Bitumen Emulsion for Roads (Cationic Type) — Specification (Second Revision)	आई एस 8887: 2004 बिटुमेन इमल्शन फ०र रोड्स (केशनिक प्रकार) – विशिष्टता (दूसरा संशोधन)
Date Of Cancellation रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13213 : 2017 Polyurethane Full Gloss Enamel (Two Pack) —Specification (First Revision)	आई एस 13213: 2017 पॉलीयूरेथेन फुल ग्लोस इनेमल (दो पैक) –संचालन (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 13213 : 1991 Polyurethane Full Gloss Enamel (Two Pack) — Specification	आई एस 13213: 1991 पॉलिउरेथेन फुल ग्लोस एनमेल (दो पैक) – विशिष्टता
Date Of Cancellation रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7123 : 1993 Hair Oils – Specification (Second Revision)	आई एस 7123: 1993 हेयर अ०यल्स – विशिष्टता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 7 November 2017	संशोधन संख्या 7 नवंबर 2017
Date Of Cancellation रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10350 : 1999 Powder Hair Dyes – Specification (Second Revision)	आई एस 10350: 1999 पाउडर हेयर डाई – विशिष्टता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 4 November 2017	संशोधन संख्या 4 नवंबर 2017
Date Of Cancellation रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15410 : 2003 Containers for Packaging of Natural Water and Packaged Drinking Water – Specification	आई एस 15410: 2003 नेचुरल वाटर और पैकेज्ड ड्रिंकिंग वाटर – स्पेसिफिकेशन की पैकेजिंग के लिए कंटेनर
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 4 November 2017	संशोधन संख्या 4 नवंबर 2017
Date Of Cancellation रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 2508 : 2016 Polyethylene Films and Sheets – Specification (Third Revision)	आई एस 2508: 2016 प०लीथीन फिल्म्स और शीट्स – विशिष्टता (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 December 2017	संशोधन संख्या 1 नवंबर 2017
Date Of Cancellation रद्द होने की तिथि	30 May 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16861 : 2018 High Flash High Speed Diesel Fuel – Specification	आई एस 16861: 2018 हाई फ्लैश हाई स्पीड डीजल ईंधन। विशिष्टता
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 3826-2 : 2008 Plastics Collapsible Containers for Human Blood and Blood Components Part 2 Graphical Symbols for Use on Labels and Instruction Leaflets	आई एस / आई एस ओ 3826-2:2008 च्लेंजपबे प्लास्टिक रक्त और मानव अवयवों के लिए बंधनेवाला कंटेनर भाग २ लेबल और निर्देश पत्रक पर उपयोग के लिए चित्रमय प्रतीक
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 15102 : 2002/ISO 3826 : 1993 Plastics Collapsible Containers for Human Blood and Blood Components	आई एस 15102: 2002 आई एस ओ 3826: 1993 प्लास्टिक मानव मानव और रक्त अवयवों के लिए बंधनेवाला कंटेनर
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018

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India has seen improvements in Healthcare Access and Quality (HAQ) since 1990. In 2016, India's healthcare access and quality soared to 41.2 (up from 24.7 in 1990). India performed poorly in tackling cases of rheumatic heart diseases, Ischaemic heart diseases, stroke, tuberculosis, testicular cancer, colon cancer and chronic kidney disease, among others. Though India's improvements on the HAQ index has hastened from 2000 to 2016, the gap between the country's highest and lowest scores widened (23.4-point difference in 1990, and 30.8-point difference in 2016). Goa and Kerala have the highest HAQ index scores in 2016, each exceeding 60 points, whereas Assam and Uttar Pradesh have the lowest, each below 40.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 10816-4 : 2009 Mechanical vibration – Evaluation of Machine Vibration by Measurements on Non-Rotating Parts Part 4 Gas Turbine Sets With Fluid-Film Bearings	आई एस / आई एस ओ 10816-4: 2009 मैकेनिकल कंपन-गैर-घूर्णन भागों पर माप द्वारा मशीन कंपन का मूल्यांकन पार्ट 4 गैस टर्बाइन फ्लुइड-फिल्म बियरिंग्स के साथ सेट करता है
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 14817-4 : 2004/ ISO 10816- 4 : 1998 Mechanical vibration – Evaluation of Machine Vibration by Measurements on Non-Rotating Parts Part 4 Gas Turbines Driven Sets With Excluding Aircraft Derivatives	आई एस 14817-4: 2004 / आई एस ओ 10816-4: 1998 मैकेनिकल कंपन च्तजे न०न-रोटेटिंग पार्ट्स पर माप द्वारा मशीन कंपन का मूल्यांकन पार्ट 4 गैस टर्बाइन ड्रिंक सेट विथ एयरकंडीशन डेरिवेटिव्स
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 11607-2 : 2006 Packaging for Terminally Sterilized Medical Devices Part 2 Validation Requirements for Forming, Sealing and Assembly Processes	आई एस / आई एस ओ 11607-2: 2006 पैकेजिंग के लिए टर्मिनेटली स्टरलाइज्ड मेडिकल डिवाइसेस पार्ट 2 के गठन, सीलिंग और असेंबली के लिए वैधता आवश्यकताएँ
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 11650 : 1999 Performance of Refrigerant Recovery and/or Recycling Equipment	आई एस / आई एस ओ 11650: 1999 रेफ्रिजरेंट रिकवरी और ६ या पुनर्चक्रण उपकरण का प्रदर्शन
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15523 : 2018 Automotive Tyres – Precured Patches for Repairing Cross Ply/ Radial Tyres and Inner Tubes – Specification	आई एस 15523: 2018 ऑटोमोटिव टायर्स सल क्र०स प्लाई / रेडियल टायर्स और इनर ट्यूब्स की मरम्मत के लिए प्रीक्योर्ड पैच
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 15523 : 2004 Automotive Tyres – Precured Patches for Repairing Cross Ply/ Radial Tyres and Inner Tubes – Specification	आई एस 15523:2004 ऑटोमोटिव टायर्स सल क्र०स प्लाई / रेडियल टायर्स और इनर ट्यूब मरम्मत के लिए पूर्वनिर्मित पैच
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 15883-1 : 2006 Washer- Disinfectors Part 1 General Requirements, Terms and Definitions and Tests	आई एस / आई एस ओ 15883-1: 2006 व०शर-डिसइंफेक्टर्स पार्ट 1 सामान्य आवश्यकताएँ, नियम और परिभाषाएं और टेस्ट
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16429 : 2017/ ISO 21567 : 2004 Microbiology of Food and Animal Feeding Stuffs – Horizontal Method for the Detection of Shigella spp.	आई एस 16429: 2017 / आई एस ओ 21567: 2004 माइक्रोबायोल०जी अ०फ फूड एंड एनिमल फीडिंग स्टफ्स प्रवदजंस क्षैतिज विधि शिगेला एसपीपी की जांच के लिए।
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16431 : 2018/ ISO 22118 : 2011 Microbiology of Food and Animal Feeding Stuffs – Polymerase Chain Reaction (PCR) for the Detection and Quantification of Food-Borne Pathogens – Performance Characteristics	आई एस 16431: 2018 /आई एस ओ 22118: 2011 खाद्य और पशु आहार सामग्री के माइक्रोबायोल०जी थ्वकक पॉलीमरेज चेन रिएक्शन (पीसीआर) खाद्य और जन्मे रोगजनकों की जांच और मात्रा निर्धारण के लिए
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16434 : 2018/ ISO 21871 : 2006 Microbiology of Food and Animal Feeding Stuffs – Horizontal Method for the Determination of Low Numbers of Presumptive Bacillus Cereus – Most Probable Number Technique and Detection Method	आई एस 16434: 2018 / आई एस ओ 21871: 2006 माइक्रोबायोलॉजी फूड एंड एनिमल फीडिंग स्टफ्स जीम प्रकल्पित बेसिलस सेरेस की कम संख्या के निर्धारण के लिए क्षैतिज विधि च्तवइ सबसे संभावित संख्या तकनीक और पता लगाने की विधि
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16616 : 2018/ ISO 349 : 1975 Hard Coal – Audibert-Arnu Dilatometer Test	आई एस 16616: 2018 / आई एस ओ 349: 1975 हार्ड कोल ज ऑडिबर-अरुण दिलतोमीटर टेस्ट
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16696 : 2018/ ISO 11657 : 2014 Hydrometry – Suspended Sediment in Streams and Canals – Determination of Concentration by Surrogate Techniques	आई एस 16696: 2018 / आई एस ओ 11657: 2014 हाइड्रोमेट्री मक धाराओं और नहरों में निलंबित तलछट जम सरोगेट तकनीक द्वारा एकाग्रता का निर्धारण
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 17584 : 2005 Refrigerant Properties	आई एस / आई एस ओ 17584: 2005 रेफ्रिजरेंट गुण
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 582 (Part 2) : 2018/ ISO 4098 : 2006 Methods of Chemical Testing of Leather Part 2 Determination of Water-Soluble Matter, Water-Soluble Inorganic Matter and Water-Soluble Organic Matter	आई एस 582 (भाग 2): 2018 / आई एस ओ 4098: 2006 चमड़े के भाग 2 के रासायनिक परीक्षण के तरीके पानी में घुलनशील पदार्थ, जल में घुलनशील अकार्बनिक पदार्थ और पानी में घुलनशील कार्बनिक पदार्थ का निर्धारण
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1448 (Part 92) : 2018/ISO 2137 : 2007 Methods of Test for Petroleum and its Products Part 92 Determination of Cone Penetration of Lubricating Greases and Petroleum (First Revision)	आई एस 1448 (भाग 92): 2018/ आई एस ओ 2137: 2007 पेट्रोलियम के लिए परीक्षण की विधियाँ और इसके उत्पाद भाग 92 चिकनाई करने वाले ग्रीज और पेट्रोलियम के पहले पेनेट्रेशन का निर्धारण (प्रथम संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 1448 (Part 92) : 1979 Methods of Test for Petroleum and its Products IS 1448 (Part 60) : 1994 Petroleum and its Products- Methods of Test- Part 60 Consistency of Lubricating Graeses by Cone Penetrometer (Second Revision)	आई एस 1448 (भाग 92): 1979 पेट्रोलियम और उसके उत्पादों के लिए टेस्ट के तरीके आई एस 1448 (भाग 60): 1994 पेट्रोलियम और इसके उत्पाद- टेस्ट के तरीके- भाग 60, कोन पेनेटोमीटर (दूसरा संशोधन) द्वारा लुब्रिकेटिंग ग्रेसेस की संगति
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7975 (Part 2) : 2018/ISO 3315 : 2011 Assembly Tools for Screws and Nuts—Driving Parts for Hand-Operated Square Drive Socket Wrenches Part 2 Dimensions and Tests (Second Revision)	आई एस 7975 (भाग 2): 2018 / आई एस ओ 3315: २ ११ के विधानसभा उपकरण पेंच और नट-हाथ के लिए ड्राइविंग पार्ट्स- संचालित स्क्वायर ड्राइव सॉकेट रिंच भाग २ आयाम और परीक्षण (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 7975 (Part 2) : 1991 Driving Parts for Hand-Operated Square Drive Socket Wrenches—Specification Part 2 Dimensions (First Revision)	आई एस 7975 (भाग 2): 1991 हाथ से संचालित स्क्वायर ड्राइव सॉकेट रिंच के लिए ड्राइविंग पार्ट्स-विशिष्टता भाग 2 आयाम (पहला संशोधन)
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 11352 : 2018 Flexible Pouches for the Packing of Vanaspati up to 2 kg or 2 Litres–Specification (Third Revision)	आई एस 11352: 2018 वनस्पती की पैकिंग के लिए लचीले पाउच 2 किग्रा या 2 लिटर सस्पेसिफिकेशन (तीसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 11352 : 1998 Flexible Pouches for the Packing Vanaspati up to 5 Kg or 5 Litres—Specification (Second Revision)	आई एस 11352: 1998 पैकिंग वैन के लिए लचीले पाउच 5 किलोग्राम या 5 लीटर तक स्पेसिफिकेशन (द्वितीय संशोधन)
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13450 (Part 2/Sec 21) : 2018/IEC 60601-2-21 : 2009 Medical Electrical Equipment Part 2 Particular Requirements for the Basic Safety and Essential Performance Section 21 Infant Radiant Warmer	आई एस 13450 (भाग 2/ सेक 21)रू 2018 आई ई सी 60601-2-21: 2009 चिकित्सा विद्युत उपकरण भाग 2 बुनियादी सुरक्षा और आवश्यक प्रदर्शन के लिए विशेष आवश्यकताएं धारा 21 शिशु दीप्तिमान वार्मर
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13943 : 2018 Automotive Vehicles Wheel Guards for Vehicles of M1 Category and	आई एस 13943: 2018 श्रेणी के वाहनों के लिए 2018 ऑटोमोटिव वाहन व्हील गार्ड और
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 13943 : 1994 Automotive Vehicles-Wheel Guards for Passenger Cars Performance Requirements	आई एस 13943: 1994 ऑटोमोटिव वाहन-व्हील गार्ड यात्री कारों के प्रदर्शन की आवश्यकताओं के लिए
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 14708-2 : 2012 Implants for Surgery–Active Implantable Medical Devices Part 2 Cardiac Pacemakers	आई एस /आई एस ओ 14708-2: 2012 सर्जरी के लिए प्रत्यारोपण सक्रिय प्रत्यारोपण चिकित्सा उपकरण भाग 2 कार्डिएक पेसमेकर
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 11754 : 1986 Specification for Implantable Ventricular Pacemaker	आई एस 11754: 1986 इंप्लांटेबल वेंट्रिकुलर पेसमेकर के लिए विशिष्टता
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15305 (Part 3) : 2018/ISO 12213-3 : 2006 Natural Gas–Calculation Using Physical Properties (First Revision)	आई एस 15305 (भाग 3): 2018 / आई एस ओ 12213-3: 2006 प्राकृतिक गैस का उपयोग भौतिक गुणों का उपयोग (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 15305 (Part 3) : 2003/ISO 12213-3 : 1997 Natural Gas–Calculation of Compression Factor	आई एस 15305 (भाग 3): 2003 / आई एस ओ 12213-3: 1997 प्राकृतिक गैस का संपीडन कारक
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16476 (Part 2) : 2018 LED based Solar Lantern Part 2 Methods of Test	आई एस 16476 (भाग 2): 2018 एल ई डी आधारित सौर लालटेन भाग 2 परीक्षण के तरीके
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16482 : 2018 Use of Synthesis Gas from Coal Gasifier for Production of Sponge Iron – Guidelines	आई एस 16482: 2018 स्पंज आयरन चवदहम दिशानिर्देश के उत्पादन के लिए कोयला गैसीफायर से सिंथेसिस गैस का उपयोग
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16595 (Part 11) : 2018/ISO 9241- 11 : 1998 Ergonomic Requirements for Office Work with Visual Display Terminals (VDTS) Part 11 Guidance on Usability	आई एस 16595 (भाग 11): 2018 / आई एस ओ 9241- 11: 1998 दृश्य प्रदर्शन टर्मिनलों (वी डी टी एस) के साथ कार्यालय के काम के लिए एर्गोनोमिक आवश्यकताएं
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16681 (Part 1) : 2018/ISO 15012-1 : 2013 Health and Safety in Welding and Allied Process–Equipment for Capture and Separation of Welding Fume Part 1 Requirements for Testing and Marking of Separation Efficiency	आई एस16681 (भाग 1): 2018 / आई एस ओ 15012-1: 2013 स्वास्थ्य और सुरक्षा वेल्डिंग और संबद्ध प्रक्रिया में कैप्चरिंग और जुदाई के लिए उपकरण वेल्डिंग धूआं भाग 1 परीक्षण और पृथक्करण दक्षता के अंकन के लिए आवश्यकताएँ
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही

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ACTION PLAN FOR CHAMPION SECTORS

The Ministry of Housing and Urban Affairs (MoH&UA) held a meeting regarding Action Plan for Champion Sectors in Services – Construction and Related Engineering Services on May 1, 2018. During the meeting BIS provided inputs on the Action Plan for construction and related engineering services champion sector. BIS officers also participated in the India Software Symposium 2018 held in New Delhi, on May 7, 2018. The symposium had keynote address on 'Software in everything,' panel discussion comprising of global leading experts and ISO Consultative Workshop on Lean Agile DevOps – Maturity, Measurement & Value.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16695 (Part 1) : 2018 SCOSTA : Smart Card Operating System Template Architecture Part 1 Basic Command Set	आई एस 16695 (भाग 1): 2018 एस सी ओ एस टी ए स्मार्ट कार्ड अ०परेटिंग सिस्टम टेम्पलेट आर्किटेक्चर भाग 1 बेसिक कमांड सेट
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16737 (Part 2) : 2018/ISO 8216-2 : 1986 Petroleum Products–Fuels (Class F) – Classification Part 2 Categories of Gas Turbine Fuels for Industrial and Marine Applications	आई एस 16737 (भाग 2): 2018 /आई एस ओ 8216-2: 1986 पेट्रोलियम उत्पाद का ईंधन (वर्ग एफ) – वर्गीकरण भाग 2 औद्योगिक और समुद्री अनुप्रयोगों के लिए गैस टर्बाइन ईंधन की श्रेणियाँ
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16737 (Part 3) : 2018/ISO 8216-3 : 1987 Petroleum Products–Fuels (Class F)– Classification Part 3 Family L (Liqueified Petroleum Gases)	आई एस 16737 (भाग 3): 2018 /आई एस ओ 8216-3: 1987 पेट्रोलियम उत्पाद का ईंधन (कक्षा एफ) – वर्गीकरण भाग 3 परिवार एल (द्रवीभूत पेट्रोलियम गैस)
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नहीदृ
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 61439-2 : 2011 Low-Voltage Switchgear and Controlgear Assemblies Part 2 Power Switchgear and Control Assemblies	आई एस /आई ई सी 61439-2: 2011 कम-वोल्टेज स्विचगियर और कंट्रोलगियर असेंबली पार्ट 2 पावर स्विचगियर और कंट्रोल असेंबली
Date Of Establishment संशोधन की सख्या और तिथि	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 8623 (Part 1) : 1993/IEC 439-1 : 1985 Specification for Low Volatage Switch Gear and Control Gear Assemblies Part 1 Requirements and Type Tested and Partially Type-Tested Assemblies (First Revision) IS 2675 : 1983 Specifications for Enclosed Distribution Fuseboards and Cutouts for Voltages Not Exceeding 1000 V AC and 1200 V AC (Second Revision)	आई एस 8623 (भाग 1): 1993 / आई ई सी 439-1: 1985 कम वोल्टेज स्विच गियर और नियंत्रण गियर विधानसभाओं के लिए विशिष्टता भाग 1 आवश्यकताएं और परीक्षण किए गए और आंशिक रूप से टाइप-टेस्ट किए गए विधानसभाओं (प्रथम संशोधन) 199175: 1983 संलग्न वितरण फ्यूजबोर्ड के लिए विनिर्देशों और 1000 वी एसी और 1200 वी एसी (दूसरा संशोधन) से अधिक नहीं वोल्टेज के लिए कटआउट
Date Of Cancellation रद्द होने की तिथि	25 Jan. 2018	25 जनवरी 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC TS 61970-2 : 2004 Energy Management System Application Program Interface (EMS-API) Part 2 Glossary	आई एस / आई ई सी टी एस 61970-2: 2004 एनर्जी मैनेजमेंट सिस्टम एप्लीकेशन प्रोग्राम इंटरफेस (ईएमएस-एपीआई) भाग 2 शब्दावली
Date Of Establishment संशोधन की सख्या और तिथी	25 Jan. 2018	25 जनवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Cancellation रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16205 (Part 24) : 2017 Conduit Systems for Cable Management Part 24 Particular Requirements Conduit Systems Buried Under Ground	आई एस 16205 (भाग 24): 2017 केबल प्रबंधन के लिए संघनित्र प्रणाली भाग 24 विशेष आवश्यकताओं के लिए नाली के नीचे ग्राउंड सिस्टम
Date Of Establishment संशोधन की सख्या और तिथी	01 Feb. 2018	01 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 14930 (Part 2) : 2001 Conduit Systems for Electrical Installations Part 2 Particular Requirements – Conduit Systems Buried Underground	आई एस 14930 (भाग 2): 2001 विद्युत प्रतिष्ठान के लिए नाली प्रणाली भाग 2 विशेष आवश्यकताएं – नाली प्रणाली दफन भूमिगत
Date Of Cancellation रद्द होने की तिथि	31 July 2018	31 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7285 (Part 1) : 2017 Refillable Seamless Steel Gas Cylinders – Specification Part 1 Normalized Steel Cylinders (Fourth Revision)	आई एस 7285 (भाग 1): 2017 त्मपिससंइसम सीमलेस स्टील गैस सिलिंडर – विनिर्देशन भाग 1 सामान्यीकृत स्टील सिलेंडर (चौथा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	01 Feb. 2018	01 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 7285 (Part 1) : 2004 Refillable Seamless Steel Gas Cylinders – Specification Part 1 Normalized Steel Cylinders (Third Revision)	आई एस 7285 (भाग 1): 2004 रीफिलेबल सीमलेस स्टील गैस सिलिंडर – स्पेसिफिकेशन पार्ट 1 सामान्यीकृत स्टील सिलेंडर (तीसरा संशोधन)
Date Of Cancellation रद्द होने की तिथि	As on date	आज की तारीख़ में
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 277 : 2018 Galvanized Steel Strips and Sheets (Plain and Corrugated) – Specification (Seventh Revision)	आई एस 277: 2018 जस्ती स्टील स्ट्रिप्स और चादरें (सादा और नालीदार) पपिबंजपवद विशिष्टता (सातवां संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	19 Feb. 2018	19 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 277 : 2003 Galvanized Steel Sheets (Plain and Corrugated) Specification (Sixth Revision)	आई एस 277: 2003 जस्ती स्टील शीट्स (सादा और नालीदार) – विशिष्टता (छठा संशोधन)
Date Of Cancellation रद्द होने की तिथि	As on date	आज की तारीख़ में

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 5719 : 2018 Gelatin, Food Grade ---- Specification (Second Revision)	आई एस 5719: 2018 जिलेटिन, खाद्य ग्रेड ---- विशिष्टता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	19 Feb. 2018	19 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 5719 : 2005 Gelatin, Food Grade – Specification (First revision)	आई एस 5719: 2005 जिलेटिन, खाद्य ग्रेड – विशिष्टता (पहला संशोधन)
Date Of Cancellation रद्द होने की तिथि	As on date	आज की तारीख़ में
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15573 : 2018 Polyaluminium Chloride (First Revision)	आई एस 15573: 2018 पoलीलुमिनियम क्लोराइड (प्रथम संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	19 Feb. 2018	19 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	IS 15573 : 2005 Polyaluminium Chloride	आई एस 15573: 2005 पॉलीलुमिनियम क्लोराइड18 अगस्त 2018
Date Of Cancellation रद्द होने की तिथि	As on date	आज की तारीख़ में
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12894 : 2002 Pulverized Fuel Ash –Lime Bricks – Specification (First Revision)	आई एस 12894: 2002 पुलीवराइज्ड फ्यूल ऐश–लाइम ब्रिक्स (विशिष्टता (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	8 Feb. 2018	7 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 2 January 2018	संशोधन संख्या 2 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	7 Mar. 2018	7 मार्च 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 14561 : 2014 Fire Resisting (Insulating) Filing Cabinets – Specification (Second Revision)	आई एस 14561: 2014 फायर रिजिस्टिंग (इंसुलेटिंग) फाइलिंग कैबिनेट्स (विशिष्टता (दूसरा संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	8 Feb. 2018	8 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 3 January 2018	संशोधन संख्या 3 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	8 Feb. 2018	8 फरवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16242 (Part 1) : 2014 Uninterruptible Power Systems (UPS) Part 1 General and Safety Requirements for UPS	आई एस 16242 (भाग 1):2014 निर्बाध विद्युत प्रणाली (यू पी एस) भाग 1 यू पी एस के लिए सामान्य और सुरक्षा आवश्यकताएँ
Date Of Establishment संशोधन की सख्या और तिथी	8 Feb. 2018	8 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 January 2018	संशोधन संख्या 1 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	8 Feb. 2018	8 फरवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 8347 : 2008 Respiratory Protective Devices Definitions, Classification and Nomenclature of Components (First Revision)	आई एस 8347: 2008 श्वसन सुरक्षा उपकरण, परिभाषाएँ, वर्गीकरण और घटकों का नामकरण (पहला संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	1 Feb. 2018	1 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No. 1 January Amendment No 1 January 2018 2018	संशोधन संख्या 1 जनवरी संशोधन संख्या 1 जनवरी 2018 2018
Date Of Cancellation रद्द होने की तिथि	1 Feb. 2018	1 फरवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 9832 : 2002 Cosmetic Pencils – Specification (First Revision)	आई एस 9832:20 02 कoस्मेटिक पेंसिल 32 विशिष्टता (प्रथम संशोधन)
Date Of Establishment संशोधन की सख्या और तिथी	1 Feb. 2018	1 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No 2 January 2018	संशोधन संख्या 2 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	1 Feb. 2018	1 फरवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10940 : 1984 Specification for Castrator	आईएस 10940: 1984 कैस्ट्रेटर के लिए विशिष्टता
Date Of Establishment संशोधन की सख्या और तिथी	1 Feb. 2018	1 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No 1 January 2018	संशोधन संख्या 1 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	1 Feb. 2018	1 फरवरी 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10998 : 1984 Specification for Bindi (Liquid)	आई एस 10998: 1984 बिंदी (तरल) के लिए विशिष्टता
Date Of Establishment संशोधन की सख्या और तिथि	1 Feb. 2018	1 फरवरी 2018
No. and year of the amendment संशोधन की तिथि एवं वर्ष	Amendment No 4 January 2018	संशोधन संख्या 1 जनवरी 2018
Date Of Cancellation रद्द होने की तिथि	1 Feb. 2018	1 फरवरी 2018

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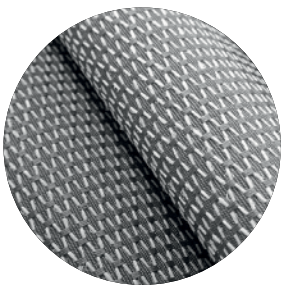

BIS was part of a curtain raiser of Technotex 2018 'Technical Textiles: Transforming India, Building Infrastructure for a New India,' which was organized in association with Ministry of Textiles and FICCI held on May 17, 2018. Two Indian Standards of national importance on protective textiles were released.

- IS 16874 : 2018 Textiles – Protective gloves for fire fighters
- IS 16890:2018 Textiles — Protective clothing for fire fighters

NEW ADDITIONS TO OUR SHELVES

The BIS' collection of standards literature is always being supplemented

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STANDARDS: A DEFINITE NEED

There is an intense need for standards specially in the domain of healthcare

BY NISCHAY MALHOTRA

Standards are good because multiple products do things in the same general way, thus making them replaceable for one another and thus more direct competitors. Standardization, however, is bad, because it favours one vendor or configuration to the exclusion of others, locking consumers into that vendor and limiting competition.

When an industry develops standards, what you get is competition, buyer choice, and technical progress. In contrast, when an industry standardizes, what you get is higher costs, reduced competition, and the nickel-and-diming of customer value. In truth, both standards and standardization aim for the same goal, which is to enable a consistent base for reuse.

1) MAKING A PROPER STANDARD:

It takes time to understand a problem domain well enough to make a proper standard. Understanding usually requires experimentation, and thus cutting-edge technology usually involves lots of entities (mostly corporate) competing with each other to do the best job of applying new technology to customer needs. This competition is essential to properly understand the problem domain, meaning a proper standard can lag the first appearance of a technology by several years.

Customers are faced with a choice. They can opt to forego altogether the use of a new technology until a proper standard is developed. That, however, is a catch-22 situation, as how is anyone going to know what works if people are waiting until that mythical standard gets snared in a research trap.

This is why, in most cases, a new standard enters a market where one company has managed to gain a majority market share in technology covered by the new standard.

2) LARGE VOLUME OF WORK: It takes years before a problem domain is sufficiently well understood as to be a base upon which a standard can be built. Technology, however, does not stand still as humans fumble for understanding.

Furthermore, there is too much to standardize. Ignoring for the moment the churn created by new technology, imagine trying to standardize every interface in an operating system, every API in a software application, every document format, and every network protocol. How would we even gather enough information to manage that?

3) IMPLEMENTATION IS KEY:
Standards are a wonderful thing when they are adopted. For instance, take the mini-standard that exists on Windows in the form of COM. If I have a COM interface, and others implement it, a host object which uses that interface can mostly use objects irrespective of the company or individual who made them.

Another example can be found in the Linux world. Linux has a level of consistency made possible by a common code base that exists in all distributions of the operating system. That does not mean, however, that one distribution of Linux is automatically replaceable with another. Standardization, in other words, is the means by which consumers create economies of scale where standards provide an insufficient base.

4) STANDARD ENSURES INTEROPERABILITY:
The fact that my product adheres to a standard doesn't prevent me from adding extra features that are unique to my product. Often, these extras deal with cutting-edge technology. It's not just proprietary companies seeking advantage who do this. This isn't something to condemn. A standard ensures interoperability, but it is not supposed to put a muzzle on creativity and prevent programmers from building a better mousetrap. Programmers often find these innovative features interesting. In order to generate economies of scale around these features, therefore, the decision is often made to standardize.

The process of standardization is a common practice in several

industries, with its implementation in healthcare posing many, often unique, challenges. Perception with the different stakeholders varies widely and remains a major barrier.

Healthcare is a complex industry that needs to strike a balance between achieving consistency and catering to the variations in individual patient needs. Patients, providers and payers typically have differing priorities, which can create tensions when implementing standardization programmes.

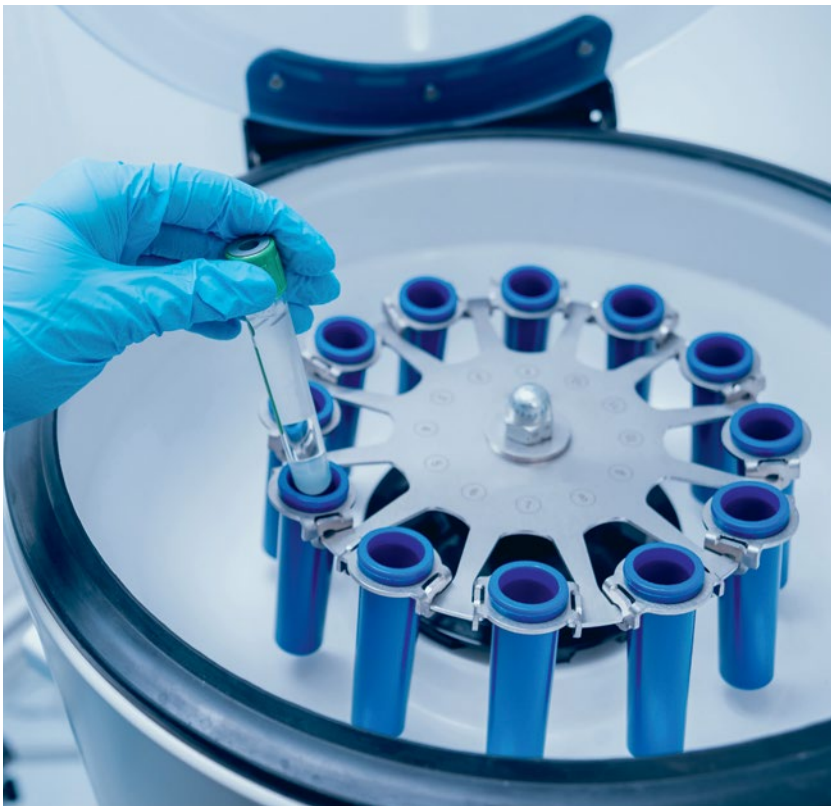
Healthcare's perception of standardization varies by industry role. While administrators see standardized care as a way to achieve efficiency and quality, caregivers have historically viewed standardization as an administrative mandate that can sometimes go against their patients' best interests.

Administrators, physicians, and nurses are beginning to realize they need to work together to improve the quality of care and reduce costs, and understand how standardization and personalization can actually complement each other.

A CASE FOR STANDARDIZING CARE

Studies show that variation in care, costs, and outcomes exists across hospitals, states, and regions. Advocates of standardized care tout how the industry uses evidence-based medicine in a systematic way to ensure patients receive high-quality care, while some critics think of it as quality "cookie-

Regionalized care is a necessary reality, but standardizing best practices is an important part of delivering effective, safe, and affordable care



cutter medicine." Regionalized care is a necessary reality, but standardizing best practices is an important part of delivering effective, safe, and affordable care. There are numerous benefits to standardized care: Consistent outcomes; Labor savings; Improved quality of care; Better documentation; Reduced waste; Improved efficiency; Improved patient safety and Reduced costs.

A CASE FOR PERSONALIZATION

Advocates of personalization don't want to see a standardized, one-size-fits-all approach to treating patients become the norm. They idealize the concept of a local family doctor who knows everyone in the family, understands each family member's health concerns, and responds to everyone individually.

Personalization improves patient satisfaction and increases patient engagement. In today's healthcare environment, in which patients' ownership of their health and outcomes is growing and becoming essential, physicians are right to personalize care and motivate patients to become active participants in their health journeys.

WORKING TOGETHER TO IMPROVE QUALITY

Standardized care and personalization don't have to be mutually exclusive. In fact, standardization can enhance personalization by eliminating unnecessary work for healthcare providers and giving them more time to spend with patients. It can also eliminate unnecessary expenses and complications resulting from not adhering to best practices.

Sometimes physicians may make treatment decisions based on their own unique clinical experiences. Standardization compensates for this variation in experience and reveals the outcomes specific treatments have historically delivered to patients.

Standardization supplements physician experience and reduces guesswork. In fact, building off standardization enables care teams to create personalized patient care plans.

–The writer is from Symbiosis, Pune and currently pursuing Business studies

Information courtesy: Subject-specific research papers

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