



COMPENDIUM OF INDIAN STANDARDS ON SPORTS GOODS

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Introduction

Sports goods are equipment used for training, competitions, or recreational activities in different sports. To ensure fair play and protect players from injuries, it is important that these products are safe, durable, and perform consistently.

The Bureau of Indian Standards (BIS), through its Production and General Engineering Department (PGD) and the Sports Goods Sectional Committee (PGD 41), has developed Indian Standards for various sports equipment. This compendium brings together important Indian Standards related to sports goods.

2. Racket and Indoor Games

This sector includes sports goods and equipment used in racket-based and indoor recreational games such as table tennis, tennis, badminton, chess, and carrom. The focus is on standardizing dimensions, materials, construction, and performance to ensure safety, durability, and consistent playing experience across all levels of use—from casual play to professional competition.

i) IS 4979: 2024 Table Tennis Table – Specification

This Indian Standard outlines requirements for table tennis tables used in competitions, institutions, and recreational settings. It classifies tables by use and design, and specifies construction, materials, dimensions, and safety features. The standard ensures consistent performance, durability, and player safety across all types of tables.

ii) IS 415: 2022 Shuttlecocks – Specification

This Indian Standard specifies requirements for feathered and synthetic shuttlecocks used in badminton for competition and recreational play. It defines two grades based on performance, outlines construction, material, and size specifications, and includes weight and flight consistency tests. All shuttlecocks must be durable, uniform, and safe for use.

3. Cricket, Hockey, Boxing and Marshal Art equipment

This sector covers equipment used in high-impact and contact sports like cricket, hockey, boxing, and martial arts. The standards ensure that items such as bats, balls, protective gear, and training apparatus meet defined requirements for material quality, safety, durability, and performance. The aim is to safeguard athletes while promoting uniformity in equipment used across training and competition levels.

i) IS 828 (Part 1): 2023 Cricket Bats – Specification

This standard specifies requirements for cricket bats made from English or Kashmir willow, intended for use with leather balls in formal cricket. It defines material quality, bat dimensions, weight ranges by size, and construction features like handle attachment and finish. Bats must pass gauge tests to ensure compliance and suitability for professional use.

ii) IS 3785: 2023 Wicket Keeping Gloves – Specification

This standard specifies the requirements for wicket keeping gloves used in cricket, focusing on protection, comfort, grip, and durability. It covers materials like leather or coated fabric, padding with shock-absorbing layers, and features such as flexible joints and non-stretch webbing. Gloves are available in various sizes to suit different age groups and must be well-constructed, comfortable, and free from defects.

iii) IS 3800: 2023 Batting Gloves – Specification

This standard defines the material, design, and sizing requirements for cricket batting gloves to ensure safety, comfort, and flexibility. Gloves are made from leather or coated fabric with proper padding in impact zones. They come in various sizes, offer a secure fit, and allow free finger movement. Strong stitching and quality workmanship ensure durability during play.

iv) IS 17791 (Part 1 to 7) : 2022 Protective equipment for martial arts

This series of standards outlines the requirements for protective gear used in martial arts, including headguards, gloves, body protectors, and shin guards. It specifies materials, design, dimensions, and performance criteria to ensure safety, comfort, and durability. The equipment must meet defined tests for impact absorption, fit, and construction quality, supporting consistent protection during training and competition.

4. Football and Inflatable Balls and Accessories

This sector includes standards for footballs, basketballs, volleyballs, handballs, and related inflatable sports balls and accessories. It covers specifications for materials, construction, performance, and safety to ensure durability, shape retention, and consistent playability. The focus is on promoting player safety and maintaining quality across different levels of use.

i) IS 19312: 2025 Inflatable Balls – Specification

This standard outlines material, construction, and performance requirements for inflatable sports balls like footballs, basketballs, volleyballs, and handballs. It covers size, weight, bounce, air retention, and water absorption, ensuring consistency and safety. Balls must use approved materials and meet strict testing protocols for quality and durability.

5. Gymnastic Equipment

This sector covers standards for equipment used in gymnastics, such as horizontal bars, rings, vaulting boxes, springboards, wall bars, and related apparatus. The specifications ensure safety, structural integrity, and performance consistency for training and competition. Emphasis is placed on material quality, ergonomic design, and rigorous performance testing to support athlete safety and excellence.

i) IS 2459: 2025 Horizontal Bars Used in Gymnastics – Specification

This standard specifies the material, design, and performance requirements for gymnastics horizontal bars, ensuring safety and durability. The bar is made of high-strength stainless steel with secure supports and adjustable height. It must swing freely without noise or slippage, have smooth surfaces, and pass strength and stability tests for safe use in training and competition.

ii) IS 2463: 2022 Rings Used in Gymnastics – Specification

This standard sets requirements for gymnastic rings, covering materials, design, construction, and performance tests to ensure safety and durability. Rings are made of seasoned hardwood or approved synthetics, suspended by strong steel ropes from a stable frame. The apparatus must allow free rotation and swing, and rings must pass strength tests with a 4000 N load without damage or deformation.

iii) IS 2746: 2023 Spring Boards – Specification

This standard sets requirements for gymnastics spring boards, covering design, materials, and safety for training and competition use. Boards are classified as hard or soft, with specific size and slip-resistant features. They must pass tests measuring rebound, deflection, and impact force to ensure durability and safe performance.

iv) IS 4980:2022 Indian Clubs – Specification

This standard specifies the requirements for Indian clubs used in physical training and fitness exercises. It covers materials, dimensions, weight categories, and construction to ensure safety, durability, and balanced performance. Clubs must be well-shaped, smooth-finished, and made from seasoned hardwood or other suitable materials. The standard ensures uniformity for effective and safe training.

6. Athletics and Physical Fitness

This sector includes standards for sports goods used in athletics and general physical training, such as javelins, discus, shot puts, hammers, hurdles, jump stands, beating boards, and Indian clubs. These specifications ensure accuracy, durability, safety, and

performance consistency across age and gender categories. The focus is on promoting fair competition and safe training environments.

i) IS 4142: 2024 Discus – Specification

This standard defines specifications for discus used in athletics, covering types, materials, dimensions, and finish for different age and gender groups. Discuses must be made from approved materials with a smooth, symmetrical design and meet precise weight and size criteria. The construction ensures balanced weight distribution and aerodynamic performance.

ii) IS 4613: 2024 Javelin – Specification

This standard sets the specifications for javelins used in athletics, covering classification by age and gender, materials, dimensions, and construction. Javelins must have a metal or rigid shaft, secure non-slip grip, and impact-resistant tip. They must be straight, balanced with a defined center of gravity for stable flight, and finished smoothly for safety and performance.

iii) IS 4630: 2022 Barbell Set – Specification

This standard specifies requirements for barbell sets used in weightlifting, including classification by athlete type, materials, dimensions, and precise weight tolerances. Bars are made of high-strength steel with knurled grips and rotating sleeves, while plates are cast iron, steel, or rubber-coated. It ensures balanced load distribution, durability, and safe finishes for competitive and training use.

iv) IS 4385:2022 Specification for Throwing Hammers

This standard specifies the requirements for throwing hammers used in athletics, covering materials, construction, dimensions, weight, and balance. It ensures the equipment meets safety and performance criteria suitable for various age and gender categories in competition and training. The hammer must be durable, well-balanced, and conform to prescribed specifications for consistent and fair use.