

BUREAU OF INDIAN STANDARDS

Program of Work

PGD 15 : Ergonomics

Scope: Standardization is the field of ergonomics including terminology, technology, methodology and human and other factors related to ergonomics common to all the spheres of life.

Liaison: **ISO TC-159 (P): Ergonomics ISO TC-159 SC-1 (P): General ergonomics principles ISO TC-159 SC-3 (P): Anthropometry and biomechanics ISO TC-159 SC-4 (P): Ergonomics of human-system interaction ISO TC-159 SC-5 (P): Ergonomics of the physical environment**

Published Standards

| S.No | IS No. | TITLE | Reaffirm M-Y | No. of Amds | Eqv. |
|------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------|--------------------------------|
| 1 | IS 13214 (Part 1):2020 ISO 7250-1 : 2017 <i>Reviewed In : 2024</i> <i>ISO 7250-1 : 2008</i> | Basic Human Body Measurements for Technological Design Part 1 Body Measurement Definitions and Landmarks (Second Revision) | September, 2024 | - | Identical under dual numbering |
| 2 | IS 13214 (Part 3):2019 ISO 7250-3 : 2016 <i>ISO 7250-3:2015</i> | Basic human body measurements for technological design: Part 3 worldwide and regional design ranges for use in product standards | | - | Identical under dual numbering |
| 3 | IS 15257:2018 ISO 1503 : 2008 <i>ISO 1503 : 2008</i> | Spatial orientation and direction of movement - Ergonomics requirements (First Revision) | - | - | Identical under dual numbering |
| 4 | IS 15836 (Part 1):2008 ISO 15534-1 <i>Reviewed In : 2023</i> <i>ISO 15534-1 : 2000</i> | Ergonomic design for the safety of machinery: Part 1 principles for determining the dimensions required for openings for whole - Body access into machinery | June, 2023 | - | Identical under dual numbering |
| 5 | IS 15836 (Part 2):2008 ISO 15534-2 <i>Reviewed In : 2021</i> <i>ISO 15534-2 : 2000</i> | Ergonomic design for the safety of machinery: Part 2 principles for determining the dimensions required for access openings | May, 2021 | - | Identical under dual numbering |
| 6 | IS 15836 (Part 3):2008 15534-3 : 2000 <i>Reviewed In : 2021</i> <i>ISO 15534-3:2000</i> | Ergonomic design for the safety of machinery: Part 3 anthropometric data | May, 2021 | - | Not Equivalent |
| 7 | IS 15836 (Part 3):2025 <i>ISO 15534-3:2000</i> | Ergonomic Design for the Safety of Machinery : Part 3 Anthropometric Data (First Revision) | | - | Not Equivalent |
| 8 | IS 16559:2019 ISO 7243 : 2017 <i>ISO 7243 : 2017</i> | Ergonomics of the Thermal Environment — Assessment of Heat Stress Using the WBGT (Wet Bulb Globe Temperature) Index (| | - | Identical under dual numbering |

| | | First Revision) | | | |
|----|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------|---|--------------------------------|
| 9 | IS 16560:2017 ISO 7726 : 1998 Reviewed In : 2022 ISO 7726 : 1998 | Ergonomics of the Thermal Environment “ Instruments for Measuring Physical Quantities | November, 2022 | - | Identical under dual numbering |
| 10 | IS 16561 (Part 1):2017 ISO 11604-1 : 2000 Reviewed In : 2022 ISO 11064-1 : 2000 | Ergonomic design of control centres: Part 1 principles for the design of control centres | November, 2022 | - | Identical under dual numbering |
| 11 | IS 16561 (Part 2):2017 ISO 11064-2 : 2000 Reviewed In : 2022 ISO 11064-2 : 2000 | Ergonomic design of control centres Part 2 Principles for the Arrangement of Control Suites | November, 2022 | - | Identical under dual numbering |
| 12 | IS 16561 (Part 4):2017 ISO 11064-4 : 2013 Reviewed In : 2022 ISO 11064-4 : 2013 | Ergonomic design of control centres: Part 4 layout and dimensions of workstations | November, 2022 | - | Identical under dual numbering |
| 13 | IS 16561 (Part 5):2018 ISO 11064-5 : 2008 Reviewed In : 2023 ISO 11064-5 : 2008 | Ergonomic design of control centres: Part 5 displays and controls | June, 2023 | - | Identical under dual numbering |
| 14 | IS 16561 (Part 6):2022 ISO 11604-6 ISO 11604-6 | ERGONOMIC DESIGN OF CONTROL CENTRES “ PART 6: ENVIRONMENTAL REQUIREMENTS FOR CONTROL ROOMS | | - | Identical under dual numbering |
| 15 | IS 16562 (Part 1):2017 ISO 15536-1 : 2005 Reviewed In : 2022 ISO 15536-1 : 2005 | Ergonomics - Computer manikins and body templates: Part 1 general requirements | November, 2022 | - | Identical under dual numbering |
| 16 | IS 16562 (Part 2):2018 ISO 15536 (Part 2) : 2007 Reviewed In : 2023 ISO 15536 (Part 2) : 2007 | Ergonomics - Computer manikins and body templates: Part 2 verification of functions and validation of dimensions for computer manikin systems | June, 2023 | - | Identical under dual numbering |
| 17 | IS 16564:2018 ISO 24504 : 2014 Reviewed In : 2023 ISO 24504 : 2014 | Ergonomics - Accessible design - Sound pressure levels of spoken announcements for products and public address systems | June, 2023 | - | Identical under dual numbering |
| 18 | IS 16565:2018 ISO 24503 : 2011 ISO 24503 : 2011 | Ergonomics - Accessible design - Tactile dots and bars on consumer products | | - | Identical under dual numbering |
| 19 | IS 16566:2017 ISO 24502 : 2010 Reviewed In : 2022 ISO 24502 | Ergonomics-Accessible Design- Specification of Age Related Luminance Contrast for Coloured Light | November, 2022 | - | Identical under dual numbering |
| 20 | IS 16567:2018 ISO 24501 : 2010 Reviewed In : 2023 ISO 24501 : 2010 | Ergonomics - Accessible design - Sound pressure levels of auditory signals for consumer products | June, 2023 | - | Identical under dual numbering |
| 21 | IS 16568:2017 ISO 24500 : 2010 | Ergonomics - Accessible design - Auditory signals for consumer | November, 2022 | - | Identical under dual numbering |

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|----|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------|---|--------------------------------|
| | Reviewed In : 2022 ISO 24500 : 2010 | products | | | |
| 22 | IS 16569:2018 ISO 11429 : 1996 Reviewed In : 2023 ISO 11429 : 1996 | Ergonomics - System of auditory and visual danger and information signals | June, 2023 | - | Identical under dual numbering |
| 23 | IS 16570:2017 ISO 11428 : 1996 Reviewed In : 2022 ISO 11428 : 1996 | Ergonomics - Visual danger signals - General requirements, design and testing | November, 2022 | - | Identical under dual numbering |
| 24 | IS 16572:2017 ISO 14738 : 2002 Reviewed In : 2022 ISO 14738 : 2002 | Safety of machinery - Anthropometric requirements for the design of workstations at machinery | November, 2022 | - | Identical under dual numbering |
| 25 | IS 16573:2025 ISO 15535 : 2023 ISO 15535 : 2023 | General Requirements for Establishing Anthropometric Databases (First Revision) | | - | Identical under dual numbering |
| 26 | IS 16574:2024 ISO 15537:2022 ISO 15537:2022 | Principles for Selecting and Using Test Persons for Testing Anthropometric Aspects of Industrial Products and Designs | | - | Identical under dual numbering |
| 27 | IS 16595 (Part 5):2018 9241-5 : 1998 ISO 9241-5 : 1998 | Ergonomic Requirements for Office Work With Visual Display Terminals (VDTs) Part 5 Workstation Layout and Postural Requirements | | - | Identical under dual numbering |
| 28 | IS 16595 (Part 11):2020 ISO 9241-11 : 1998 Reviewed In : 2024 ISO 9241-11 : 2018 | Ergonomics of Human-System Interaction Part 11 Usability: Definitions and Concepts (First Revision) | September, 2024 | - | Identical under dual numbering |
| 29 | IS 16595 (Part 20):2024 ISO 9241-20:2021 ISO 9241-20:2021 | Ergonomics of Human System Interaction Part 20 An ergonomic approach to accessibility within the ISO 9241 series | | - | Identical under dual numbering |
| 30 | IS 16595 (Part 110):2023 ISO 9241-110:2020 ISO 9241-110:2020 | Ergonomics of human-system Interaction Part 110 : Interaction principles ISO 9241-110 | | - | Identical under dual numbering |
| 31 | IS 16595 (Part 154):2018 ISO 9241-154 : 2013 Reviewed In : 2023 ISO 9241-154 : 2013 | Ergonomics of human - System interaction: Part 154 interactive voice response (IVR) applications | June, 2023 | - | Identical under dual numbering |
| 32 | IS 16595 (Part 171):2023 ISO 9241-171 : 2008 ISO 9241-171 : 2008 | Ergonomics of human-system interaction Part 171: Guidance on software accessibility ISO 9241-171 | | - | Identical under dual numbering |
| 33 | IS 16595 (Part 210):2023 ISO 9241-210:2019 ISO 9241-210:2019 | Ergonomics of human-system interaction Part 210: Human-centred design for interactive systems ISO 9241-210 | | - | Identical under dual numbering |
| 34 | IS 16595 (Part 300):2023 ISO 9241-300:2008 ISO 9241-300:2008 | Ergonomics of human-system Interaction Part 300: Introduction to electronic visual display requirements ISO 9241-300 | | - | Identical under dual numbering |
| 35 | IS 16595 (Part 302):2023 | Ergonomics of human-system Interaction Part 302: Terminology | | - | Identical under dual numbering |

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| | ISO 9241-302:2008 ISO 9241-302:2008 | for electronic visual displays ISO 9241-302 | | | |
| 36 | IS 16595 (Part 410):2023 ISO 9241-410 : 2008 ISO 9241-410 : 2008 | Ergonomics of human-system interaction part 410: design criteria for physical input devices ISO 9241-410 | | - | Identical under dual numbering |
| 37 | IS 16595 (Part 411):2023 ISO/TS 9241-411 : 2012 ISO/TS 9241-411 : 2012 | Ergonomics of human-system Interaction Part 411: Evaluation method for the design of physical input devices ISO 9241-411 | | - | Identical under dual numbering |
| 38 | IS 16595 (Part 971):2023 ISO 9241-971:2020 ISO 9241-971:2020 | Ergonomics of human-system Interaction Part 971: Accessibility of tactilehaptic interactive systems ISO 9241-971 | | - | Identical under dual numbering |
| 39 | IS 17009:2018 ISO 11226 : 2000 ISO 11226 : 2000 | Ergonomics - Evaluation of static working postures | | - | Identical under dual numbering |
| 40 | IS 17030 (Part 1):2024 ISO 20685-1:2018 ISO 20685-1:2018 | 3-D Scanning Methodologies for Internationally Compatible Anthropometric Databases Part 1 Evaluation Protocol for Body Dimensions Extracted From 3-D Body Scans | | - | Identical under dual numbering |
| 41 | IS 17030 (Part 2):2025 ISO 20685-2:2023 ISO 20685-2:2023 | Ergonomics 3-D scanning methodologies for internationally compatible anthropometric databases : Part 2 Evaluation protocol of surface shape and repeatability of relative landmark positions (first revision) | | - | Identical under dual numbering |
| 42 | IS 17031 (Part 1):2024 ISO 11228-1:2021 ISO 11228-1:2021 | Ergonomics ½ Manual handling Part 1 Lifting lowering and carrying | | - | Identical under dual numbering |
| 43 | IS 17031 (Part 2):2019 ISO 11228-2 : 2007 ISO 11228-2:2007 | Ergonomics “ Manual Handling Part 2 Pushing and Pulling | | - | Identical under dual numbering |
| 44 | IS 17031 (Part 3):2018 ISO 11228-3 : 2003 ISO 11228-3:2007 | Ergonomics “ Manual Handling Part 3 Handling of Low Loads at High Frequency | | - | Identical under dual numbering |
| 45 | IS 17032:2018 ISO/TS 20646 : 2014 ISO/TS 20646 : 2014 | Ergonomics Guidelines for the Optimization of Musculoskeletal Workload | | - | Identical under dual numbering |
| 46 | IS 17033:2018 ISO/TR 12296:2012 | Ergonomics - Manual handling of people in the healthcare sector | | - | Identical under dual numbering |
| 47 | IS 17102:2019 ISO 7731 : 2003 ISO 7731 : 2003 | Ergonomics - Danger signals for public and work areas - Auditory danger signals | | - | Identical under dual numbering |
| 48 | IS 17103:2019 ISO 9886 : 2004 | Ergonomics - Evaluation of thermal strain by physiological | | - | Identical under dual numbering |

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|----|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---|----------------------------------|
| | ISO 9886 : 2004 | measurements | | | |
| 49 | IS 17104:2024 ISO 10551:2019 ISO 10551:2019 | Ergonomics of the Physical Environment Subjective Judgement Scales for Assessing Physical Environments (first revision) | | - | Identical under dual numbering |
| 50 | IS 17105:2019 ISO 28802 : 2012 ISO 28802 : 2012 | Ergonomics of the physical environment - Assessment of environments by means of an environmental survey involving physical measurements of the environment and subjective responses of people | | - | Identical under dual numbering |
| 51 | IS 18232:2023 ISO 24508 : 2019 ISO 24508 : 2019 | Ergonomics Accessible design Guidelines for designing tactile symbols and characters ISO 24508-2019 | | - | Identical under dual numbering |
| 52 | IS 18254:2023 ISO 28803 : 2012 ISO 28803 : 2012 | Ergonomics of the physical environment Application of International Standards to people with special requirements Adoption of ISO 28803: 2012 | | - | Identical under dual numbering |
| 53 | IS 18259:2023 ISO 24505 : 2016 ISO 24505 : 2016 | Ergonomics Accessible design Method for creating colour combinations taking account of age-related changes in human colour vision ISO 24505 | | - | Identical under dual numbering |
| 54 | IS 18263 (Part 1):2023 ISO 10075-1 : 2017 ISO 10075-1 : 2017 | Ergonomic principles related to mental workload Part 1: General issues and concepts terms and definitions | | - | Identical under dual numbering |
| 55 | IS 18263 (Part 3):2023 ISO 10075-3 : 2004 ISO 10075-3 : 2004 | Ergonomic principles related to mental workload Part 3: Principles and requirements concerning methods for measuring and assessing mental workload | | - | Identical under dual numbering |
| 56 | IS/ISO 26800:2011 ISO 26800 : 2011 Reviewed In : 2023 ISO 26800 : 2011 | Ergonomics â€” General Approach, Principles and Concepts | June, 2023 | - | Identical under dual numbering |
| 57 | IS/ISO 27500:2016 ISO 27500 : 2016 Reviewed In : 2023 ISO 27500 : 2016 | The Human - Centered Organization - Rationale and General Principles | June, 2023 | - | Identical under single numbering |
| 58 | IS 4838:1990 Reviewed In : 2020 | Anthropometric dimensions for school children age group 5 - 17 years (Second Revision) | May, 2020 | - | Indigenous |

Standards under Development

Projects Approved

| SI. No. | Doc No. | Title |
|------------------|---------|-------|
| No Records Found | | |

Preliminary Draft Standards

| SI. No. | Doc No. | Title |
|------------------|---------|-------|
| No Records Found | | |

| Drafts Standards in WC Stage | | |
|------------------------------|---------|-------|
| SI. No. | Doc No. | Title |
| No Records Found | | |

| Draft Standards Completed WC Stage | | |
|------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------|
| SI. No. | Doc No. | Title |
| 1 | PGD 15 (27723) | Ergonomics of Human-System Interaction Part 5 Workstation Layout and Postural Requirements First Revision |

| Finalized Draft Indian Standard | | |
|---------------------------------|---------|-------|
| SI. No. | Doc No. | Title |
| No Records Found | | |

| Finalized Draft Indian Standards under Print | | |
|----------------------------------------------|---------|-------|
| SI. No. | Doc No. | Title |
| No Records Found | | |

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| Total Published Standards:57 Total Standards Under development:1 | | |
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Aspect Wise Report

Product : 14

Code of Practices : 25

Methods of Test : 7

Terminology : 3

Dimensions : 4

System Standard : 1

Safety Standard : 1

Others : 2

Service Specification : 0

Process Specification : 0

Unclassified : 0

| Annexure-I :List of Indian Standards Withdrawn/Superseded | | |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| SI. No. | IS No. & Year | Title |
| 1 | IS 13214:1991 Reviewed In : 2014 | Machine Tools - Ergonomics Anthropometric Terminology |
| 2 | IS 16563 (Part 1):2017 ISO 9355-1 Reviewed In : 2022 EN 301549 | ERGONOMIC REQUIREMENTS FOR THE DESIGN OF DISPLAYS AND CONTROL ACTUATORS PART 1 HUMAN INTERACTIONS WITH DISPLAYS AND CONTROL ACTUATORS |
| 3 | IS 16563 (Part 2):2017 ISO 9355-2 : 1999 Reviewed In : 2022 ISO 9355-2 : 1999 | Ergonomic requirements for the design of displays and control actuators Part 2 displays |
| 4 | IS 16563 (Part 3):2017 ISO 9355-3 : 2006 Reviewed In : 2022 ISO 9355-3 : 2006 | Ergonomic requirements for the design of displays and control actuators Part 3 control actuators |
| 5 | IS 5533:1969 Reviewed In : 2014 | Recommendation for dimensions of spaces for human activities |

Annexure-II :List of Indian Product Standards

| Sl. No. | IS No. & Year | Title |
|---------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | IS 15257:2018 ISO 1503 : 2008 ISO 1503 : 2008 | Spatial orientation and direction of movement - Ergonomics requirements First Revision |
| 2 | IS 16561 (Part 1):2017 ISO 11604-1 : 2000 Reviewed In : 2022 ISO 11064-1 : 2000 | Ergonomic design of control centres Part 1 principles for the design of control centres |
| 3 | IS 16561 (Part 4):2017 ISO 11064-4 : 2013 Reviewed In : 2022 ISO 11064-4 : 2013 | Ergonomic design of control centres Part 4 layout and dimensions of workstations |
| 4 | IS 16561 (Part 5):2018 ISO 11064-5 : 2008 Reviewed In : 2023 ISO 11064-5 : 2008 | Ergonomic design of control centres Part 5 displays and controls |
| 5 | IS 16561 (Part 6):2022 ISO 11604-6 ISO/TS 17863:2013 | ERGONOMIC DESIGN OF CONTROL CENTRES PART 6 ENVIRONMENTAL REQUIREMENTS FOR CONTROL ROOMS |
| 6 | IS 16562 (Part 1):2017 ISO 15536-1 : 2005 Reviewed In : 2022 ISO 15536-1 : 2005 | Ergonomics - Computer manikins and body templates Part 1 general requirements |
| 7 | IS 16562 (Part 2):2018 ISO 15536 (Part 2) : 2007 Reviewed In : 2023 ISO 15536 (Part 2) : 2007 | Ergonomics - Computer manikins and body templates Part 2 verification of functions and validation of dimensions for computer manikin systems |
| 8 | IS 16566:2017 ISO 24502 : 2010 Reviewed In : 2022 ISO 24502 | Ergonomics-Accessible Design-Specification of Age Related Luminance Contrast for Coloured Light |
| 9 | IS 16569:2018 ISO 11429 : 1996 Reviewed In : 2023 ISO 11429 : 1996 | Ergonomics - System of auditory and visual danger and information signals |
| 10 | IS 16570:2017 ISO 11428 : 1996 Reviewed In : 2022 ISO 11428 : 1996 | Ergonomics - Visual danger signals - General requirements design and testing |
| 11 | IS 16595 (Part 5):2018 9241-5 : 1998 ISO 9241-5 : 1998 | Ergonomic Requirements for Office Work With Visual Display Terminals VDTs Part 5 Workstation Layout and Postural Requirements |
| 12 | IS 16595 (Part 154):2018 ISO 9241-154 : 2013 Reviewed In : 2023 ISO 9241-154 : 2013 | Ergonomics of human - System interaction Part 154 interactive voice response IVR applications |
| 13 | IS 17102:2019 ISO 7731 : 2003 ISO 7731 : 2003 | Ergonomics - Danger signals for public and work areas - Auditory danger signals |
| 14 | IS 18254:2023 ISO 28803 : 2012 IEC 61800-9-2:2023 | Ergonomics of the physical environment Application of International Standards to people with special requirements Adoption of ISO 28803 2012 |