

BUREAU OF INDIAN STANDARDS

Program of Work

PGD 33 : Transmission Devices

Scope: Formulation of standards for gears, transmission chains; shaft ends and axle heights; splines and serrations; clutches and couplings and keys & keyways.

Liaison: **ISO TC-100 (P): Chains and chain sprockets for power transmission and conveyors ISO TC-14 (P): Shafts for machinery and accessories ISO TC-60 (P): Gears ISO TC-60 SC-1 (O): Nomenclature and wormgearing ISO TC-60 SC-2 (O): Gear capacity calculation**

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10686:1983 Reviewed In : 2024	Specification for mechanical multi - Disc clutches (Wet Type)	May, 2024	-	Indigenous
2	IS 1072:2024 ISO 4347 ISO 4347	Leaf Chains, Clevises and Sheaves â€” Dimensions, Measuring Forces, Tensile Strengths and Dynamic Strengths (Fourth Revision)		-	Identical under dual numbering
3	IS 10911:1984 Reviewed In : 2021 Reaffirmed but not taken up for revision	Methods of inspection for straight bevel gears	February, 2021	-	Indigenous
4	IS 11740:2014 ISO 10190 : 2008 Reviewed In : 2025 ISO 10190	Motorcycle chains - Characteristics and test methods (First Revision)	January, 2025	-	Identical under dual numbering
5	IS 11863:1986 Reviewed In : 2021 Reaffirmed but not taken up for revision	Tolerances for worm gears	February, 2021	-	Indigenous
6	IS 12405:1988 Reviewed In : 2023	Specification for gear type flexible couplings	March, 2023	-	Indigenous
7	IS/ISO 13203:2005 ISO 13203: 2005 Reviewed In : 2025	Chains, sprockets and accessories - List of equivalent terms	January, 2025	-	Identical under single numbering
8	IS 13926:2005 ISO 6971 Reviewed In : 2025 ISO 6971	Cranked - Link drag chains of welded construction, attachments and sprockets (First Revision)	September, 2025	-	Identical under dual numbering
9	IS 13927:2005 ISO 6972 Reviewed In : 2025 ISO 6972	Cranked - Link mill chains of welded construction, attachments and sprockets (First Revision)	September, 2025	-	Identical under dual numbering
10	IS 14285:1995	Transmission devices - Flexible	February, 2021	-	Indigenous

	Reviewed In : 2021 Decision taken to Reaffirm and Archive	couplings - Tyre type - Specification			
11	IS 14696:2000 Reviewed In : 2025	Transmission steel roller chains and chain wheels for oil field applications - Specification	September, 2025	-	Indigenous
12	IS 15509:2017 ISO 1275 : 2006 Reviewed In : 2022 ISO 1275 : 2006	Double - Pitch precision roller chains - Attachments and associated chain sprockets for transmission and conveyors (First Revision)	March, 2022	-	Identical under dual numbering
13	IS 15510:2004 ISO 3512 Reviewed In : 2025 ISO 3512	Heavy - Duty cranked - Link transmission chains	September, 2025	-	Identical under dual numbering
14	IS 15511:2004 ISO 9633 Reviewed In : 2021 ISO 9633	Cycle chains - Characteristics and test methods	February, 2021	1	Identical under dual numbering
15	IS 15790:2008 ISO 15654 Reviewed In : 2025 ISO 15654	Fatigue test method for transmission precision roller chains	September, 2025	-	Identical under dual numbering
16	IS 19153 (Part 1):2025 ISO 6336-1 ISO 6336-1	Calculation of Load Capacity of Spur and Helical Gears $i\frac{1}{2}$ Part 1: Basic Principles Introduction and General Influence Factors		-	Identical under dual numbering
17	IS 19153 (Part 2):2025 ISO 6336-2 ISO 6336-2	Calculation of load capacity of spur and helical gears Part 2: Calculation of surface durability pitting		-	Identical under dual numbering
18	IS 19153 (Part 3):2025 ISO 6336-3 ISO 6336-3	Calculation of Load Capacity of Spur and Helical Gears $i\frac{1}{2}$ Part 3: Calculation of Tooth Bending Strength		-	Identical under dual numbering
19	IS 19153 (Part 5):2025 ISO 6336-5 ISO 6336-5	Calculation of Load Capacity of Spur and Helical Gears $i\frac{1}{2}$ Part 5: Strength and Quality of Materials		-	Identical under dual numbering
20	IS 19153 (Part 6):2025 ISO 6336-6 ISO 6336-6	Calculation of Load Capacity of Spur and Helical Gears $i\frac{1}{2}$ Part 6 : Calculation of Service Life Under Variable Load		-	Identical under dual numbering
21	IS 2031:1987 ISO 496 Reviewed In : 2023 Decision taken to Reaffirm and Archive ISO 496	Driving and driven machines - Shaft heights (First Revision J	March, 2023	-	Identical under dual numbering
22	IS 2048:1983 Reviewed In : 2023 Decision taken to Reaffirm and Archive	Specification for parallel keys and keyways (Second Revision)	August, 2023	2	Indigenous
23	IS 2291:1990 ISO 3117-1977 Reviewed In : 2023 Decision taken to	Tangential keys and keyways (Third Revision)	March, 2023	-	Identical under dual numbering

	Reaffirm and Archive ISO 3117				
24	IS 2292:1974 Reviewed In : 2024	Specification for taper keys and keyways (First Revision)	May, 2024	-	Indigenous
25	IS 2293:1974 Reviewed In : 2024	Specification for gib - Head - Keys and keyways (First Revision)	May, 2024	-	Indigenous
26	IS 2294:1986 Reviewed In : 2023	Specifi - Cation for woodruff keys and keyways (Second Revision)	March, 2023	2	Indigenous
27	IS 2327:1993 Reviewed In : 2025 ISO 14 :1982	Straight - Sided splines for cylindrical shafts with internal centering - Dimensions, tolerances and verification (First Revision)	January, 2025	-	Identical under dual numbering
28	IS 2403:2024 ISO 606 ISO 606	Short-Pitch Transmission Precision Roller and Bush Chains, Attachments and Associated Chain Sprockets (Fourth Revision)		-	Identical under dual numbering
29	IS 2458:2001 ISO 1122-1 Reviewed In : 2023 ISO 1122-1	Vocabulary of gear terms - Definitions related to geometry (First Revision)	March, 2023	-	Identical under dual numbering
30	IS 2467:2002 ISO 701 Reviewed In : 2023 ISO 701	International gear notation - Symbols for geometrical data (First Revision)	March, 2023	-	Identical under dual numbering
31	IS 2535 (Part 1):2004 ISO 53 Reviewed In : 2023 ISO 53	Cylindrical gears for general and heavy engineering: Part 1 standard basic rack tooth profile (Third Revision)	March, 2023	-	Identical under dual numbering
32	IS 2535 (Part 2):2004 ISO 54 Reviewed In : 2023 ISO 54	Cylindrical gears for general and heavy engineering: Part 2 module (Third Revision)	March, 2023	-	Identical under dual numbering
33	IS 2610:1989 Reviewed In : 2023 Decision taken to Reaffirm and Archive	Power transmission - Straight sided splines for machine tools dimensions (First Revision)	December, 2023	-	Indigenous
34	IS 2637:2004 ISO 487 Reviewed In : 2023 ISO 487	Steel roller chains, types s and c, attachments and sprockets (Second Revision)	March, 2023	-	Identical under dual numbering
35	IS 2693:1989 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Power transmissionbush type flexible coupling (Second Revision)	May, 2024	2	Indigenous
36	IS 3542:1980 Reviewed In : 2023 ISO 1275	Specification for extended pitch transmission precision roller chains and chain wheel (First Revision)	March, 2023	-	Not Equivalent
37	IS 3560:1980 Reviewed In : 2024 ISO 606	Specification for short pitch transmission precision bush chains and chain wheels (First Revision)	May, 2024	-	Not Equivalent
38	IS 3654:2024	Straight Sided Serrations $i_L \frac{1}{2}$ Dimensions (first revision)		-	Indigenous
39	IS 3665:2024	Involute Sided Splines $i_L \frac{1}{2}$ Dimensions (First Revision)		-	Indigenous
40	IS 3681:1995	Gears - Cylindrical, gears -	September, 2025	-	Indigenous

	Reviewed In : 2025	Accuracies (First Revision)			
41	IS 3688:1990 ISO/TR 775 Reviewed In : 2023 Decision taken to Reaffirm and Archive ISO 775	Power transmission - Shafts - Dimensions for cylindrical and 1/10 conical shaft ends (Second Revision)	March, 2023	-	Identical under dual numbering
42	IS 3734:1983 Reviewed In : 2021 Reaffirmed but not taken up for revision	Dimensions for worm gearing (First Revision)	February, 2021	1	Indigenous
43	IS 3756:2002 Reviewed In : 2023	Method for gear correction - Addendum modification for external cylindrical gears with parallel axes (First Revision)	March, 2023	-	Indigenous
44	IS 4071:1986 Reviewed In : 2025 Decision taken to Reaffirm and Archive	Specification for Master Gears (first revision)	May, 2025	-	Indigenous
45	IS 4278:1988 Reviewed In : 2020	Specification for flexible shafts for speedometers and tachographs (Second Revision)	January, 2020	1	Indigenous
46	IS 4460 (Part 13):1995 Reviewed In : 2023 Reaffirmed but not taken up for revision ISO 6336	Gears - spur and helical gears - Calculation of load capacity (First Revision)	March, 2023	2	Not Equivalent
47	IS 4600:2024	Flexible Shafts $i_L^{1/2}$ Specification		-	Indigenous
48	IS 5037 (Part 1):2004 ISO 677 Reviewed In : 2023 ISO 677	Straight bevel gears for general engineering and heavy engineering: Part 1 basic rack (First Revision)	March, 2023	-	Identical under dual numbering
49	IS 5037 (Part 2):2004 ISO 678 Reviewed In : 2023 ISO 678	Straight bevel gears for general engineering and heavy engineering: Part 2 module and diametral pitches (First Revision)	March, 2023	-	Identical under dual numbering
50	IS 5267:2002 ISO 1122-2 Reviewed In : 2023 ISO 1122-2	Vocabulary of gear terms - Definitions related to worm gear geometry (First Revision)	March, 2023	-	Identical under dual numbering
51	IS 6166:1971 Reviewed In : 2024	Specification for thin taper keys and keyways	July, 2024	1	Indigenous
52	IS 6167:1971 Reviewed In : 2024	Specification for thin parallel keys and keyways	May, 2024	1	Indigenous
53	IS 6196:1971 Reviewed In : 2023 Decision taken to Reaffirm and Archive	Dimensions for fitted half - Couplings	December, 2023	1	Indigenous
54	IS 6276:1971 Reviewed In : 2024 Decision taken to Reaffirm and	Specification for flexible shafts used in concrete vibrators	May, 2024	-	Indigenous

	Archive				
55	IS 7403:1974 Reviewed In : 2023 Reaffirmed but not taken up for revision	Code of practice for selection of standard worm and helical gear boxes	March, 2023	-	Indigenous
56	IS 7443:2002 Reviewed In : 2023	Method for load rating of worm gears (First Revision)	March, 2023	-	Indigenous
57	IS 7504:1995 Reviewed In : 2021 Reaffirmed but not taken up for revision	Gears - Cylindrical gears - Accuracies methods of inspection (First Revision)	February, 2021	-	Indigenous
58	IS 8733:1978 Reviewed In : 2023 Reaffirmed but not taken up for revision	Tolerances for single start gear hobs	March, 2023	-	Indigenous
59	IS 8830:2007 ISO 9083 Reviewed In : 2023 Decision taken to Reaffirm and Archive ISO 9083	Calculation of load capacity of spur and helical gears - Application to marine gears (First Revision)	March, 2023	-	Identical under dual numbering
60	IS 8843:1978 Reviewed In : 2024	Accuracy requirements for turbine gears	October, 2024	-	Indigenous

Standards under Development

Projects Approved

Sl. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

Sl. No.	Doc No.	Title
No Records Found		

Drafts Standards in WC Stage

Sl. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage

Sl. No.	Doc No.	Title
1	PGD 33 (28145)	Fatigue Test Method for Transmission Precision Roller Chains and Leaf Chains

Finalized Draft Indian Standard

Sl. No.	Doc No.	Title
1	PGD 33 (27175) Revision of: IS 2637:2004	Steel Roller Chains Types S and C Attachments and Sprockets

Finalized Draft Indian Standards under Print

Sl. No.	Doc No.	Title
1	PGD 33 (27258) Revision of: IS 15511:2004	Cycle Chains Specification

Total Published Standards:55 Total Standards Under development:3
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Aspect Wise Report
<div>Product : 30</div> <div>Code of Practices : 1</div> <div>Methods of Test : 12</div> <div>Terminology : 3</div> <div>Dimensions : 9</div> <div>System Standard : 0</div> <div>Safety Standard : 0</div> <div>Others : 5</div> <div>Service Specification : 0</div> <div>Process Specification : 0</div> <div>Unclassified : 0</div>

Annexure-I :List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No. & Year	Title
1	IS 10185:1982 Reviewed In : 2018	Data for procurement of worm and wormwheels
2	IS 2240:1976	Vegetable tanned leather belting for power transmission
3	IS 2458 (Part 2):1984 Reviewed In : 2000	Glossary Of Terms For Toothed Gearing part 2 Bevel And Hypoid Gears
4	IS 2710:1975	Parallel keys and keyways for machine tools
5	IS 3143:1965	Cotton ropes for power transmission
6	IS 3653:1966	Dimensions For Forged End Type Rigid Couplings
7	IS 529:1976	Solid-woven impregnated cotton belting for power transmission
8	IS 5375:1979 Reviewed In : 2018 Reaffirmed but not taken up for revision	Data for procurement of cylindrical gears First Revision
9	IS 6535:1979 Reviewed In : 2018 Reaffirmed but not taken up for revision	Data for procurement of straight bevel gears First Revision
10	IS 6583:1989 Reviewed In : 1999	Power transmission belts - Train lighting belting

Annexure-II :List of Indian Product Standards

Sl. No.	IS No. & Year	Title
1	IS 10686:1983 Reviewed In : 2024	Specification for mechanical multi - Disc clutches Wet Type
2	IS 1072:2024 ISO 4347	Leaf Chains Clevises and Sheaves Dimensions Measuring Forces Tensile Strengths and Dynamic Strengths Fourth Revision
3	IS 11740:2014 ISO 10190 : 2008	Motorcycle chains - Characteristics and test methods First Revision

	Reviewed In : 2025 ISO 10190	
4	IS 12405:1988 Reviewed In : 2023	Specification for gear type flexible couplings
5	IS 13926:2005 ISO 6971 Reviewed In : 2025 ISO 6971	Cranked - Link drag chains of welded construction attachments and sprockets First Revision
6	IS 13927:2005 ISO 6972 Reviewed In : 2025 ISO 6972	Cranked - Link mill chains of welded construction attachments and sprockets First Revision
7	IS 14285:1995 Reviewed In : 2021 Decision taken to Reaffirm and Archive	Transmission devices - Flexible couplings - Tyre type - Specification
8	IS 14696:2000 Reviewed In : 2025	Transmission steel roller chains and chain wheels for oil field applications - Specification
9	IS 15509:2017 ISO 1275 : 2006 Reviewed In : 2022 ISO 1275 : 2006	Double - Pitch precision roller chains - Attachments and associated chain sprockets for transmission and conveyors First Revision
10	IS 15510:2004 ISO 3512 Reviewed In : 2025 ISO 3512	Heavy - Duty cranked - Link transmission chains
11	IS 2291:1990 ISO 3117-1977 Reviewed In : 2023 Decision taken to Reaffirm and Archive ISO 3117	Tangential keys and keyways Third Revision
12	IS 2292:1974 Reviewed In : 2024	Specification for taper keys and keyways First Revision
13	IS 2293:1974 Reviewed In : 2024	Specification for gib - Head - Keys and keyways First Revision
14	IS 2294:1986 Reviewed In : 2023	Specifi - Cation for woodruff keys and keyways Second Revision
15	IS 2403:2024 ISO 606	Short-Pitch Transmission Precision Roller and Bush Chains Attachments and Associated Chain Sprockets Fourth Revision
16	IS 2535 (Part 1):2004 ISO 53 Reviewed In : 2023 ISO 53	Cylindrical gears for general and heavy engineering Part 1 standard basic rack tooth profile Third Revision
17	IS 2535 (Part 2):2004 ISO 54 Reviewed In : 2023 ISO 54	Cylindrical gears for general and heavy engineering Part 2 module Third Revision
18	IS 2637:2004 ISO 487 Reviewed In : 2023 ISO 487	Steel roller chains types s and c attachments and sprockets Second Revision
19	IS 2693:1989 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Power transmissionbush type flexible coupling Second Revision
20	IS 3542:1980 Reviewed In : 2023 ISO 1275	Specification for extended pitch transmission precision roller chains and chain wheel First Revision
21	IS 3560:1980 Reviewed In : 2024 ISO 606	Specification for short pitch transmission precision bush chains and chain wheels First Revision
22	IS 3681:1995	Gears - Cylindrical gears - Accuracies First Revision

	Reviewed In : 2025	
23	IS 4071:1986 Reviewed In : 2025 Decision taken to Reaffirm and Archive	Specification for Master Gears first revision
24	IS 4278:1988 Reviewed In : 2020	Specification for flexible shafts for speedometers and tachographs Second Revision
25	IS 4600:2024	Flexible Shafts Specification
26	IS 5037 (Part 1):2004 ISO 677 Reviewed In : 2023 ISO 677	Straight bevel gears for general engineering and heavy engineering Part 1 basic rack First Revision
27	IS 5037 (Part 2):2004 ISO 678 Reviewed In : 2023 ISO 678	Straight bevel gears for general engineering and heavy engineering Part 2 module and diametral pitches First Revision
28	IS 6166:1971 Reviewed In : 2024	Specification for thin taper keys and keyways
29	IS 6167:1971 Reviewed In : 2024	Specification for thin parallel keys and keyways
30	IS 6276:1971 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Specification for flexible shafts used in concrete vibrators