### **BUREAU OF INDIAN STANDARDS**

### **Program of Work**

### MTD 6: Pig iron and Cast iron Sectional Committee

Scope: Standardization in the field of pig iron, various types of cast iron castings

Liaison: **ISO TC-25 (P):** Cast irons and pig irons **ISO TC-5 (P):** Ferrous metal pipes and metallic

fittings ISO TC-5 SC-2 (P): Cast iron pipes, fittings and their joints

### **Published Standards**

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10207 : 1982 Reviewed In : 2020	Methods of sampling grey iron and malleable iron castings	February, 2020	-	Indigenous
2	IS 10292 : 1988 Reviewed In : 2022	Specification for dimensional reooirements for rubber sealing rings for C.I.D joints in asbestos cement piping (First Revision)	March, 2022	-	Indigenous
3	IS 10299 : 1982 Reviewed In : 2020	Specification for cast iron saddle pieces for service connection from asbestos cement pressure pipes	February, 2020	-	Indigenous
4	IS 11606 : 1986 Reviewed In : 2019	Methods for sampling of cast iron pipes and fittings	December, 2019	-	Indigenous
5	IS 12820 : 2004 Reviewed In : 2020	Dimensional requirements of rubber gaskets for mechanical joints and push - On joints for use with cast iron pipes and fittings for carrying water, gas and sewage (First Revision)	July, 2020	1	Indigenous
6	IS 12987 : 1991 Reviewed In : 2019	Cast iron detachable joints for use with asbestos cement pressure pipes (Light Duty) - Specification	December, 2019	-	Indigenous
7	IS 12988 : 1991 Reviewed In : 2019	Rubber sealing rings for cid joints for light duty ac pipesdimensional requirements	December, 2019	-	Indigenous
8	IS 13382 : 2018  Reviewed In : 2024  ISO 2531	Cast iron specials for mechanical and push-on flexible joints for pressure pipes for water, gas and sewage - Specification (Second Revision)	January, 2024	-	Not Equivalent
9	IS 13502 : 2023	PIG IRON- SPECIFICATION		-	Indigenous
10	IS 14329 : 1995 Reviewed In : 2019 ISO 9147:1987	Malleable iron castings - Specification	December, 2019	-	Not Equivalent
11	IS 1536 : 2001 Reviewed In : 2021	Centrifugally cast (Spun) iron pressure pipes for water, gas and sewage - Specification (Fourth Revision)	March, 2021	5	Indigenous
12	IS 1536 : 2023	Centrifugally cast (spun) iron		-	Indigenous

		pressure pipes for water, gas and sewage i/2½ Specification			
13	IS 1537: 1976 Reviewed In: 2025 Reaffirmed but not taken up for revision ISO 6594	Specification for vertically cast iron pressure pipes for water, gas and sewage (First Revision)	February, 2025	7	Not Equivalent
14	IS 1538 : 1993 Reviewed In : 2024 ISO 6594	Cast iron fittings for pressure pipes for water, gas and sewage - Specification (Third Revision)	February, 2024	6	Not Equivalent
15	IS 15905 : 2011 Reviewed In : 2022	Hubless centrifugally cast (Spun) iron pipes, fittings and accessories - Spigot series - Specification	March, 2022	1	Indigenous
16	IS 15905 : 2024	Hubless Centrifugally Cast (Spun)  Iron Pipes, Fittings and Accessories â€" Spigot Series â€"  Specification (First Revision)		-	Indigenous
17	IS 1729 : 2023	SAND CAST IRON SPIGOT AND SOCKET PIPES, FITTINGS AND ACCESSORIES � SPECIFICATION		-	Indigenous
18	IS 1865 : 1991 Reviewed In : 2020 ISO 1083:2018	Iron castings with spheroidal or nodular graphite - Specification (Third Revision)	February, 2020	-	Not Equivalent
19	IS 1879 : 2010 Reviewed In : 2020	Malleable cast iron pipe fittings - Specification (Third Revision)	July, 2020	5	Indigenous
20	IS 1956 (Part 7):	Glossary of terms relating to iron and steel: Part 7 wrought iron (First Revision)	March, 2021	2	Indigenous
21	IS 2084 : 1991 Reviewed In : 2021 ISO/TR 15931	Code for designation of pig iron (Second Revision)	March, 2021	-	Not Equivalent
22	IS 210 : 2009 Reviewed In : 2020 ISO 185:2005	Grey iron castings - Specification (Fifth Revision)	February, 2020	-	Not Equivalent
23	IS 2749 : 1974 Reviewed In : 2020 ISO 2892:2007	Specification for austenitic iron castings (First Revision)	February, 2020	-	Not Equivalent
24	IS 3005 (Part 1): 1979 Reviewed In: 2022 Reaffirmed but not taken up for revision	Specification for grey cast iron ingot moulds, stools and slag ladles: Part 1 bottom stools for large size ingot moulds weighing 8 tonnes and higher (First Revision)	March, 2022	1	Indigenous
25	IS 3005 (Part 2): 1979 Reviewed In: 2020 Reaffirmed but not taken up for revision	Specification for grey cast iron ingot moulds, stools and slag ladles: Part 2 grey cast iron ingot moulds of mass more than eight tonnes (First Revision)	February, 2020	1	Indigenous
26	IS 3005 (Part 3): 1982 Reviewed In: 2025 Reaffirmed but not taken up for revision	Specification for grey cast iron ingot moulds, stools and slag laddles: Part 3 grey cast iron ingot moulds of mass more than one tonne and up to eight tonnes (First Revision)	February, 2025	1	Indigenous
27	IS 3005 (Part 4): 1984 Reviewed In: 2025	Specification for grey cast iron ingot moulds, stools and slag laddles: Part 4 grey cast iron ingot	February, 2025	1	Indigenous

	Reaffirmed but not taken up for revision	moulds of mass up to 1 tonne (First Revision)			
28		Specification for grey iron castings for elevated temperatures for non - Pressure containing parts (First Revision)	February, 2020	-	Indigenous
29	IS 3516 : 1966 Reviewed In : 2020	Specification for cast iron pipe flanges and flanged fittings for petroleum industry	February, 2020	1	Indigenous
30	IS 3989 : 2024	CENTRIFUGALLY CAST (SPUN) IRON SPIGOT AND SOCKET PIPES, FITTINGS AND ACCESSORIES 1;1/2 SPECIFICATION (Fourth Revision)		-	Indigenous
31	IS 4771 : 1985 Reviewed In : 2020	Specification for abrasion - Resistant iron castings (Second Revision)	February, 2020	-	Indigenous
32	IS 5519 : 1979 Reviewed In : 2020	Deviations for untoleranced dimensions and mass of grey iron castings (First Revision)	February, 2020	-	Indigenous
33	IS 5531 : 2014 Reviewed In : 2020	Cast iron specials for asbestos cement pressure pipes for water and sewage - Specification (Third Revision)	February, 2020	-	Indigenous
34	IS 5787 : 1986 Reviewed In : 2021	Specification for spheroidal or nodular graphite iron castings for paper mill dryer rolls (First Revision)	March, 2021	1	Indigenous
35	IS 5788 : 1986 Reviewed In : 2020	Specification for iron castings with spheroidal or nodular graphite for pressure containing parts for use at elevated temperatures (First Revision)	February, 2020	1	Indigenous
36	IS 5789 : 1993 Reviewed In : 2020	Austenitic spheroidal graphite iron castings for pressure containing parts suitable for low - Temperature service - Specification (First Revision)	February, 2020	-	Indigenous
37	IS 6418 : 1971 Reviewed In : 2020	Specification for cast iron and malleable cast iron flanges for general engineering purposes	February, 2020	-	Indigenous
38	IS 6629 : 1972 Reviewed In : 2020	Specification for cast iron rolls	February, 2020	1	Indigenous
39	IS 7181 : 1986 Reviewed In : 2024 Reaffirmed but not taken up for revision	Specification for horizontally cast iron double flanged pipes for water, gas and sewage (First Revision)	December, 2024	5	Indigenous
40		Specification for corrosion - Resistant high silicon iron castings	February, 2020	-	Indigenous
41	IS 7925 : 1976 Reviewed In : 2021	Specification for low alloy types of abrasion - Resistant iron castings	March, 2021	-	Indigenous
42	IS 8329 : 2000 Reviewed In : 2020 ISO 2531:2009	Centrifugally cast (Spun) ductile iron pressure pipes for water, gas and sewage - Specification (Third Revision)	February, 2020	5	Not Equivalent
43	IS 8349 : 1977	Deviations for untoleranced	February, 2020	-	Indigenous

	Reviewed In: 2020	dlMensions of malleable iron castings			
44	IS 8350 : 1977 Reviewed In : 2020 Reaffirmed but not taken up for revision	Deviations for untoleranced dimensions of spheroidal or nodular graphite iron castings	February, 2020	1	Indigenous
45	IS 8794 : 1988 Reviewed In : 2022	Specification for cast iron detachable joints for use with asbestos cement pressure pipes (First Revision)	March, 2022	2	Indigenous
46	IS 9321 : 1979 Reviewed In : 2020	Specification for material for alloy cast iron valve seat inserts	February, 2020	-	Indigenous
47	IS 9523 : 2000 Reviewed In : 2020 ISO 2531:2009	Ductile iron fittings for pressure pipes for water, gas and sewage - Specification (First Revision)	February, 2020	6	Not Equivalent
48	IS 9630 : 1980 Reviewed In : 2021	Recommended practices for production of spheroidal graphite iron	March, 2021	2	Indigenous

# **Standards under Development**

Projects Approved				
SI. No.	SI. No. Doc No. Title			
No Records Found				

Preliminary Draft Standards					
SI. No.	SI. No. Doc No. Title				
	No Records Found				

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

Draft Standards Completed WC Stage			
SI. No.	SI. No. Doc No. Title		
No Records Found			

	Finalized Draft Indian Standard				
SI. No.	Doc No.	Title			
1	MTD 6 (25697)	Ductile iron fittings for pressure pipes for water gas and sewage - Specification First Revision			
		Amendment - 7			
2	MTD 6 (25698)	Centrifugally cast Spun ductile iron pressure pipes for water gas and sewage - Specification Third			
		Revision Amendment - 6			

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

### Total Published Standards:46 Total Standards Under development:2

## **Aspect Wise Report**

Product: 35
Code of Practices: 3
Methods of Test: 0
Terminology: 2
Dimensions: 6
System Standard: 0
Safety Standard: 0
Others: 0

Service Specification: 0 Process Specification: 0 Unclassified: 0

## Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 1230 : 1979	Cast iron rainwater pipes and fittings
2	IS 2107 : 1977	Whiteheart malleable iron castings
3	IS 2108 : 1977	Blackheart Malleable Iron Castings
4	IS 224 : 1979	Foundry pig iron for general purposes
5	IS 225 : 1969	Pig iron charcoal
6	IS 227 : 1954	Malleable iron castings
7	IS 2640 : 1977	Pearlitic Malleable Iron Castings
8	IS 2841 : 1978	Pig iron for special purposes
9	IS 2842 : 1980	Basic pig iron for steel marking purposes
10	IS 3486 : 1966 Reviewed In : 2006	Cast Iron Spigot And Socket Drain Pipes
11	IS 3684 : 1966	Metals for casting moveable types
12	IS 3896 (Part 1): 1978 Reviewed In: 2014	Comparison of Indian and Overseas Standards for Iron Castings - Part I Grey Iron Castings
13	IS 3896 (Part 2): 1985 Reviewed In: 2014	Comparison of Indian and Overseas Standards for Iron Castings - Part 2 Spheroidal or Nodular Graphite Iron Castings
14	IS 5020 : 1969	Hematite Pig Iron
15	IS 5021 : 1969	Acid-resisting High-silica Pig Iron
16	IS 6163 : 1978 Reviewed In : 2010	Centrifugaly cast spun iron low pressure pipes for water gas and sewage
17	IS 6331 : 1987 Reviewed In : 2005	Automotive Grey Iron Castings

## **Annexure-II :List of Indian Product Standards**

SI. No.	IS No. & Year	Title
1	IS 10299 : 1982	Specification for cast iron saddle pieces for service connection from asbestos cement pressure
	Reviewed In: 2020	pipes
2	IS 12987 : 1991	Cast iron detachable joints for use with asbestos cement pressure pipes Light Duty - Specification

	Reviewed In: 2019	
3	IS 13382 : 2018	Cast iron specials for mechanical and push-on flexible joints for pressure pipes for water gas and
		sewage - Specification Second Revision
	Reviewed In: 2024 ISO	
	2531	
4	IS 13502 : 2023	PIG IRON- SPECIFICATION
	IEC 63203-406-1:2021	
5	IS 14329 : 1995	Malleable iron castings - Specification
	Reviewed In: 2019 ISO	
	9147:1987	
6	IS 1536 : 2023	Centrifugally cast spun iron pressure pipes for water gas and sewage Specification
7	IS 1537 : 1976	Specification for vertically cast iron pressure pipes for water gas and sewage First Revision
	Reviewed In: 2025	
	Reaffirmed but not taken up	
	for revision ISO 6594	
8	IS 1538 : 1993	Cast iron fittings for pressure pipes for water gas and sewage - Specification Third Revision
	Reviewed In: 2024 ISO	
	6594	
9	IS 15905 : 2024	Hubless Centrifugally Cast Spun Iron Pipes Fittings and Accessories Spigot Series Specification
		First Revision
10	IS 1729 : 2023	SAND CAST IRON SPIGOT AND SOCKET PIPES FITTINGS AND ACCESSORIES
		SPECIFICATION
11	IS 1865 : 1991	Iron castings with spheroidal or nodular graphite - Specification Third Revision
	Reviewed In: 2020 ISO	
- 12	1083:2018	
12	IS 1879 : 2010	Malleable cast iron pipe fittings - Specification Third Revision
12	Reviewed In : 2020	
13	IS 210 : 2009	Grey iron castings - Specification Fifth Revision
	Reviewed In: 2020 ISO	
14	185:2005 IS 2749 : 1974	Specification for austenitic iron castings First Revision
14	Reviewed In : 2020 ISO	Specification for austennic from castings First Revision
	2892:2007	
15	IS 3005 (Part 1): 1979	Specification for grey cast iron ingot moulds stools and slag ladles Part 1 bottom stools for large
13	Reviewed In : 2022	size ingot moulds weighing 8 tonnes and higher First Revision
	Reaffirmed but not taken up	size filgot filodids weighing o toffics and filgher 1 fist Revision
	for revision	
16	IS 3005 (Part 2) : 1979	Specification for grey cast iron ingot moulds stools and slag ladles Part 2 grey cast iron ingot
10	Reviewed In: 2020	moulds of mass more than eight tonnes First Revision
	Reaffirmed but not taken up	
	for revision	
17	IS 3005 (Part 3) : 1982	Specification for grey cast iron ingot moulds stools and slag laddles Part 3 grey cast iron ingot
	Reviewed In: 2025	moulds of mass more than one tonne and up to eight tonnes First Revision
	Reaffirmed but not taken up	
	for revision	
18	IS 3005 (Part 4): 1984	Specification for grey cast iron ingot moulds stools and slag laddles Part 4 grey cast iron ingot
	Reviewed In: 2025	moulds of mass up to 1 tonne First Revision
	Reaffirmed but not taken up	
	for revision	
19	IS 3355 : 1974	Specification for grey iron castings for elevated temperatures for non - Pressure containing parts
	Reviewed In: 2020	First Revision
20	IS 3516 : 1966	Specification for cast iron pipe flanges and flanged fittings for petroleum industry
	Reviewed In: 2020	
21	IS 3989 : 2024	CENTRIFUGALLY CAST SPUN IRON SPIGOT AND SOCKET PIPES FITTINGS AND
		ACCESSORIES SPECIFICATION Fourth Revision
22	IS 4771 : 1985	Specification for abrasion - Resistant iron castings Second Revision
	Reviewed In: 2020	Cast iron specials for asbestos cement pressure pipes for water and sewage - Specification Third
23	IS 5531 : 2014	

	Reviewed In: 2020	Revision
24	IS 5787 : 1986	Specification for spheroidal or nodular graphite iron castings for paper mill dryer rolls First
	Reviewed In: 2021	Revision
25	IS 5788 : 1986	Specification for iron castings with spheroidal or nodular graphite for pressure containing parts for
	Reviewed In: 2020	use at elevated temperatures First Revision
26	IS 5789 : 1993	Austenitic spheroidal graphite iron castings for pressure containing parts suitable for low -
	Reviewed In: 2020	Temperature service - Specification First Revision
27	IS 6418 : 1971	Specification for cast iron and malleable cast iron flanges for general engineering purposes
	Reviewed In: 2020	
28	IS 6629 : 1972	Specification for cast iron rolls
	Reviewed In: 2020	
29	IS 7181 : 1986	Specification for horizontally cast iron double flanged pipes for water gas and sewage First
	Reviewed In: 2024	Revision
	Reaffirmed but not taken up	
	for revision	
30	IS 7520 : 1974	Specification for corrosion - Resistant high silicon iron castings
	Reviewed In: 2020	
31	IS 7925 : 1976	Specification for low alloy types of abrasion - Resistant iron castings
	Reviewed In: 2021	
32	IS 8329 : 2000	Centrifugally cast Spun ductile iron pressure pipes for water gas and sewage - Specification Third
	Reviewed In: 2020 ISO	Revision
	2531:2009	
33	IS 8794 : 1988	Specification for cast iron detachable joints for use with asbestos cement pressure pipes First
	Reviewed In: 2022	Revision
34	IS 9321 : 1979	Specification for material for alloy cast iron valve seat inserts
	Reviewed In: 2020	
35	IS 9523 : 2000	Ductile iron fittings for pressure pipes for water gas and sewage - Specification First Revision
	Reviewed In: 2020 ISO	
	2531:2009	