

IPSS HANDBOOK

2020



STANDARDISATION HELPS, ADOPT IPSS



स्टील अथॉरिटी ऑफ इंडिया लिमिटेड
STEEL AUTHORITY OF INDIA LTD.

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**Inter Plant Standardisation in Steel industry
(IPSS)**

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MESSAGE

Development of standards and documentation of best practices have been useful in reducing inventory and cost in industry. It provides guidance to engineers in selection, procurement, repair, maintenance of equipment etc.

Inter Plant Standardisation in Steel Industry (IPSS) have been formulated by various standard committees consisting experts from Steel Plants and Consultants for steel industries in India. This handbook has been compiled after incorporating latest standards. To reap the maximum benefits out of these standards, the first step is to make this information available to all concerned and provide knowledge about existence of these Standards in different areas.

I convey my appreciation to IPSS Secretariat whose efforts have resulted in bringing about this useful compilation and hope that this handbook will serve as an important reference document for the plants in taking fast decisions for achieving the desired results.

(Dr. G. Vishwakarma)

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Standards shown in small letters, have been withdrawn / superseded or merged with other Standard as mentioned

INTRODUCTION

The first three Public Sector steel plants i.e. Bhilai, Rourkela & Durgapur were set up in collaboration with three different countries. Naturally, the equipment and other hardware installed in these plants were conforming to the standards of the respective countries. Subsequently, Bokaro was commissioned in early seventies. It was rightly called the Swadeshi Steel Plant as a substantial percentage of indigenous machinery and equipment were used in Bokaro. With TISCO & IISCO already having their own sets of specifications, there was a huge proliferation of types, sizes and even designs leading to high inventories, problems in maintenance and difficulties in procurement.

With a view to overcoming the above difficulties, the Ministry of Steel & Mines, Govt. of India, appointed a Panel of Experts on Standardization of Steel Plant Equipment which recommended creation of a permanent body of experts to carry out the standardization work. Emphasis was given to formulate common standards and to develop indigenous vendors.

IPSS Secretariat was created in 1975 to fulfill this objective. Members of IPSS were SAIL, TATA STEEL, HEC, BHEL, MECON and DASTURCO. It started functioning under the then Indian Standards Institution (now Bureau of Indian Standards)

premises. In 1990, the whole activity was taken over by SAIL and placed under Centre for Engineering & Technology (CET). Subsequently, Visakhapatnam Steel Plant (RINL), JSPL, ESSAR also joined this forum. In addition to the above mentioned member organizations, all major Petroleum PSUs are members of the Committees which formulate IPSS standards on Oils & Lubricants & Hydraulic Machinery.

Since formulating standards required extensive use of national, international standards, other reference data which is readily available in Bureau of Indian Standards (BIS) library and with a need for regular interaction with BIS, it was decided by SAIL management to retain IPSS Secretariat at Delhi.

FUNCTIONING OF IPSS

IPSS Secretariat draws its broad guidelines from Executive Director, Centre for Engineering & Technology (CET). The formulation of standards is done by Committee method on the lines of BIS.

There are three broad categories of standards viz. Consumable Stores & Equipment, Design Parameters, and Management. The standards in these areas are formulated through a number of Standards Committees which have been created based on specializations. Members of these Committees are specialists from steel plants and consultants with vast experience in the respective area. Every member organization is represented on all the Committees.

Before finalizing every standard, the respective manufacturers are invited to interact with the Committee so that the views of the suppliers could be incorporated in the standard. This ensures better implementation of IPSS standards.

Since IPSS endeavors to cater to the needs of the steel industry, the following types of standards are formulated:

- 1) Subjects on which the national and international standards are not available. These are mostly based on the available knowledge of the members of the concerned

technical committees of IPSS and the wealth of experience available at steel plants, design organizations and the heavy engineering organizations. IPSS Secretariat has formulated a number of standards on Steel Plants specific equipment. A number of switches, gauges, sensors, etc. which are used in automation of rolling mills etc. have also been standardized.

- 2) Some standards utilize the technical contents of the corresponding Indian Standards. The inadequacies in the Indian Standards (IS) from the view point of the steel plants are overcome in these standards. For example, most of the electrical machines and components procured as per Indian Standards are not able to withstand the rigorous conditions of steel plants duty due to higher ambient temperature, high amount of conductive dust, presence of corrosive fumes, steam and higher level of vibration, etc. in the critical areas of the steel plants. Therefore, IPSS standards have been formulated for most of the electrical items keeping the above stringent conditions in view.
- 3) Technical contents of the Indian Standards (IS) have been selectively incorporated in the IPSS standards with a view to controlling proliferation of variety. Like in IPSS standard on Wire Ropes, only a limited number of sizes have been retained for steel industry out of a wide variety

available in the IS. The motor frame sizes have also been included selectively from the available Indian Standards to control the inventory.

- 4) Standardizing internal procedures of SAIL to bring uniformity and transparency in the process has been done. The examples of these standards are available in Materials Management, Projects Management and Safety Procedures. A number of Materials Management standards have been included in the SAIL's "Purchase & Contract Procedure".
- 5) Standards contribute to direct cost reduction. In line with the needs of steel industry in general and SAIL in particular, various procedures have been standardized for repairs/reclamation of spares/consumables. Examples of these are: Reclamation of Lubricants, Reconditioning of Rolls, Reconditioning of Sinter Plant Pallets, Method of Reconditioning of Blast Furnace Bells, Reclamation of Roll Table Rollers, Reconditioning of Hot Blast Valve of Blast Furnace, Code of Practice (COP) for repair of LT Squirrel Cage Induction Motors, Code of Practice (COP) for repair of HT Squirrel Cage Induction Motors etc.

AIMS & OBJECTIVES OF IPSS

IPSS in general, works on following Aims & Objectives:

- 1) IPSS Secretariat formulates specifications and code of practices exclusively for steel plants. Implementation of IPSS Standards reduces the recurring problems, downtime of equipment and thus results in reducing the production loss. IPSS Standards improve the quality of equipment / spares through properly made specifications and thus increase life of equipment.
- 2) To reduce lead time required for manufacture of steel plant equipment by means of readymade specifications. Reducing cost / unit provided a bulk order is ensured by the steel plants. Implementation of IPSS Standards is kept in view for this.
- 3) To reduce foreign exchange components of new steel plants by employing indigenous suppliers for supply of equipment /spares just like Bokaro Steel Plant.
- 4) To facilitate exchange of critical equipment and spares in case of emergencies.
- 5) To protect and protect the interest of steel industry in national committees of BIS by participation and enforce requirement of steel industry in national standards.

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- 6) To ensure harmony of standards with IS / IEC / ISO.
 - 7) To maintain IPSS websites, both SAIL's Intranet as well as Internet. (Intranet site is for SAIL network only).
 - 8) IPSS Site Links:
 - a) Intranet Link

http://10.135.0.7/myweb/ipss/ipss_home.asp
 - b) Internet Link

<http://www.sail.co.in/ipss/about-ipss>
 - 9) Categories & Numbering
 - a) Broadly, there are three categories of IPSS Standards:
 - i) Consumable Stores & General Equipment (specifications and code of practices) and its number starts with 1 (one).
 - ii) Design Parameters (for design purposes) and its number starts with 2 (two).
 - iii) Materials Management, Operations & Maintenance Management and Project Management and its number starts with 3 (three)
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10) De-coding of Standard number

a) First digit	:	Category of Standard
b) Second pair of digit	:	Committee no.
c) Third group of digits	:	Standard no.
d) Fourth pair of digit	:	Year of revision / prep.

LIST OF STANDARD COMMITTEES

Sl. No.	Committ. No.	TITLE OF STANDARDS COMMITTEE
1.	IPSS 1:1	<u>Standards Committee on Mechanical Drives</u>
2.	IPSS 1:2	<u>Standards Committee on Basic Standards & Hydraulic, Pneumatic & Lubricating Equipment</u>
3.	IPSS 1:3	<u>Standards Committee on Rotating Electrical Machinery</u>
4.	IPSS 1:4	<u>Standards Committee on Switchgears & Controlgears</u>
5.	IPSS 1:5	<u>Standards Committee on Pumps & Compressors</u>
6.	IPSS 1:6	<u>Standards Committee on Pipes, Fittings, Valves And Piping Layout</u>
7.	IPSS 1:7	<u>Standards Committee on Paints, Portable Maintenance Equipment And Miscellaneous Items</u>
8.	IPSS 1:8	<u>Standards Committee on Lifting And Hoisting Equipment</u>
9.	IPSS 1:9	<u>Standards Committee on Oils & Lubricants</u>
10.	IPSS 1:10	<u>Standards Committee on Electrical Components & Equipment</u>
11.	IPSS 1:11	<u>Standards Committee on Personnel Safety Appliances And Procedures</u>
12.	IPSS 2:1	<u>Standards Committee on Steel Plant Ladles And Rolling Stock</u>
13.	IPSS 2:2	<u>Standards Committee on EOT Cranes</u>
14.	IPSS 2:3	<u>Standards Committee on Conveyors</u>
15.	IPSS 2:7	<u>Standards Committee on Instrumentation and Automation</u>
16.	IPSS 2:8	<u>Standards Committee on Information and Communication Technology</u>
17.	IPSS 3:1	<u>Standards Committee on Materials Management</u>
18.	IPSS 3:2	<u>Standards Committee on Operation & Maintenance</u>
19.	IPSS 3:3	<u>Standards Committee on Integrated Projects Management</u>

STANDARDS COMMITTEE ON MECHANICAL DRIVES, IPSS 1:1

Sl .No.	IPSS No.	Title of the IPSS Standard
1.	1-01-001-18	Specification for Single Stage Under-driven Worm Reduction Gear Boxes (<i>With Amendment No.1</i>)
2.	1-01-002-18	Specification for Single Stage Over-driven Worm Reduction Gear Boxes (<i>With Amendment No.1</i>)
3.	1-01-003-18	Specification for Bush Pin Type Flexible Couplings (second revision)
4.	1-01-004-18	Specification for Tyre Type Flexible Couplings (Third revision)
5.	1-01-005-18	Specification for Gear Type Flexible Couplings (First Revision)
6.	1-01-006-18	Specification for Grid Type Resilient Couplings (Second revision)
7.	1-01-007-18	Code of Practice for Selection of Couplings (<i>Second Revision</i>)
8.	1-01-008-18	Specification for Fluid Coupling (<i>First Revision</i>)
9.	1-01-010-18	Specification for Fabric Bearings (First Revision)
10.	1-01-011-18	Specification for Rigid Couplings (<i>First Revision</i>)
11.	1-01-012-18	Specification for Single Stage Horizontal Helical Gear Boxes (<i>First Revision</i>)
12.	1-01-016-18	Specification for Drive Roller Chains (<i>First Revision</i>)
13.	1-01-017-18	Specification for Chain Wheels (<i>First Revision</i>)
14.	1-01-018-85	Specification for Holdback Devices (<i>Withdrawn in favour of IS-12101-1997</i>)
15.	1-01-021-18	Specification for Gear Type Flexible Couplings for standard dc motors (<i>First Revision</i>)
16.	1-01-023-18	Specification for Nylon Based Mechanical Components for Mechanical Drives (<i>First Revision</i>)

17.	1-01-024-18	Code of Practice for Selection of Gear Boxes (<i>First Revision</i>)
18.	1-01-026-18	Specification for Plummer Blocks (<i>First Revision</i>)
19.	1-01-027-18	Selection of Shaft Diameters (<i>First Revision</i>)
20.	1-01-028-18	Journal Bearing of General Use in Steel Plant Equipment (First Revision)
21.	1-01-034-18	Specification for Flexible Snap Wrap Jaw Couplings (<i>First Revision</i>)
22.	1-01-035-18	Format for Procurement of Gear Boxes (<i>First Revision</i>)
22.	1-02-019-18	Selection of Fits for Anti-frictional Bearings- General Purpose (<i>First Revision</i>)- Shifted from IPSS 1:2

STANDARDS COMMITTEE ON BASIC STANDARDS & HYDRAULIC, PNEUMATIC & LUBRICATING EQUIPMENT, IPSS 1:2

Sl. No.	IPSS No.	Title of the IPSS Standard
1.	1-02-002-18	Specification for Remote Control Hydraulic Jacks
2.	1-02-003-84	Specification for Wire Braided High Pressure Hydraulic Hose (first revision) (WITH DRAWN)
3.	1-02-004-18	Specification for Two Stage Oil Hydraulic Hand Pumps used for Remote Control Hydraulic Jacks
4.	1-02-005-85	Specification for Ferrule Type Male Stud Couplings and Male Stud Coupling Bodies for Hydraulic Lines
5.	1-02-006-85	Specification for Ferrule and Metric Coupling Nuts for Male Stud Couplings
6.	1-02-007-18	Specification for Assembly of permanently attached Hose End Fittings for Hydraulic Lines
7.	1-02-008-18	Specification for Coupling Nut for Male Stud Coupling Body of permanently attached Hose End Fittings
8.	1-02-009-18	Specification for Air Pressure Regulators
9.	1-02-010-18	Specification for Integral Hydraulic Lifting Jacks
10.	1-02-011-18	Specification for Grease Transfer Pumps
11.	1-02-012-18	Specification for Oil Transfer Pumps
12.	1-02-013-18	Specification for Rotary Shaft Oil Seal Units
13.	1-02-015-18	Specification for Airline Lubricator
14.	1-02-016-18	Specification for Set of V-Packing for hydraulic machines
15.	1-02-017- 85	High Pressure Hydraulic Hose Assemblies with permanently attached end fittings (MERGED WITH IPSS 1-02-007-18)

16.	1-02-018-84	Specification for Air Line Filters
17.	1-02-019-84	Selection of Fits for Mounting Antifriction Bearings (General Guidelines) Shifted to IPSS 1:1 (Mechanical Comm.)
18.	1-02-020-84	Basic Parameters for Standardization of Steel Plant Equipment
19.	1-02-021-85	Specification for Water Hoses of rubber with Braided Textile Reinforcement exposed to high temperature conditions (Shifted to IPSS 1:6 (Pumps, Fittings, Valves and Piping Layout.
20.	1-02-022-84	Specification for Hose Nipples (Shifted to IPSS 1:6 (Pumps, Fittings, Valves and Piping Layout.
21.	1-02-023-18	Specification for Oil Resistant Nitrile Rubber Sheets & Gaskets (First Revision)
22.	1-02-024-18	Specification for Oil Resistant Neoperene (Chloroprene) Rubber Sheets, Gaskets etc.
23.	1-02-025-84	High Pressure Hydraulic Hose Assemblies with permanently attached end fittings, female 37 deg Flared Swivel (both sides) type- Merged with IPSS 1-02-007-18
24.	1-02-026-18	Specification for Air Cylinders
25.	1-02-027-85	Selection of shaft diameters –Shifted to IPSS 1:1 (Mechanical Committee)
26.	1-02-028-18	Journal Bearings for general use in Steel Plant Equipment Shifted to IPSS 1:1 (Mechanical Committee)
27.	1-02-031-85	Specification for 37 Deg Male Flared Bodies-Withdrawn
28.	1-02-033-85	Specification for Precision Steel Tubes - Shifted to IPSS 1:6
29.	1-02-035-86	Tapers - Dimensions and Tolerances
30.	1-02-040-86	Guide for Application and Installation of Oil Hydraulic System In Steel Plants
31.	1-02-048-18	Specification for Pneumatically Operated Sump Pump (First Revision)
32.	1-02-050-18	Specification for Heavy Duty Pipe Cramps Assembly for high pressure hydraulic pipelines (First Revision)

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| 33. | 1-02-054-18 | Specification for Pneumatic Sump Pump - Ejector Type (First Revision) |
| 34. | 1-02-056-18 | Specification for Strainer Elements for Oil Hydraulic Systems (First Revision) |
| 35. | 1-02-061-18 | Button Head Grease Nipples (First Revision) |
| 36. | 1-02-062-18 | Specification for Grease Pump for Lubrication System (First Revision) |
| 36. | 1-05-018-18 | Specification for Gear Pump for Lubrication System (Shifted from IPSS 1:5) (First Revision) |

STANDARDS COMMITTEE ON ROTATING ELECTRICAL MACHINERY, IPSS 1:3

Sl.No.	IPSS No.	Title of the Standard
1.	1-03-001-14	Specification for General purpose Squirrel Cage Induction Motors (<i>fifth revision</i>)
2.	1-03-002-08	Specification for dc mill/crane duty motors (800 series) (<i>fourth revision</i>)
3.	1-03-003-08	Specification for ac mill/crane duty Slipring Induction Motors (<i>third revision</i>)
4.	1-03-004-14	Specification for ac crane (Hoist & Winches) duty Squirrel Cage Induction Motors (<i>fourth revision</i>)
5.	1-03-005-03	Specification for dc crane/mill duty motors (600 series) (<i>first revision</i>)
6.	1-03-007-14	Specification for ac Roller Table Motors (<i>second revision</i>)
7.	1-03-008-03	Specification for Motorized Gear Units (MGUs) (<i>first revision</i>)
8.	1-03-011-92	Specification for ac cabin fans for EOT cranes (<i>first revision</i>)
9.	1-03-012-92	Specification for dc cabin fans for EOT cranes (<i>first revision</i>)
10.	1-03-016-14	Standard information for enquiry and order for LT Induction Motors (<i>fourth revision</i>)
11.	1-03-018-14	General purpose HT Squirrel Cage Induction Motors (<i>second revision</i>)
12.	1-03-019-06	Code of Practice for repair of 3 phase LT Squirrel Cage Induction Motors (<i>first revision</i>)
13.	1-03-023-07	Code of Practice for repair of Squirrel Cage HT motors (6.6 kV) (<i>first revision</i>)
14.	1-03-024-14	Standard information for enquiry and order for HT Squirrel Cage Induction Motors (<i>third revision</i>)
15.	1-03-025-07	Guidelines for testing / inspection of rotating electrical

		machines (<i>First revision</i>)
16.	1-03-026-08	Guidelines for selection of Carbon Brushes (<i>second revision</i>)
17.	1-03-033-03	Code of Practice for overhauling of dc motors with anti-friction / sliding bearings
18.	1-03-034-03	Code of Practice for inspection and maintenance of large & dc motors
19.	1-03-035-04	Code of Practice for overhauling of squirrel cage induction motors with antifriction and sliding bearings
20.	1-03-036-04	Code of Practice for overhauling of slipring induction motors with antifriction /sliding bearings
21.	1-03-037-14	Standard information for enquiry and order for dc electric Motors (<i>second revision</i>)
22.	1-03-038-09	Code of Practice for Cleaning of Winding of Rotating Electrical Machines
23.	1-03-039-14	Specification for ac Motors for VFD application

STANDARDS COMMITTEE ON SWITCHGEARS & CONTROLGEARS, IPSS 1:4

SI. No.	IPSS No.	Title of the IPSS Standard
1.	1-04-001-03	Specification for Contactors for voltages not exceeding 1000 V ac or 1500 V dc (<i>second revision</i>)
2.	1-04-002-03	Specification for Manually Operated Control Selection Switches for voltages not exceeding 1000 V ac or 1500 V dc (<i>first revision</i>)
3.	1-04-003-03	Specification for Mechanically Operated Limit Switches for control circuit for voltages upto and including 1000 V ac or 1200 V dc (<i>first revision</i>)
4.	1-04-004-11	Specification for Moulded Case Circuit Breakers for voltages not exceeding 1000 V ac or 1200 V dc (<i>first revision</i>)
5.	1-04-008-11	Specification for Magnetic Over-current Relays for ac and Motor protection up to 650 V (<i>first revision</i>)
6.	1-04-009-99	Specification for Motorized Time Delay Relays for ac and dc Application (<i>first revision</i>)
7.	1-04-010-11	Specification for dc flux decay type timer relays (<i>first revision</i>)
8.	1-04-011-11	Specification for Pneumatic Time Delay Relays for ac and dc application (<i>second revision</i>)
9.	1-04-012-12	Guide for Selection of oil-filled power/distribution transformers for steel plant duty (<i>first revision</i>)
10.	1-04-013-02	Specification for Control Transformers (<i>first revision</i>)
11.	1-04-014-03	Specification for Bi-metallic Overload Relays for ac and dc motor protection (<i>first revision</i>)
12.	1-04-018-06	Specification for Belt Speed Relays and Transducers (<i>first revision</i>)
13.	1-04-019-02	Specification for Fuse Combination Units for voltages not exceeding 1000V ac (<i>first revision</i>)

14. 1-04-023-99 Specification for Push Buttons (*first revision*)
15. 1-04-027-11 Specification for Magnetic Clutch (*first revision*)
16. 1-04-028-11 Specification for Arc Extinguishing Chamber for ac and dc contactors (*first revision*)
17. 1-04-029-15 General Technical Specification for LV Switchgear (*first revision*)
18. 1-04-030-15 General Technical Specification for Indoor High Voltage Switchgear (*first revision*)
19. 1-04-035-08 Code of practice for testing & commissioning of transformers and related switchgears
20. 1-04-036-08 Specification of geared type limit switches
21. 1-04-037-99 Specification for Magnet Panels for cranes (*first revision*)
22. 1-04-038-02 Specification for Controlling and Signaling Factory Built Assemblies (*first revision*)
23. 1-04-039-03 Specification for Single Motor Control Units for Voltages not Exceeding 1000 V ac (*first revision*)
24. 1-04-040-99 Specification for Motor Control Centres (MCCs) (*first revision*)
25. 1-04-041-03 Specification for General requirements for Control for cranes (*first revision*)
26. 1-04-042-03 Specification for Particular requirements for Control Panels for ac cranes (*first revision*)
27. 1-04-043-03 Particular requirements of Control Panels for dc cranes (*first revision*)
28. 1-04-047-08 Code of practice for maintenance of oil-power transformers
29. 1-04-050-08 Code of practice for maintenance of HT circuit breakers
30. 1-04-052-12 Specification for Motor Protection of ac Electronic / Micro Processor based Relays
31. 1-10-005-81 [Specification for Master Controller \(Shifted from IPSS 1:10\)](#)

STANDARDS COMMITTEE ON PUMPS & COMPRESSORS, IPSS 1:5

Sl.No.	IPSS No.	Title of the Standard
1.	1-05-002-19	Specification for Single Stage Horizontal Split Casing Centrifugal Pumps for raw water (<i>first revision</i>)
2.	1-05-003-19	Specification for Single Stage Horizontal End Suction Centrifugal Pumps for raw water(<i>first revision</i>)
3.	1-05-004-19	Specification for Multi-stage horizontal centrifugal pumps for raw water(<i>first revision</i>)
4.	1-05-005-19	Specification for Vertical Spindle Centrifugal Pumps for raw water(<i>first revision</i>)
5.	1-05-006-19	Specification for Single Stage Horizontal Split Casing Centrifugal Pumps for emulsion, slurry and scale bearing water(<i>first revision</i>)
6.	1-05-007-19	Specification for Single Stage End Suction Centrifugal Pumps for emulsion, slurry and scale bearing water(<i>first revision</i>)
7.	1-05-008-19	Specification for Vertical Spindle Centrifugal Pumps for emulsion, slurry and scale bearing water(<i>first revision</i>)
8.	1-05-010-19	Specification for Sump Pump Unit(<i>first revision</i>)
9.	1-05-011-19	Specification for Self-priming Sulphuric Acid Pumps (horizontal centrifugal) (<i>first revision</i>)
10.	1-05-012-19	Specification for Centrifugal Air Compressors(<i>first revision</i>)
11.	1-05-013-83	Specification for Centrifugal Oxygen Compressors – (Withdrawn)
12.	1-05-018-19	Gear Pumps for Lubrication System (<i>first revision</i>)
13.	1-05-020-19	Specification for Self priming Single stage end suction pump for coaltar. (<i>first revision</i>)
14.	1-05-021-19	Specification for Non-clog Type Submersible Pump Unit(<i>first revision</i>)

STANDARDS COMMITTEE ON PIPES, FITTINGS, VALVES AND PIPING LAYOUT, IPSS 1:6

SI.No.	IPSS No.	Title of the Standard
1.	1-06-001-03	Specification for Foot Valves (<i>second revision</i>)
2.	1-06-003-03	Specification for Centrifugally Cast (spun) Iron Pipes for water and sewage (<i>second revision</i>)
3.	1-06-004-01	Specification for Cast Iron Fittings for Pressure Pipes for Water & Sewage (<i>first revision</i>)
4.	1-06-008-08	Specification for Cast Steel Gate Valves (with rising spindle) (<i>second revision</i>)
5.	1-06-010-02	Specification for Cast Steel Non-return Valves (swing & lift check type with flanged ends) (<i>first revision</i>)
6.	1-06-012-02	Specification of Butterfly Valves for gas and air application (<i>second revision</i>)
7.	1-06-013-97	Specification for Welded Steel Pipes for general use (<i>first revision</i>)
8.	1-06-014-02	Code of Practice for selection and laying of moist fuel gas lines (<i>second revision</i>)
9.	1-06-015-02	Code of Practice for thermal insulation of hot pipe lines and accessories (<i>second revision</i>)
10.	1-06-020-03	Specification for Fabricated Pipe Fittings (<i>first revision</i>)
11.	1-06-021-86	Specification for Steam Trap (<i>Reaffirmed in 1994</i>)
12.	1-06-023-03	Specification for Cast Iron Gate Valve (for low pressure fuel gas lines) (<i>first revision</i>)
13.	1-06-025-01	Specification for Diaphragm Valves for corrosive and erosive fluids (<i>first revision</i>)
14.	1-06-031-17	Code of Practice for thermal insulation of cold services (<i>Second revision</i>)

15.	1-06-033-97	Code of Practice for acetylene gas pipelines
16.	1-06-034-17	Code of Practice for oxygen gas pipeline (<i>first revision</i>)
17.	1-06-035-17	Code of Practice for laying of underground pipelines for water services (<i>with Amendment 1</i>) (<i>first revision</i>)
18.	1-06-036-99	Specification for Metallic Bellows
19.	1-06-037-17	Procedure for installation of Steam Traps (<i>first revision</i>)
20.	1-06-038-17	Inspection of utility pipelines (<i>first revision</i>)
21.	1-06-039-02	Specification for Steam Trap and guideline for its selection
22.	1-06-040-01	Specification for Selection and installation of basket filter for industrial water
23.	1-06-041-08	Specification for gland compensator
24.	1-06-042-08	Code of practice for the installation and maintenance of industrial valves
25.	1-06-044-08	Code of practice for protocol for shut down work on fuel gas lines
26.	1-06-045-08	Code of practice for protocol for shut down and repair work on Oxygen, Nitrogen, Argon and Acetylene distribution pipeline
27.	1-06-046-09	Procedure for maintenance practices for steel pipes in water services
28.	1-06-047-09	Specification for vacuum insulated (super insulation) Cryogenic pipelines
29.	1-06-048-09	Code of practice for installation and commissioning of Propane/ LPG Pipelines.

STANDARDS COMMITTEE ON PAINTS, PORTABLE MAINTENANCE EQUIPMENT AND MISCELLANEOUS ITEMS, IPSS 1:7

Sl.No.	IPSS No.	Title of the Standard
1.	1-07-001-95	Specification for Arc Welding Transformer (<i>third revision</i>)
2.	1-07-004-92	Specification for Hand Operated Chain Pulley Blocks (<i>first revision</i>)
3.	1-07-005-14	Specification for Single, Double & Triple Sheave Pulley Blocks for fibre ropes (<i>Second revision</i>)
4.	1-07-007-77	Specification for Pneumatically Operated Drilling Machine (<i>Reaffirmed in 1992</i>)
5.	1-07-008-77	Specification for Pneumatically Operated Grinding Machine (<i>Reaffirmed in 2000</i>)
6.	1-07-009-77	Specification for Pneumatically Operated Chipping Hammer (<i>with Amendment No 1</i>)(<i>Reaffirmed in 2000</i>)
7.	1-07-010-77	Specification for Pneumatically Operated Riveting Hammer (<i>Reaffirmed in 2000</i>)
8.	1-07-011-77	Specification for Pneumatically Operated Demolition Tool (<i>Reaffirmed in 2000</i>)
9.	1-07-014-14	Specification for Single, Double and Triple Sheave Pulley Blocks for wire ropes (<i>first revision</i>)
10.	1-07-020-14	Specification for Single Wheel Barrow (<i>Reaffirmed in 2014</i>)
11.	1-07-021-92	Specification for Double Wheel Barrow (<i>first revision</i>) (<i>Reaffirmed in 2000</i>)
12.	1-07-022-14	Dee-Shackles (<i>Second revision</i>)
13.	1-07-024-89	Specification for Portable Electric Angle Grinder (<i>first revision</i>)
14.	1-07-025-14	Specification for Hand Trolley (<i>Second Revision</i>)

15.	1-07-026-97	Specification for Trailers (<i>second revision</i>)
16.	1-07-027-14	Specification for Pulling and Lifting Machines (<i>First Revision</i>)
17.	1-07-028-85	Specification for Hydraulic Pullers
18.	1-07-029-14	Specification for Clay Mixing Machines (<i>Reaffirmed in 2014</i>)
19.	1-07-030-85	Specification for Heat Resistant Anticorrosive Paint
20.	1-07-031-03	Specification for Bulldog Grips (<i>first revision</i>)
21.	1-07-032-86	Specification for Industrial Wire Cloth and Wire Mesh (<i>Reaffirmed in 2000</i>)
22.	1-07-033-86	Specification for Electric Winch
23.	1-07-037-14	Specification for Wire Rope Slings (<i>First Revision</i>)
24.	1-07-038-96	Specification for Alloy Steel Chain Slings (<i>first revision</i>)
25.	1-07-039-14	Specification for Belt punches for Conveyor Belt Fasteners – Plate Type (<i>Reaffirmed in 2014</i>)
26.	1-07-040-86	Specification for Sockets for Conveyor Belt Fasteners – (<i>Reaffirmed in 2000</i>)
27.	1-07-041-03	Specification for Mechanical Jack (<i>first revision</i>)
28.	1-07-045-14	Specification for Both Ends Spliced Wire Rope Sling (<i>First Revision</i>)
29.	1-07-049-98	Code of Practice for safe use of Arc Welding Equipment (<i>first revision</i>)
30.	1-07-051-03	Specification for Welding Cable Connector (<i>first revision</i>)
31.	1-07-052-95	Specification for Electrode Holders (<i>first revision</i>)
32.	1-07-054-95	Specification for Turn-Buckle (<i>Reaffirmed in 2003</i>)
33.	1-07-055-00	Specification for Oxygen & Acetylene gas cylinder carrying trolley

34.	1-07-058-95	Specification for Weld-Flux Chipper and Scaling Hammer
35.	1-07-062-95	Specification for Thyristorized Arc Welding Transformer – Rectifier set
36.	1-07-063-97	Specification for Die-less Hydraulically Operated Crimping Tool
37.	1-07-064-03	Code of Practice for painting in Steel Plant
38.	1-02-043-87	Specification for Balls for Ball Mill
39.	3-01-010-98	Specification for HDPE bags
40.	3-01-012-98	Specification for HDPE sheets
41.	1-01-009-84	Specification for Belt Fasteners - Plate Type
42.	1-07-SP1-96	Guide on selection of welding electrodes (only for internal use by Member Organizations)

STANDARDS COMMITTEE ON LIFTING AND HOISTING EQUIPMENT, IPSS 1:8

Sl .No.	IPSS No.	Title of the Standard
1.	1-08-001-18	Specification for Crane Wheels (<i>Third Revision</i>)
2.	1-08-002-18	Specification for Sheaves Assembly for EOT cranes (<i>Third Revision</i>)
3.	1-08-003-18	Specification for Wire Ropes for cranes (<i>Fifth Rrevision</i>)
4.	1-08-004-94	Specification for Forged Crane Hooks (<i>Second Revision</i>)
5.	1-08-005-86	Specification for Brakes for cranes (<i>first revision</i>)
6.	1-08-006-18	Specification for Festoon Cable Trolley (<i>Second revision</i>)
7.	1-08-007-18	Specification for Hook Blocks(<i>Second revision</i>)
8.	1-08-008-18	Specification for Forged Ramshorn Hooks (<i>First revision</i>)
9.	1-08-009-18	Specification for Laminated Ladle Hooks (<i>First revision</i>)
10.	1-08-010-18	Specification for Crane Wheel Assembly (Live Axle Type) (<i>Second revision</i>)
11.	1-08-011-18	Specification for Steel Wire Ropes for general use (<i>Third revision</i>)
12.	1-08-013-18	Specification for Thimbles (<i>Second revision</i>)
13.	1-08-014-18	Specification for Horizontal Gear Boxes for cranes (<i>Second revision</i>)
14.	1-08-017-18	Code of Practice for clamping of crane rails (<i>Second revision</i>)
15.	1-08-020-18	Acceptance norms for Crane gear boxes (<i>Third revision</i>)

STANDARDS COMMITTEE ON OILS & LUBRICANTS, IPSS 1:9

Sl. No.	IPSS No.	Title of the IPSS Standard
1.	1-09-001-97	Specification for Oil-film Bearing Oil (<i>third revision</i>)
2.	1-09-003-97	Specification for Industrial EP Gear Oil (<i>second revision</i>)
3.	1-09-005-20	Specification for Lithium EP Grease (<i>third revision</i>)
4.	1-09-006-11	Specification for Multipurpose Grease, Lithium base (<i>third revision</i>)
5.	1-09-008-20	Specification for High Temperature Grease (<i>fifth revision</i>)
6.	1-09-009-20	Specification for Calcium EP Grease (<i>fourth revision</i>)
7.	1-09-010-81	Specification for Steam Cylinder Oil
8.	1-09-012-11	Code of Practice for Selection of industrial lubricants for steel plant applications (<i>first revision</i>)
9.	1-09-020-20	Specification for Lithium complex grease (<i>first revision</i>)
10.	1-09-024-03	Code of Practice for usage of lubricants in steel plants
11.	1-09-025-03	Glossary of terms used in lubrication of oil & grease
11.	1-09-027-20	Specification of Calcium Sulfonate Complex Grease

STANDARDS COMMITTEE ON ELECTRICAL COMPONENTS & EQUIPMENT, IPSS 1:10

Sl. No.	IPSS No.	Title of the IPSS Standard
1.	1-10-001-11	Specification for Lifting Magnets (<i>first revision</i>)
2.	1-10-002-02	Specification for Resistance Boxes for power circuits (<i>first revision</i>)
3.	1-10-003-02	Specification for Electro-hydraulic Thruster (<i>first revision</i>)
4.	1-10-007-11	Specification for dc power packs for EOT cranes (<i>second revision</i>)
5.	1-10-008-08	General requirements for Current Collector Assembly (<i>second revision</i>)
6.	1-10-013-11	Specification for Protective Panels for dc cranes (<i>second revision</i>)
7.	1-10-017-11	Specification for Cable Reeling Drum (<i>first revision</i>)
8.	1-10-018-10	Hoist Motor Control Scheme employing thyristors for ac cranes (<i>second revision</i>)
9.	1-10-019-08	Code of Practice for End termination & jointing of cables by compression method and Specification for Die-less Hydraulically Operated Crimping Tool (<i>first revision</i>)
10.	1-10-020-15	Specification for Line Commutated Thyristor Convertors
11.	1-10-033-12	Specification for Compression type terminal ends and in-line connectors for conductors of insulated cables (<i>first revision</i>)
12.	1-10-034-12	Specification for Uninterruptible Power Systems (UPS)
13.	1-10-035-15	Variable frequency drive (VFD) up to 690 V Part 1 - General
14.	1-10-036-11	Specification for Static Excitation Convertors for Synchronous Motors (<i>first revision</i>)
15.	1-10-038-15	Thyristor convertors for armature & field of main drive motors
16.	1-10-039-08	Switch Mode Power Supply (SMPS)
17.	1-10-042-12	Particular requirements of roller table VFD drives
18.	1-10-044-12	ac Variable Frequency Drive for steel mill duty EOT cranes
19.	1-10-005-81	Specification of Master controller(<i>shifted to IPSS 1:4</i>)
20.	1-10-006-81	Specification of Drum and CAM Controller (with Amendment)

21.	1-10-040-15	Soft Starter for voltage upto 690 V AC
22	1-10-043-15	Particular requirements of roller table VFD drives
23	1-10-041-15	Variable Voltage and Variable Frequency Drive for Fans , Pumps and Compressors

STANDARDS COMMITTEE ON PERSONNEL SAFETY APPLIANCES AND PROCEDURES, IPSS 1:11

Sl.No.	IPSS No.	Title of the Standard
1.	1-11-001-98	Definitions of terms related to Safety (withdrawn in favour of International Standards)
2.	1-11-002-19	Safety procedures for oxygen, nitrogen, acetylene and fuel gases (<i>Second revision</i>)
3.	1-11-003-19	Safety procedure for roof sheet changing (<i>Second revision</i>)
4.	1-11-004-01	Specification for Dust Mask (<i>first revisio</i>)
5.	1-11-005-19	Safety Procedure for working at heights by contractor's workers (<i>Second Revision</i>)
6.	1-11-006-14	Guidelines for working in confined space (<i>First Revision</i>)
7.	1-11-007-14	Procedure for permit to work (<i>First Revision</i>)
8.	1-11-008-14	Safety Procedure for working at heights by regular employees of Plants / mines (<i>First Revision</i>)
9.	1-11-009-15	Code of Practice for Safe Handling of Liquid Metal (<i>First Revision</i>)
10.	1-11-010-14	Safety in Contract Works in mines (<i>First Revision</i>)
11.	1-11-011-14	Safety in Contract Works (<i>First Revision</i>)
12.	1-11-012-15	Safety Procedure for Wagon Tippling (<i>First Revision</i>)
13.	1-11-015-12	Safety guidelines for work on EOT Cranes.
14.	1-11-016-12	Safety Procedure for Lance Cutting – By Regular / Contractor's Workers
15.	1-11-017-12	Safety Procedure for Gas Cutting – By Regular / Contractor's Workers
16.	1-11-018-15	Safety Guidelines for operation of Manual/ Pendant Electrical Hoist
17.	1-11-020-15	Safety Procedure for Welding and Cutting

18	1-11-022-15	GUIDELINES FOR INSTALLATION AND USE OF BARRICADING
19	1-11-023-16	SAFETY STANDARD FOR TRANSPORTATION IN STEEL INDUSTRY
20	1-11-024-16	GUIDELINES FOR STORING MATERIALS IN SAFE MANNER AT OPEN YARDS AND OTHER STORAGE PLACES IN STEEL INDUSTRY
21	1-11-025-16	SAFETY STANDARD FOR EQUIPMENT AND MACHINERY GAURDING IN STEEL INDUSTRY
22	1-11-026-16	SAFETY STANDARD FOR OPERATION AND MAINTAINANCE OF CONVEYOR BELT IN STEEL INDUSTRY
23	1-11-027-16	GUIDELINES FOR SELECTION USAGE, INSPECTION AND REJECTION OF RIGGING EQUIPMENT(SLINGS AND ROPES)
24	1-11-029-17	SAFETY STANDARD FOR STORAGE HANDLING AND USE OF GAS CYLINDERS IN STEEL INDUSTRY.
25	1-11-030-17	SAFETY STANDARD FOR WORKING OF GAS LINES IN STEEL INDUSTRY.
26	1-11-031-17	SAFETY GUIDELINES FOR DEMOLITION OF BUILDING AND STRUCTURE IN STEEL INDUSTRY.
24	1-11-032-17	SAFETY STANDARD FOR HYDRAULIC SYSTEMS.
25	1-11-033-17	SAFETY STANDARD FOR LOCO OPERATION IN STEEL INDUSTRY.

STANDARDS COMMITTEE ON STEEL PLANT LADLES AND ROLLING STOCK, IPSS 2:1

Sl.No.	IPSS No.	Title of the IPSS Standard
1.	2-01-001-81	Design parameters for Steel Teeming Ladles
2.	2-01-002-83	Design parameters for Iron Ladles
3.	2-01-003-81	Design parameters for Slag Ladles and Slag Ladle Cars
4.	2-01-005-83	Design parameters for Ingot Mould Car
5.	2-01-006-83	Design parameters for Auto-Dump Car
6.	2-01-007-85	Design parameters for Charging Box Car

STANDARDS COMMITTEE ON EOT CRANES, IPSS 2:2

Sl.No.	IPSS No.	Title of the Standard
1.	2-02-001-18	Design parameters for EOT cranes (<i>with amendment 1</i>) (<i>first revision</i>)
2.	2-02-002-18	Acceptance norms for EOT cranes (<i>Second revision</i>)
3.	2-02-003-18	General Code of Practice for design of EOT cranes (mechanical aspects) (<i>Second revision</i>)
4.	2-02-004-18	General Code of Practice for design of EOT cranes (electrical aspects) (<i>first revision</i>)
5.	2-02-005-18	Code of Practice for selection of electric cables for use on EOT cranes (<i>Second revision</i>)
6.	2-02-006-18	Code of Practice for laying of electric cables on EOT cranes (<i>Second revision</i>)
7.	2-02-007-18	Guidelines for safety in EOT cranes (<i>first revision</i>)
8.	2-02-008-18	Tests & checks for acceptance of EOT cranes (<i>first revision</i>)
9.	2-02-009-18	Reference guide for EOT cranes (<i>first revision</i>)
10.	2-02-011-18	Guidelines for arrangement drawings and documents to be submitted to an EOT Crane customer for approval (<i>first revision</i>)
11.	2-02-012-18	General Code of Practice for Radio Remote Control System for EOT Cranes (<i>first revision</i>)
12.	2-02-013-18	Hand signals for EOT cranes (<i>first revision</i>)

STANDARDS COMMITTEE ON CONVEYORS, IPSS 2:3

Sl.No.	IPSS No.	Title of the IPSS Standard
1.	2-03-001-97	Design parameters for galleries and tunnels for belt conveyors in steel plants (<i>first revision</i>)
2.	2-03-002-95	General design features for junction houses for belt conveyors (<i>first revision</i>)
3.	2-03-003-97	Design considerations for provision of safety in belt conveyor system (<i>first revision</i>)
4.	2-03-004-85	Design parameters for idlers and idler sets
5.	2-03-005-97	Design considerations for lighting of junction houses, conveyor galleries and tunnels (<i>first revision</i>)
6.	2-03-006-95	Specification for Synthetic Fabric Reinforced Rubber Conveyor Belting – general purpose (<i>first revision</i>)
7.	2-03-007-88	Specification for pulleys for belt conveyors
8.	2-03-008-97	Design and fabrication parameters for technological structures for belt conveyors (<i>second revision</i>)
9.	2-03-009-97	Design parameters for maintenance facilities in conveyor System (<i>first revision</i>)
10.	2-03-010-97	Acceptance norms for belt conveyor system
11.	2-03-019-95	Design parameters for Shuttle Conveyor

STANDARDS COMMITTEE ON INSTRUMENTATION & AUTOMATION, IPSS 2:7

Sl.No.	IPSS No.	Title of the Standard
1.	2-07-001-87	Guide for tests for hardware and enclosures for different environments (<i>re-affirmed in 1992</i>)
2.	2-07-002-93	Guide for installation of systems (<i>first revision</i>) (<i>With drawn</i>)
3.	2-07-004-11	Specification for Control Valves and Actuators (<i>Third revision</i>)
4.	2-07-005-13	Specification for Electronic/Pneumatic Differential Pressure and Pressure Transmitters (<i>Third revision</i>)
5.	2-07-007-11	Guidelines for safety of instruments used in Steel Plants (<i>Second revision</i>)
6.	2-07-014-13	Guide for Instrumentation and Automation Laboratory (<i>Second revision</i>)
7.	2-07-015-15	Specification of Programmable Controller (<i>Third revision</i>)
8.	2-07-017-13	Specification for Infra-red Pyrometers (<i>first revision</i>)
9.	2-07-020-11	Specification for Nucleonic Thickness Gauge (<i>Third revision</i>)
10.	2-07-024-97	Specification for Position Switches & Proximity Switches (<i>Second revision</i>)
11.	2-07-026-11	Specification for Measuring System for speed of rotation (<i>Second revision</i>)
12.	2-07-027-11	Specification for Vibration Measuring System for low speed Machines (<i>Second revision</i>)

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| 13. | 2-07-027A-97 | Specification for Vibration Measuring System for high speed Machines (<i>Second revision</i>) |
| 14. | 2-07-037-13 | Specification for Sensors for measurement of length of rolled materials (<i>First revision</i>) |
| 15. | 2-07-040-13 | Guidelines for laying of cables and impulse lines (<i>third revision</i>) |
| 16. | 2-07-041-88 | Specification for Process Operator's Console |
| 17. | 2-07-042-11 | Specification for Pressure Switches and Differential Pressure Switches (<i>Second revision</i>) |
| 18. | 2-07-043-13 | Specification for Resistance Temperature Detectors (<i>Second revision</i>) |
| 19. | 2-07-044-13 | Specification for Thermocouples (<i>first revision</i>) |
| 20. | 2-07-047-13 | Specification for Rotameters (<i>Second revision</i>) |
| 21. | 2-07-048-13 | Specification for Magnetic Flow Switches (<i>first revision</i>) |
| 22. | 2-07-049-13 | Specification for Temperature Switch (thermostat) (<i>first revision</i>) |
| 23. | 2-07-054-13 | Specification for Nucleonic Level Signalizer (<i>first revision</i>) |
| 24. | 2-07-077-13 | Measurement of moisture content (<i>first revision</i>) |
| 25. | 2-07-078-13 | Specification for Electro-magnetic Flow Meters (<i>first revision</i>) |
| 26. | 2-07-081-13 | Specification for Capacitance Type Level Sensor (<i>first revision</i>) |
| 27. | 2-07-087-13 | Specification for Electronic Weighing Systems (<i>first revision</i>) |
| 28. | 2-07-089-13 | Acceptance testing of business computers & process control computers (Reaffirmed in 2007) |
| 29. | 2-07-090-13 | Specification for Gas Analysis System |

30.	2-07-091-13	Specification for Online Dust Monitoring System
31.	2-07-092-13	Specification for Online Analyzer for SOx AND NOx
32.	2-07-093-13	Specification of online air type moisture meter
33.	2-07-095-14	Specification & Guide for Instrumentation Air System
34.	2-07-096-14	Specification for Fire Detection and Alarm System
35.	2-07-097-14	Format for Standard Maintenance Practices for Pneumatic Control Valves
36.	2-07-098-14	Specification & Guide for Calibration System of Instrumentation
37.	2-07-099-14	Code of Practice for Gas Analyser with Sample Handling System
38	2-07-100-15	Code of Practice for Maintenance of Weigh Bridge
38.	2-07-101-15	Specification of Mechanical Flow Switches
39	2-07-102-15	Specification of Vertex Flow Meter
39.	2-07-103-15	Specification for Smart, Pressure & Differential Pressure Transmitter
40	2-07-104-15	Specification of Coriolis type Mass Flow Meter
41	2-07-105-15	Code of Practice for Shutoff Valve Maintenance

**STANDARDS COMMITTEE ON INFORMATION TECHNOLOGY AND
COMMUNICATION, IPSS 2:8**

Sl.No.	IPSS No.	Title of the IPSS Standard
1.	2-08-02-13	Guidelines for PC Based Usage & Security
2.	2-08-03-13	Guidelines for Data Exchange & Remote Access Across Service
3.	2-08-04-13	Guidelines for Organizational E-mail Set up
4.	2-08-05-13	Guidelines for IT Infrastructure, distribution, maintenance & ownership policy.

STANDARDS COMMITTEE ON MATERIALS MANAGEMENT, IPSS 3:1

Sl.No.	IPSS No.	Title of the Standard
1.	3-01-001-18	Vendor Registration and Renewal (<i>Third revision</i>)
2.	3-01-002-18	Tender evaluation for stores and spares (<i>Second revision</i>)
3.	3-01-003-18	Guidelines for Vendor Rating and Vendor Development (<i>Second revision</i>)
4.	3-01-008-18	Format for Tender Enquiry Proposal (First Revision)
5.	3-01-010-98	Specification for HDPE Bags
6.	3-01-012-98	Specification for HDPE Sheets

STANDARDS COMMITTEE ON OPERATION & MAINTENANCE, IPSS 3:2

Sl.No.	IPSS No.	Title of the Standard
1.	3-02-001-18	Method of storage of semi-finished products like ingots, blooms, billets, slabs (<i>Second revision</i>)
2.	3-02-002-18	Method of reconditioning of Sinter Plant Pallets (<i>Third revision</i>)
3.	3-02-003-18	Code of Practice for mounting and dismounting of bearings (<i>Hindi version also available</i>) (<i>First Revision</i>)
4.	3-02-004-18	Code of Practice for storing, handling and reclamation of lubricants (<i>Second revision</i>)
5.	3-02-005-18	Method of reconditioning of Blast Furnace Bells (<i>First Revision</i>)
6.	3-02-006-18	Definition of terms relating to maintenance & equipment performance (<i>First Revision</i>)
7.	3-02-007-18	Method of packing, identification & storage of finished long products (<i>First Revision</i>)
8.	3-02-008-18	Method of periodic maintenance of WDS-6 locomotives in steel plant (<i>First Revision</i>)
9.	3-02-010-18	Method of storage of flat products (<i>First Revision</i>)
10.	3-02-011-18	Code of Practice for vibration monitoring (<i>First Revision</i>)
11.	3-02-012-18	Wear particle analysis procedure for establishing a system (<i>First Revision</i>)
12.	3-02-013-18	Method of permanent way inspection and maintenance practices of rail track (Part-A)
13.	3-02-013-18	Method of permanent way inspection and maintenance practices of rail track (Part-B) (<i>First Revision</i>)

14.	3-02-014-18	Code of Practice for revamping of EOT cranes (First Revision)
15.	3-02-015-18	Code of Practice for inspection of industrial building steel structures (First Revision)
16.	3-02-017-18	Reconditioning of Coke Crusher Roll (for Base Mix preparation)
17.	3-02-018-18	Reclamation of Roll Table Rollers
18.	3-02-019-18	Reconditioning of Hot Blast Valve of Blast Furnace
19.	3-02-021-18	Code of Practice for raw material spillage control

**STANDARDS COMMITTEE ON INTEGRATED PROJECTS MANAGEMENT,
IPSS 3:3**

Sl. No.	IPSS No.	Title of the IPSS Standard
1.	3-03-001-00	Registration of Contractors for Job/Works Contracts (Indigenous), with <i>Amendment 1</i>
