


INTER PLANT STANDARD IN STEEL INDUSTRY		
 IPSS	METHOD OF PACKING, IDENTIFICATION & STORAGE OF FINISHED LONG PRODUCTS	IPSS:3-02-007-18
	Corresponding IS does not exist	Formerly: IPSS:3-02-007-07

0. FOREWORD

- 0.1 Interplant standardization in steel industry was initiated under the aegis of the Indian Standards Institution (ISI) and the Steel Authority of India Limited (SAIL). This IPSS was prepared by the standard committee on Operation and Maintenance, IPSS 3:2 and firstly published in 1995. Lastly, this has been revised by the standard committee in July 2018 with the active participation of the representatives from major Indian steel plants and leading consultants.
- 0.2 This standard applies to the various long products from finishing mills like Merchant Mills, Section Mills and Rail & Structural Mills. Rails, Heavy Structural & Heavy sections are not covered in this standard as their weights vary from 100 Kg to 1.5 Tones as such they are not packed or bundled. In view of this, the coverage of the standard is limited to long products like TOR steel, TMT bars, Light & Medium Structural etc.

1. SCOPE

- 1.1 This Inter Plant Standard covers the method of storage of finished long products like rounds, TMT bars/ribbed bars, light medium structural, etc.
- 1.2 This also covers the method of packing, identification, colour coding, documentation etc. for adoption at shop floor and does not cover the documentations for dispatch.

2. PACKING

- 2.1 The products shall be packed as per the P-41 stipulated packing conditions by Railways.
- 2.2 Each bundle shall weigh up to 12 Tonnes & shall be securely knotted with two strand of wire of at least 3.2 mm thickness or with hard cold rolled steel straps of not less than 38 mm width and 0.9 mm thickness at a distance 0.5 m from each end and a minimum of 3 additional similar binding shall be provided in between each which shall be evenly spaced.
- 2.3 Each bundle shall be of one fixed length between 6 to 13 meters. The length shall have a tolerance as per relevant IS specification.
- 2.4 The assorted length (5.5 to 13.5 m) shall be packed in separate bundles.
- 2.5 Light & medium structural may be nested and packed.

3. IDENTIFICATION

3.1 Each bundle shall carry one identification metallic tag of steel or aluminium or non-metallic adhesive tags of minimum size 90 mm x 65 mm x 0.5 mm at one end of the bundle securely tied with the wire of size 1.5 mm to 6 mm diameter.

3.2 The tag shall generally contain the following information :

LOGO	NAME OF THE PLANT
	MATERIAL/QUALITY _____
	CAST NO. _____
	SECTION _____
	TONNAGE _____
	DATE _____ LENGTH _____

4. COLOUR CODE

4.1 To distinguish different grades of finished product and to have clear identification, colour code shall be applied as follows :

- i) Rejected/Defective materials : Red
- ii) Off grade material : White
- iii) Graded material : As per plant practice & grade declared by R&C Lab of the plant
- iv) For TMT bars following colour code shall be applied :
 - a) TMT - 415 : No colour
 - b) TMT - 415 Gr. M : Aluminium
 - c) TMT - 500 : Yellow
 - d) TMT - 500 Gr. M : Blue
 - e) TMT - 550 : Green

4.2 Colour code shall be applied at the cross section of bundle at one end.

4.3 Width of colour band shall be 10 cm using ready mixed paint of good quality.

5. STORAGE

- 5.1 Stack card shall be prepared while stacking bundles as shown in **Appendix-A**.
- 5.2 Bundles shall be stacked on the basis of material, section and length.
- 5.3 Bundles shall be stacked up to a suitable height depending upon the availability of space and shall be suitably inter spaced by cross stacking.
- 5.4 Each stack shall contain load of material as per availability of space.
- 5.5 The space between two adjacent stacks shall be 1-2 meter. Each stack shall be at least 2 meter away from Railway tracks in the shipping yard.
- 5.6 Each stack shall be identified by column no. marked suitably on column in shipping yard.

6. DOCUMENTATION

- 6.1 The bundles shall be stacked as per stacking plan with details in the stack card.
- 6.2 The stack card shall provide information regarding material, section, cast no., individual bundle no. & test status.
- 6.3 The stack card shall be regularly updated.

APPENDIX - A

(Clause 5.1)

(SAMPLE) STACK CARD
NAME OF THE MILL (DESPATCH)

SECTION : _____ BAY NO : _____
MATERIAL : _____ COLUMN NO : _____
QUALITY : _____
LENGTH : _____

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ROLLING	CAST NO.	BUNDLE	TEST	LOADING
_____		NO.	RESULT	_____
DATE SHIFT				DATE SHIFT

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SIGNATURE OF FINISHING SUPERVISOR