


INTERPLANT STANDARD - STEEL INDUSTRY		
	SPECIFICATION FOR SINGLE WHEEL BARROW <i>(First Revision)</i>	IPSS: 1-07-020-14
	BASED ON IS: 2431-1963	Formerly IPSS; 1-07-020-83

0. FOREWORD

0.1 This Inter Plant Standard, prepared by the Standards Committee on Paints and Portable Maintenance Equipment, IPSS 1:7, with the active participation of the representatives of all the steel plants, reputed consultants and established manufacturers of single wheelbarrow and was adopted in January, 1995 and revised in July, 2014.

0.2• Interplant Standards for steel industry primarily aim at achieving rationalization and unification of parts and assemblies used in steel plant equipment and accessories, and provide guidance in Indenting stores or equipment (or while placing orders for additional requirements) by individual steel plants. For exercising effective control on inventories, it is advisable to select a fewer number of sizes (or types) from among those mentioned in this standard, for the purpose of company standards of individual steel plants. It is not desirable to make deviations in technical requirements.

1. SCOPE

This Interplant Standard specifies the single wheelbarrow, 85-litre capacity and is generally based on IS: 2431-1963 'Specification for steel wheelbarrows (single-wheel type) '. For convenience of reference, the clause numbers of this Indian Standard for each requirement are given in Appendix A along with the number of the matching clauses of this standard.

2. MATERIAL

2.1 Body —Sheets conforming to IS: 1079-2009 'Specification for hot rolled carbon steer sheet and strip (third revision)'

2.2 Tubes — Medium conforming to IS: 1239 (Part I) - 2004 ' Specification for mild steel tubes, tubulars, and other wrought steel fittings : Part 1 Mild steel tubes (fourth revision) *.

2.3 Axle - - In conformity with 1S :2062 - 2011 ' Specification for structural steel (standard quality) (fifth revision)".

3. Design and Dimensions

3.1 The design and dimensions of the single wheelbarrow shall be as given in Fig. 1.

3.2 The body shall be welded to the chassis.

3.3 The top edge of the body shall be rolled over a steel rod of 8 mm diameter in order to form a bead and retain the rod.

3.4 The end of the pipes at the handles shall be plugged, welded and ground smooth to remove sharp edges.

3.5 The wheels shall be constructed of mild steel disk type fitted with solid rubber tyres. The wheels shall be of-size 300 mm diameter and 75 mm width, having a spindle of 25 mm diameter. The wheels shall be fitted with single row deep grooved ball bearing of 25 mm inner diameter, 52 mm outer diameter and 15 mm width, provided with dust seal and arrangement for lubrication.

3.6 The wheel shall withstand a maximum load of 300 kg without any permanent deformation.

3.7 The details of the axle shall be as shown in Fig. 1. •

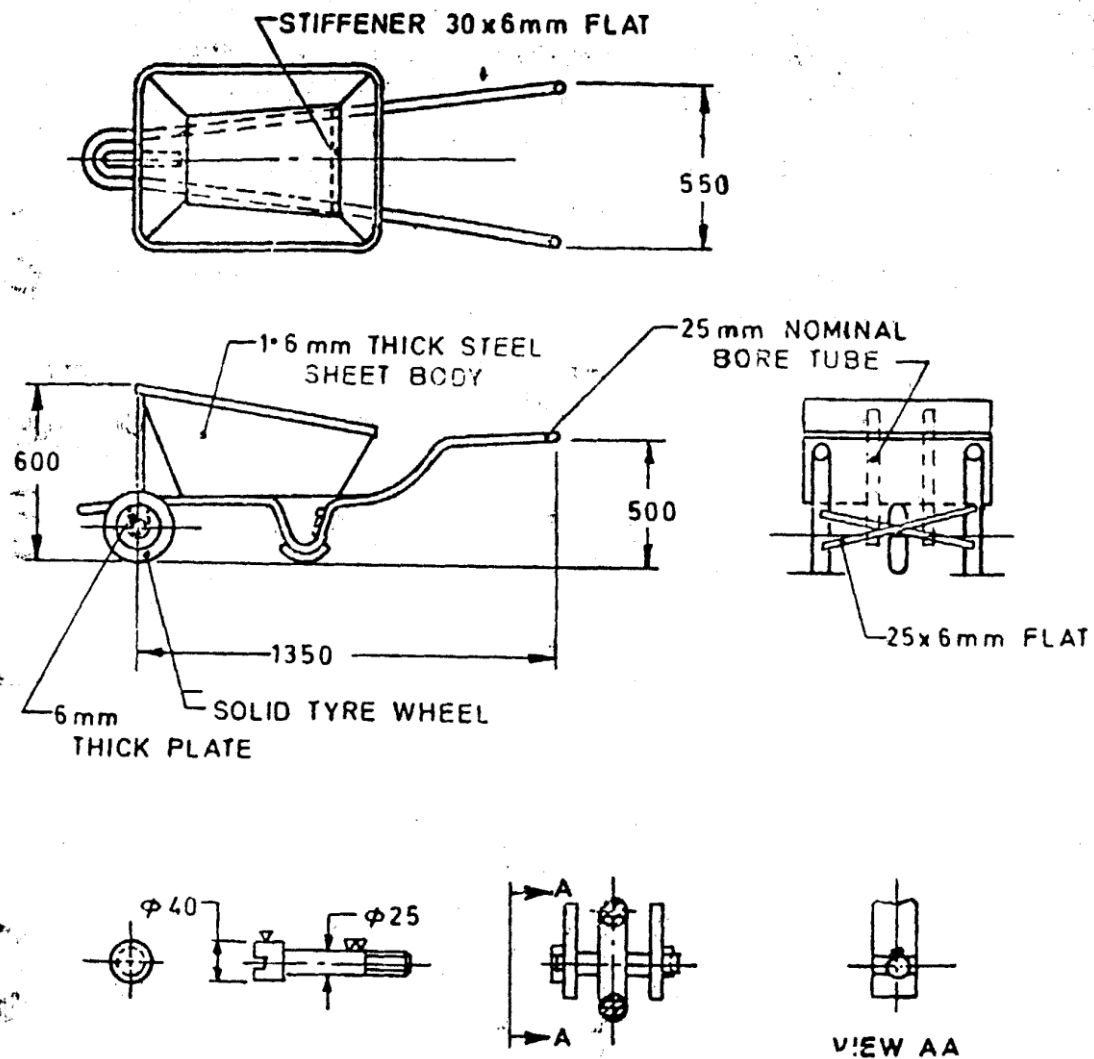
4. **Body** — Body shall be as described in 5 of IS : 2431 - 1963.

5. **Chassis** — Chassis shall be as described in 6 of IS : 2431 - 1963.

6. **Finish** – Immediately after fabrication the wheelbarrow shall be thoroughly cleaned and painted with two coats of black bituminous paint, conforming to IS:158-1981 'Specification for ready mixed paint, brushing, bituminous, black, lead free, acid alkali and heat resistant (third revision)'.

7. **Marking** – Each wheelbarrow shall be marked with the following:

- a) Name of the manufacturer or his trade-mark
- b) Capacity
- c) Unloaded weight of the wheelbarrow
- d) The year of manufacture, and
- e) Number of this standard.



ARRANGEMENT OF WHEEL AND AXLE

All dimensions in millimetres.

FIG. 1 SINGLE WHEELBARROW

**APPENDIX – A
(Clause 1)****COMPARATIVE STUDY OF****IPSS:1-07-020-14 `SPECIFICATION FOR SINGLE WHEELBARROW`
AND
IS:2431-1963 `SPECIFICATION FOR DOUBLE WHEEL BARROW` (SINGLE
WHEEL TYPE)'**

Requirements		Clause Reference In IPSS	Clause Reference In ISS
Requirement which are identical between IPSS and ISs	Load	3.6	4.2
	Body	4	5
	Chasis	5	6
	Finish	6	10.1
	Marking	7	11.1
Requirements selected for steel plant use out of several choices	NIL	-	-
Supplementary requirements not covering ISS	Material Design and Dimension	2 3	3 -
Deviation from ISs	Nil	-	-