INTERPLANT STANDARD - STEEL INDUSTRY		
IPSS	**SPECIFICATION FOR OXYGEN AND ACETYLENE GAS CYLINDER CARRYING TROLLEY** *Based on Indian Standard 8016:1996*	**IPSS:1-07-055-00**

0. FOREWORD

0.1 This Inter Plant Standard has been prepared by the Standards Committee on Paints & Portable Maintenance Equipment, IPSS 1:7, with the active participation of the representatives of all the steel plants and established manufacturers of trolley and was adopted in August 2000.

0.2 Inter Plant Standardization for steel industry primarily aims at achieving rationalisation and unification of parts and sub-assemblies used in steel plant equipment and accessories, and provides guidance in indenting stores for existing equipment (or while placing orders for additional requirements) by individual steel plants. For exercising effective control on the inventories, it is advisable to select a fewer number of sizes (or types) of products mentioned in this document, in the form of Company Standard of individual steel plants; it is not desirable to make deviation in technical requirements.

0.3 Oxygen and Acetylene Gas carrying trollies are used for transportation of Oxygen and Acetylene Cylinders in day to day working of departmental activities. These are mostly used by Central Maintenance Agencies like CR&M, C&HM Department, Engineering Shops and Construction Organization.

1. SCOPE

1.1 This standard specifies Cylinder Trolley for carrying Acetylene and Oxygene gas cylinder for gas cutting and welding operations.

2. MATERIAL

2.1 Body: The body shall be made of MS (fe 410WA) Angle 50x50x6 conforming to IS 2062:1999 `Steel for general structural purpose (fourth revision) (Amendment No.1)'.

2.2 Axle Pins : For axle pins, fe 410WA steel conforming to IS 2062:1999 shall be used. These axle pins shall be welded to body of trolley and both pins shall be joined by MS Angle 50x50x6.

2.3 Chasis : Chasis shall be made of 20 mm nominal bore (medium duty) conforming to IS 1239 (Part-1):1990. Steel tube and bent to accommodate cylinders on brackets.

2.4 Brackets : Brackets shall be made from one thick MS Plate, conforming to IS 2062:1999 shaped to support Oxygen and Acetylene Cylinders side by side. These brackets shall be welded with chasis pipe and body of trolley.

3. CONSTRUCTION FEATURES

3.1 The design and dimension of cylinder trolley shall be as shown in **Figure-I.**

3.2 The chasis pipe shall be bent in such a way that it can be utilised for trolley movement.

3.3 The bottom of cylinders shall be resting on lower portion of body angle. Body angles shall be bent to provide ease in loading cylinders on trolley.

3.4 The wheels shall be of solid cured on type rubber tyre wheel 300mm O.Dx75mm wide mounted on M.S. rims. The wheels shall be fitted with single row deep grooved sealed bearings 25mm bore x 52mm OD x 15mm wide (lubricated for life). Alternatively, solid wheel made of UHMWPE (Ultra High Molecular Weight Poly Ethelene) 300mm O.Dx75mm wide fitted with antifriction bearing may also be used.

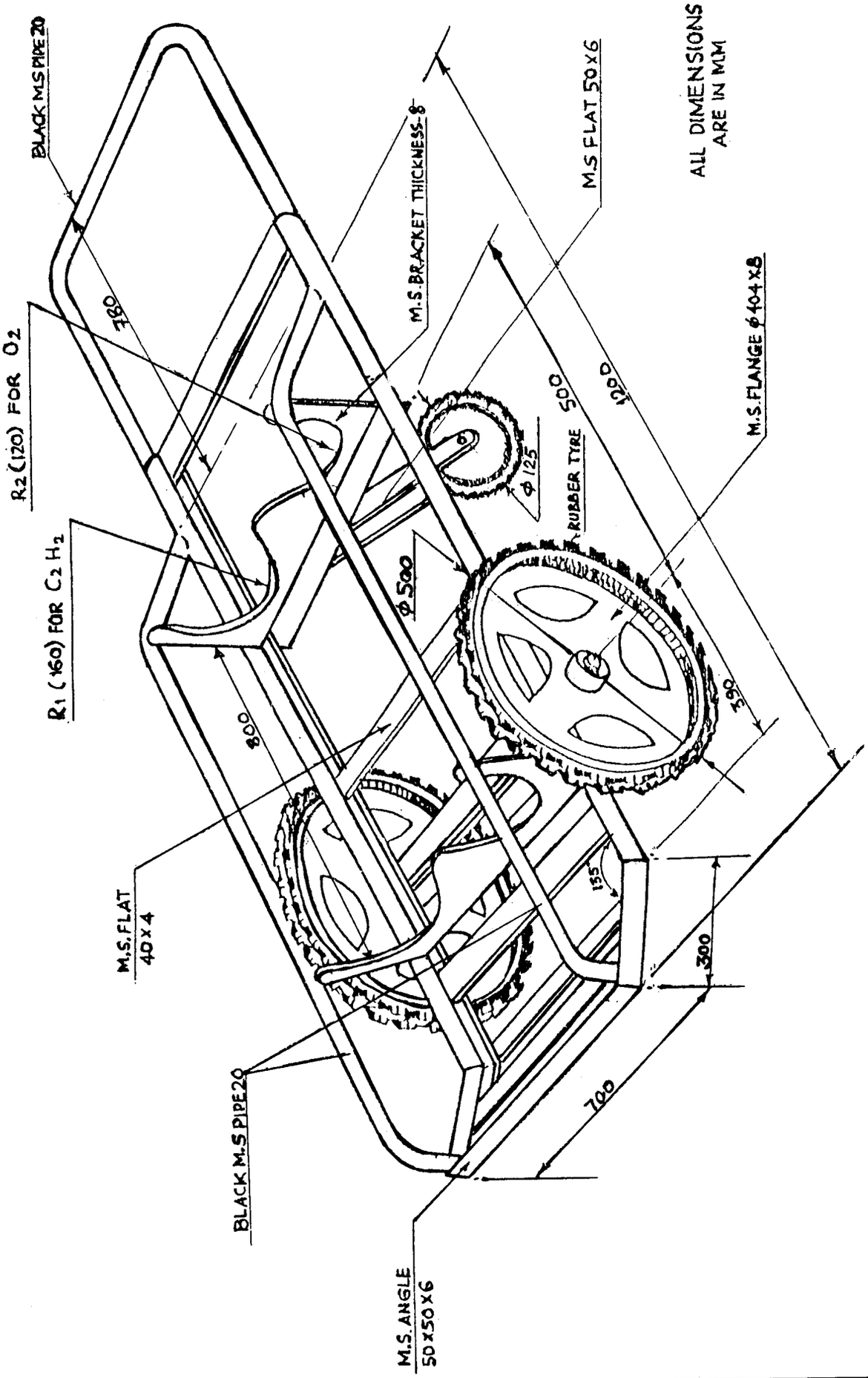
3.5 Third wheel of 125 mm dia shall be provided (with bush) to support cylinder trolley and movements on shop floor.

4. FINISH

4.1 Immediately after fabrication the cylinder trolley shall be thoroughly cleaned and painted with two coats of paint, conforming to IS 158:1981 (reaffirmed in 1988).

5. MARKING

5.1 Each trolley shall be marked with the Name of Manufacture or his Trade Mark, Capacity unloaded weight of the trolley, Year of Manufacture and IPSS No.



DOUBLE CYLINGER TROLLEY

(FIGURE – 1)