

ISO 9001:2008	Document No: TM/HM/6/350	Version No:0.0	Date effective: 27/07/2015
Specification of Cyl. Tube of Vibrator slide Cylinder of DGS Machine (Part No HZ09.GB.063.036.0075.001)			



**RESEARCH DESIGN AND STANDARD ORGANISATION
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Track Machine and Monitoring Directorate

**SPECIFICATION NO. TM/HM/6/350
(Provisional)**

**SPECIFICATION CYLINDER TUBE OF VIBRATOR SLIDE CYLINDER OF DGS MACHINE
(PART NO HZ09.GB.063.036.0075.001)**

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**SPECIFICATION NO. TM/HM/6/350
(Provisional)**

**SPECIFICATION OF CYL. TUBE OF ROLLER CLAMP LIFTING CYLINDER OF DGS MACHINE
(Part no HZ09.MB.063.0180)**

- 1.0 Scope:** This specification covers the dimensional, functional, and material requirements with testing criteria of the Cylinder Tube of Vibrator Slide Cylinder of DGS machine. This specification may be treated as provisional subject to modifications based on service performance.
- 2.0 Reference Document:** Following Document and specification have referred to in this specification. Full set of relevant drawings and the referred codes/specifications duly incorporating the updated corrections / amendments shall be available for reference at manufacturer's work.
- i) IS: 2062-1992: Specification of steel for general engineering Purpose.
 - ii) IS: 77- 1976: Linseed oil for paints specifications.
 - iii) Drawing No: RDSO/TM/08/14 –The Cylinder Tube of Vibrator Slide Cylinder of DGS machine
- 3.0 Functional Requirement:** The Cylinder Tube of Vibrator Slide Cylinder of DGS machine is provided to hold the rail with roller clamp with the help of fork head during stabilizing the track. Functional pressure in cylinder tube is 160 Kg / cm² hydraulic pressure. All surfaces meant for machining shall be finished as mentioned in the Drg. No. RDSO/TM/08/14
- 4.0 Dimensions and Tolerance:** Dimension and tolerance of the Cylinder Tube shall be as mentioned in drawing no. RDSO/TM/08/14.
- 5.0 Material:** Cylinder Tube shall be made of mild steel of grade A or B Conforming to IS: 2062-1992 having minimum tensile strength 410Mpa i.e.410 N/ mm² with minimum percentage elongation of 23.
- 6.0 Manufacturing Process:** The Cylinder Tube shall be made by fabrication and machining process of specified material.
- 7.0 Marking:** Month and year of manufacture and manufacturer's code/identification shall be engraved / embossed on the non-functional surface of the component.
- 8.0 Inspection and Acceptance Criteria:**
- i. Each Cylinder Tube offered by manufacturer shall be checked visually for their surface finish, freedom from defect like porosity, cracks, improper edges etc. Machined surface shall be checked by any suitable pneumatic or electronic equipment.
 - ii. The component found suitable after visual inspection shall be checked for their dimensional characteristics as per relevant drawing.

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- iii. Each cylinder complete assembly shall be tested for leakage on hydraulic test bench and no leakage shall be there in the cylinder body on 160 kg/cm² hydraulic pressure applied on complete assembly.

Any deviation in the test result shall be the cause of rejection.

9.0 Packing and Protection: All the nonfunctional surface of the Cylinder Tube shall be painted in two coats with golden yellow colour of general purpose synthetic enamel paint by spray painting and functional surface shall be protected with one coat of boiled linseed oil conforming to IS: 77-1976(Linseed oil for paint). The oil holes shall be protected with plastic cap. Each component shall be packed in cardboard case.

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