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| ISO 9001:2008 | Document No: TM/HM/6/399 | Version No:0.0 | Date effective: 24/11/17 |
| Specification of Wear Plate for Cutting Trough of FRM-80 (Part no.SU1702.21.1.27, SU1702.21.1.28 & SU1702.21.3.19) | | | |



**RESEARCH DESIGN AND STANDARD ORGANISATION
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**SPECIFICATION NO.TM/HM/6/399
SPECIFICATION OF WEAR PLATE FOR CUTTING TROUGH OF FRM-80
(Part no.SU1702.21.1.27, SU1702.21.1.28 & SU1702.21.3.19)**

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| DTM-III | EDTM | Page 1 of 3 |
| Prepared By: | Issued By: | |

SPECIFICATION NO.TM/HM/6/399

SPECIFICATION OF WEAR PLATE FOR CUTTING TROUGH OF FRM-80 (Part no.SU1702.21.1.27, SU1702.21.1.28 & SU1702.21.3.19)

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Wear plate for cutting trough of FRM-80 Machine. This specification may be treated as provisional subject to modifications based on service performance.
- 2.0 Reference documents:** Following documents have been referred to in this specification. Full sets of relevant drawings and the referred codes/ specifications, duly incorporating the up-dated corrections/amendments, shall be available for reference at manufacturer's works.
- i) IS:5517 - 1993 - Steel for Hardening and tempering - specification.
 - ii) IS:77-1976 - Linseed oil for paints - specification.
 - iii) RDSO Drg. No. RDSO/TM/20/17, RDSO/TM/21/17 & RDSO/TM/22/17 Wear Plate for Cutting Trough of FRM-80.
- 3.0 Functional requirement:** Wear Plate is used for deep screening of ballast. There are two troughs on either side of the machine in which the cutter chain moves and scoops the material for throwing it onto the screens. These troughs are lined by wear plates, which are bolted to the main body of the troughs to facilitate replacement once these get worn out.
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of Wear Plate for Cutting Trough of FRM-80 Machine shall be as mentioned in RDSO drawing no. RDSO/TM/20/17, RDSO/TM/21/17 & RDSO/TM/22/17.
- 5.0 Material:** The Wear Plate for Cutting Trough of FRM-80 Machine shall be made from Steel Grade 31Ni10Cr3Mo6 conforming to IS: 5517-1993 specification of Steel for Hardening and Tempering.
- 6.0 Manufacturing Process:** The Wear Plate for Cutting Trough of FRM-80 Machine shall be made by fabrication and machining from plate/sheet of specified material.
- 7.0 Heat Treatment:** Each component shall be heat treated by any suitable method to achieve hardness of 341 to 430 BHN.
- 8.0 Marking:** Month and year of manufacture and manufacturer's code / identification shall be engraved / embossed on the non-functioning surface of Wear Plate.
- 9.0 Inspection and Acceptance Criteria:**

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- i. Each component 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.
- iii. Supplier shall produce the certificate that the raw material used for manufacturing of the component conforms to material specified as mentioned in Para 5.0.
- iv. Minimum one no or 2 % sample of the Wear Plate randomly picked up out of each lot of consignment and shall be subjected to chemical composition test. The consignee shall test the material for chemical composition at his laboratory or get the material tested in a reputed laboratory having proper facilities for testing. Before sending the samples for testing, the same shall be duly sealed and secret coding shall be done.
- v. Any deviation in the test result shall be the cause of rejection.

10.0 Packing and Protection: Each component shall be protected with one coat of boil linseed oil conforming to IS: -77-1976 (linseed oil for paint) and shall be packed in card board case.

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| DTM-III | EDTM | Page 3 of 3 |
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