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MD35131 **Date:12.03.2026**

Sub: Issue of MDST 189 (Rev: NIL)

Please find enclosed a copy of mentioned RDSO specification **MDST 189** (Rev: NIL), for information and necessary action at your end.

Description: Schedule of Infra-Structural requirements for manufacturing & Testing of Fire Retardant Fibre Glass Wool with Single side Heat Resistant Aluminium Foil for Heat Insulation in IR Coaches.

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Dy.CME/FD

CQM-I,II CPLE CWE/Fur CMM/ HSQ CMM/TKJ CWE/Shell

Dy.CMM/LHB/HSQ Dy.CMM/G CMT Dy. CPLE-I,II Dy.CMM/Fur

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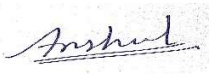
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Schedule of Infra-Structural requirements for manufacturing & Testing of Fire Retardant Fibre Glass Wool with Single side Heat Resistant Aluminium Foil for Heat Insulation in IR Coaches.

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1. Scope:-

This schedule is applicable for Fire Retardant Fibre Glass Wool with Single side Heat Resistant Aluminium Foil for Heat Insulation as per MDTS 207 for all IR Coaches. This document has been prepared with the objective of forming a standard infrastructure and Testing facilities for purchase of Glass Wool Insulation. For the purpose of ensuring quality and fulfilling warranty requirements unless otherwise specified, the latest version of the relevant specification MDTS-207 shall be taken as reference The vendors seeking approval shall comply with all the requirements mentioned below.

2. Abbreviation/Terminology:

S.No.	Abbreviation /Terminology	Expansion/Explanation
1	QAP	Quality Assurance Plan
2	RCF	Rail Coach Factory
3	KXH	Indian Railways station code for Kapurthala
4	LHB	Linke-Hofmann-Busch the transfer of technology partner for RCF/KXH.
5	OEM	Original Equipment Manufacturer

Table 1-Abbreviation /terminology used

3. MANUFACTURING FACILITIES (M&P):

Machinery and Equipments :

1. Slitting machine (at least 01 no.)
2. Compressors- 6 bar (at least 01 no.), 3 bar (at least 01 no.)
3. Compression packing m/c. (at least 01 no.)
4. Batch House-30 MT/D (at least 01 no.)
5. Melter-30 MT/D (at least 01 no.)
6. Forming machine (at least 01 no.)
7. Vacuum pump (at least 01 no.) (760 mm of Hg or more)
8. Process water filtration and recirculation system (at least 01 no.)
9. Resin & binder preparation equipment (at least 01 no.)
10. Effluent treatment Plant (at least 01 no.30 MT/D) if process of manufacturing & testing results in discharge (in case of complete recycling resulting in discharge may be exempted)
11. Facing Lamination machine (at least 01 no.)
12. Forklift - 3 tons (at least 1 no.)
13. Rolling up/stacking machine (at least 01 no.)

4. TESTING REQUIREMENTS:

1. Measuring scale (at least 01 no.)
2. Measuring tape (3m & 5m) (at least 01 no. each)
3. Vernier caliper (at least 01 no.)
4. PH meter (pH 0 to 14) (at least 01 no.)
5. Moister analyzer or thermostat fitted drying oven with a suitable vent (at least 01 no.)
6. Laboratory Oven (0 to 400 ºC) (at least 01 no.)
7. Humidity Chamber, (0 to 99% RH, 0 to 99 ºC) (at least 01 no.)
8. Hot Plate (0 to 250 ºC) (at least 01 no.)
9. Projection Microscope (0 to 1 mm) (at least 01 no.)
10. Sieve mesh-class A (BSS NO: 30, BSS NO:60 BSS NO:100)
11. Ignition Test Apparatus (0 to 800 ºC) (at least 01 no.)
12. Compression Testing machine (0 to 10000 N) (at least 01 no.)
13. Vibration Tester & Jolting Machine (0 to 6000 Minute/100Hrs) (at least 01 no.)
14. Water bath Thermostatic (0 to 100 ºC) (at least 01 no.)
15. Weighing balance (0 to 100 Kg, 0 to 3 Kg & 0 to 220 gms)
16. Muffle Furnace (0 to 1200 ºC) (at least 01 no.)

5. QUALITY CONTROL REQUIREMENTS:

a. ISO: 9001 certifications of OEM/Manufacturer and the product for which approval is sought should be covered in the scope of the certification for manufacture and supply.

b. The Quality manual of OEM for ISO: 9001-2000 at any stage should clearly indicate control over manufacturing and testing of the said railway product.

c. Automated traceability of the product from material incoming stage to Inspection at OEM Plant & Final Inspection of Finished product. The System should be such as to facilitate the identification of Intermediate products and finished products.

d. For identification the box of the accepted finished products shall be clearly marked with a capital letter having height of more than 50 mm either by printing, stamping or needle perforation. The marking should consist of the date of manufacture (month and year for example 12/04) of the finished products.

e. Ensure that the in-charge of the Quality Control Section is having a qualification of minimum bachelor's degree in the relevant field and shall have minimum of 3years experience. Alternatively he should be a diploma holder with minimum of 5 years' experience. He should be actively involved in day-to-day activities of quality control/stage inspection / compliance of QAP etc.

f. The firm must ensure that proper analysis is being done on monthly basis to study the rejections at various internal stages and it is documented.

g. Firm should ensure that latest version all the relevant specifications, IS standards are available with the firm.

h. firm should have 24x7 customer complaint registration & redressal mechanism.

i. Disposal system of rejected material.

j. The firm must ensure that proper analysis is being done on monthly basis to study the rejections at various internal stages and it needs to be documented.

k. The required test equipment should be calibrated on regular basis and valid calibration certificates with calibration record should also be maintained.