
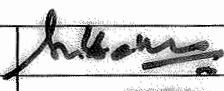




**GOVERNMENT OF INDIA
(Ministry of Railways)**

**SPECIFICATION FOR
ALUMINISED RAYON SUIT**

**MECHANICAL DRAWING OFFICE
RAIL WHEEL FACTORY
YELAHANKA, BANGALORE-560 064
INDIA**

**Issued by
SSE/D**

			
CME	CWE/W	Dy. CME/Mfg.	W/M/WP
APPROVED BY	REVIEWED BY	VERIFIED BY	PREPARED BY

SPECIFICATION FOR ALUMINISED RAYON SUIT

1.0 SCOPE

1.1 The specification covers the manufacture and supply of Aluminised PFR Rayon suit to Rail Wheel Factory, Yelahanka, Bangalore 560 106, Karnataka State, India.

2.0 GENERAL DESCRIPTION

2.1 Aluminised PFR Rayon suit as per RWF drawing No. RWF/MISC/ M-821 alt. b.

3.0 JOB REQUIREMENTS

3.1 These are required to be used for personal protection of the operator during wheel manufacturing process. The Aluminium Rayon suit shall be made out of aluminised PFR Rayon as per the drawing No. RWF/MISC/ M-821 alt. b and it shall be comfortable to wear and user friendly.

3.2 The Clothing/ Suit shall be with Cape, Sleeves and Bib. The Bib shall be detachable; having a length of 1000mm. Cape shall cover part of the back. Cape and Sleeves shall be attached to each other by a stitching arrangement to make the complete dress as per drawing No. RWF/MISC/ M-821 alt. b.

3.3 The suit fabric shall withstand a continuous radiation from an electric arc gouging operation with 2000 Amp. current and additional radiation from the work piece (hot wheel) weighing about 500kg at a temperature of 600°C. The material used shall not have any adverse effect on the user. The material shall be fireproof including stitching material.

3.4 The fabric material shall reflect 95% radiant heat and withstand moderate exposure to molten metal splash.


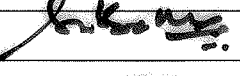
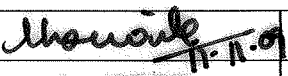

3.5 The flame retardancy of the fabric shall be permanent.

4.0 TECHNICAL REQUIREMENTS

Technical Specifications for Aluminised Fabric

Description : Aluminised PFR Rayon type # 1017
PFR645 Herringbone

Coating Face : Gentex Dual Mirror Aluminised Fabric

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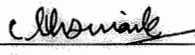

Characteristics	Test Method	Values in	
		FPS system	S.I. Unit
Weight per unit area	ASTM D3776	19 oz. /sq. yd.	645 gm/m ²
Thickness	ASTM D1777	0.035 in.	0.89 mm
Breaking Strength	ASTM D5034	350 lb	1557 N
Warp Fill		180 lb	801 N
Tear Strength	ASTM D1424	35 lb	156 N
Warp Fill		35 lb	156 N
Flame Resistance after flame for.....	ASTM D6413	2.0 seconds	2.0 seconds
Char length.....		3.0 in.	7.6 cm
Radiant Reflectivity	MIL-C-24929A	25 seconds	25 seconds

5.0 ACCEPTANCE CRITERIA

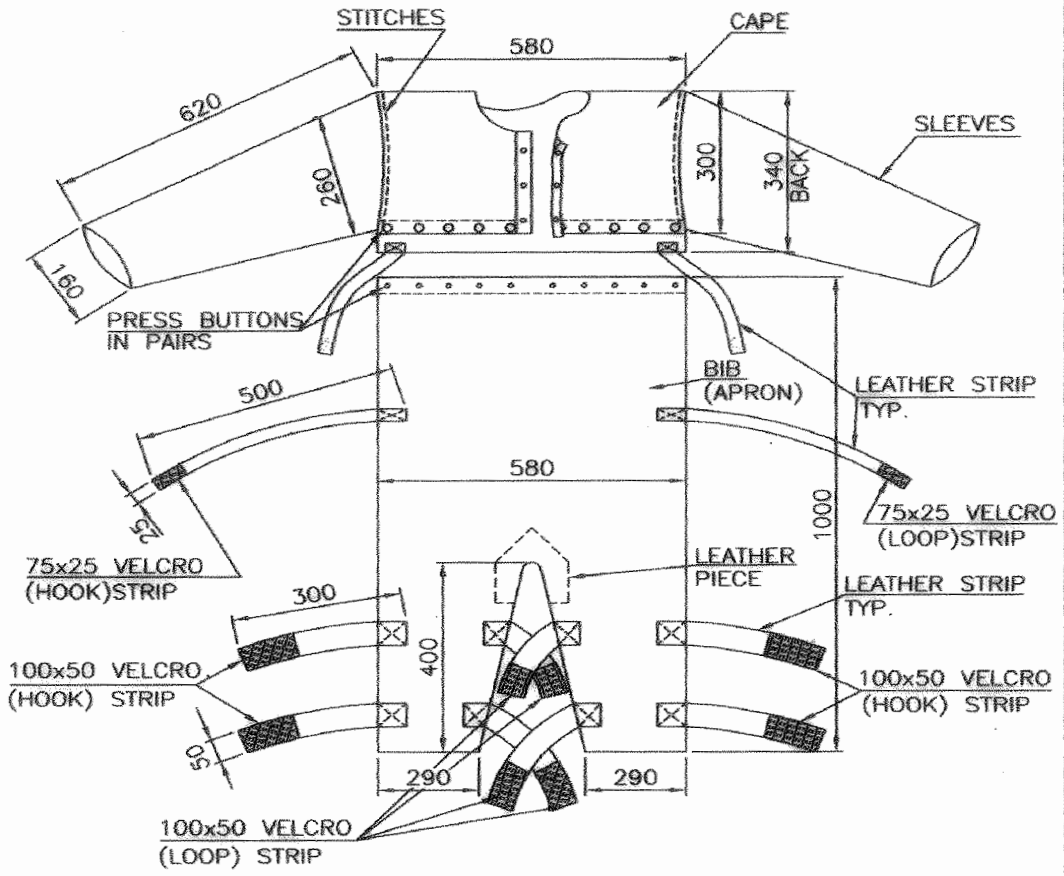
- 5.1 Manufacturer's Test Certificate (MTC) issued by an approved Govt. Agency / Lab confirming the characteristics mentioned in Clause 4.0 shall accompany each batch/lot of supply.
- 5.2 The suit shall remain in good condition for 35-40 heats minimum.
- 5.3 General workmanship and finish of the suit shall conform to the approved sample.

6.0 MARKING AND PACKING

- 6.1 The Aluminised Suit shall be stamped with the manufacturer's name and the year and month of supply.
- 6.2 The Aluminised Suit shall be supplied in sets with properly packed condition.

			
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DO NOT SCALE DRAWING	ALT	DESCRIPTION	JOB No.	APPROVED
	①	DRAWING IS REVISED AND REDRAWN		



MATL:- ALUMINISED PFR RAYON GENTEX #1017
 NOTE:- THIS DRAWING IS FOR GENERAL GUIDANCE ONLY
 MANUFACTURER/SUPPLIER SHOULD ENSURE
 REQUIRED FITMENT.

ALL DIMENSIONS ARE IN MILLIMETRES.
 PERMISSIBLE DEVIATION FOR UNTOLERANCED DIMENSIONS AS PER IS:2102 CLASS 'm'

<p><i>Mhavit</i> BY CME/MFG. APPROVED <i>[Signature]</i> REVIEWED <i>[Signature]</i> VERIFIED</p>	<p>INDIAN RAILWAYS</p>	REF DRG.	
	<p>ALUMINISED SAFETY SUIT FOR SPRUE WASH</p>	SCALE	AME/D <i>Mishra 09-11-09</i>
		SSE/D <i>SB 09/11/09</i>	
		CHD <i>Chang 09-11-09</i>	
<p>PROJECTION DRN SHAM 06.11.09</p>	<p>ALT ①</p>	DRG No. RWF/MISC/M-821	JOB No. 5361 SHEET 1 OF 1
<p>RAIL WHEEL FACTORY BANGALORE</p>			

<i>[Signature]</i>	<i>[Signature]</i>	<i>Mhavit</i> 11-11-09	<i>[Signature]</i>
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