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यूनिवर्सल वे साइड डीटीएमएफ कंट्रोल टेलीफोन
Universal Way Side DTMF Control Telephone



Schedule of Technical Requirements (STR)
for
यूनिवर्सल वे साइड डीटीएमएफ कंट्रोल टेलीफोन
Universal Way Side DTMF Control Telephone

स्पेसिफिकेशन संख्या आई.आर.एस./ टीसी /82/2005

Specification No. IRS/TC/82/2005

दूरसंचार निदेशालय
अनुसंधान अभिकल्प और मानक संगठन
रेल मंत्रालय मानकनगर, लखनऊ - 226011

TELECOMDIRECTORATE
RESEARCHDESIGNS ANDSTANDARDS ORGANISATION
MINISTRYOF RAILWAYS MANAK NAGAR, LUCKNOW - 226011

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DOCUMENT CONTROL SHEET

NAME	ORGANIZATION	FUNCTION	LEVEL
DIRECTOR/ TELECOM-I	RDSO	MEMBER	PREPARE
EXECUTIVE DIRECTOR/ TELECOM-I	RDSO	-	APPROVE

REVISIONS

VERSION	CHAPTER/ ANNEXURE	REVISION	EFFECTIVE MONTH/YEAR
STR FOR Universal Way Side DTMF Control Telephone	FIRST ISSUE TCQ0033	REVISION-1	01.12.2014
STR FOR Universal Way Side DTMF Control Telephone	SECOND ISSUE TCQ0037	REVISION-2	15.07.2021

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I. SCOPE:

The Schedule of Technical Requirement covers machinery & plant, testing & measuring equipments and quality assurance plan required for manufacturing of following items as per RDSO specifications

S. N.	Description of Item	Specification
1	Universal Way Side DTMF Control Telephone	IRS/TC/82/2005

Vendor shall also comply norms issued by RDSO time to time in this connection and other relevant laws of country.

The STR shall be applicable to all vendors applying for registration.

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II. ESSENTIAL MACHINERY AND PLANTS REQUIRED FOR PRODUCTION:

Note: Plant and machinery shall be of adequate capacity.

Sr. No.	Requirement of Machinery & Plants		Details of Machinery & Plants available with the Vendor						Calibration Details (As applicable)	
	Description	Qty. Required	Qty. Available	Model	Make	Machine No.	Year of Built	Range/ capacity	Date of Calibration	Due Date of Calibration
1.	Drilling Machine	1 No.								
2.	Grinding Machine	1 No.								
3.	Vices	1 No.								
4.	Electric Blower	1 No.								
5.	The PCB Assembly jigs (In-house/ Outsourced to ISO 9001 Certified vendor).	1 No.								
6.	Coil Winding Machine	1 No.								
7.	Baking Oven	1 No.								
8.	Vacuum impregnation plant	1 No.								
9.	Temperature controlled soldering iron	1 No.								
10.	Regulated power supply	1 No.								
11.	Test Jigs	1 No.								

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III. Essential Measuring/ Testing Equipments for Quality Control:

Sr. No.	Requirement of Essential Testing Equipments		Details of Testing & Measuring Equipments available with the Vendor						Calibration Details	
	Description	Qty. Required	Qty. Available	Model	Make	Machine No.	Year of Built	Range/ capacity	Date of Calibration	Due Date of Calibration
1.	High Voltage Tester 2KV/AC rms	1 No.								
2.	Megger or Insulation Resistance Tester 500V	1 No.								
3.	Digital Level Meter / Digital Multi Meter with Digital level meter facility	1 No.								
4.	Oscilloscope 10 MHz or better	1 No.								
5.	Digital Multi Meter 3 ^{1/2} digit	1 No.								
6.	Harmonic Distortion Meter	1 No.								
7.	Decade Step Attenuator or Variable Attenuator	1 No.								
8.	Dial pulse and DTMF tester	1 No.								
9.	Terminating Load Resistances of different values such as 100, 150, 200, 300, 470, 600 ohms & 1120 ohms etc. with tolerances of 1%	1 No.								
10.	LCR Bridges and Meters	1 No.								

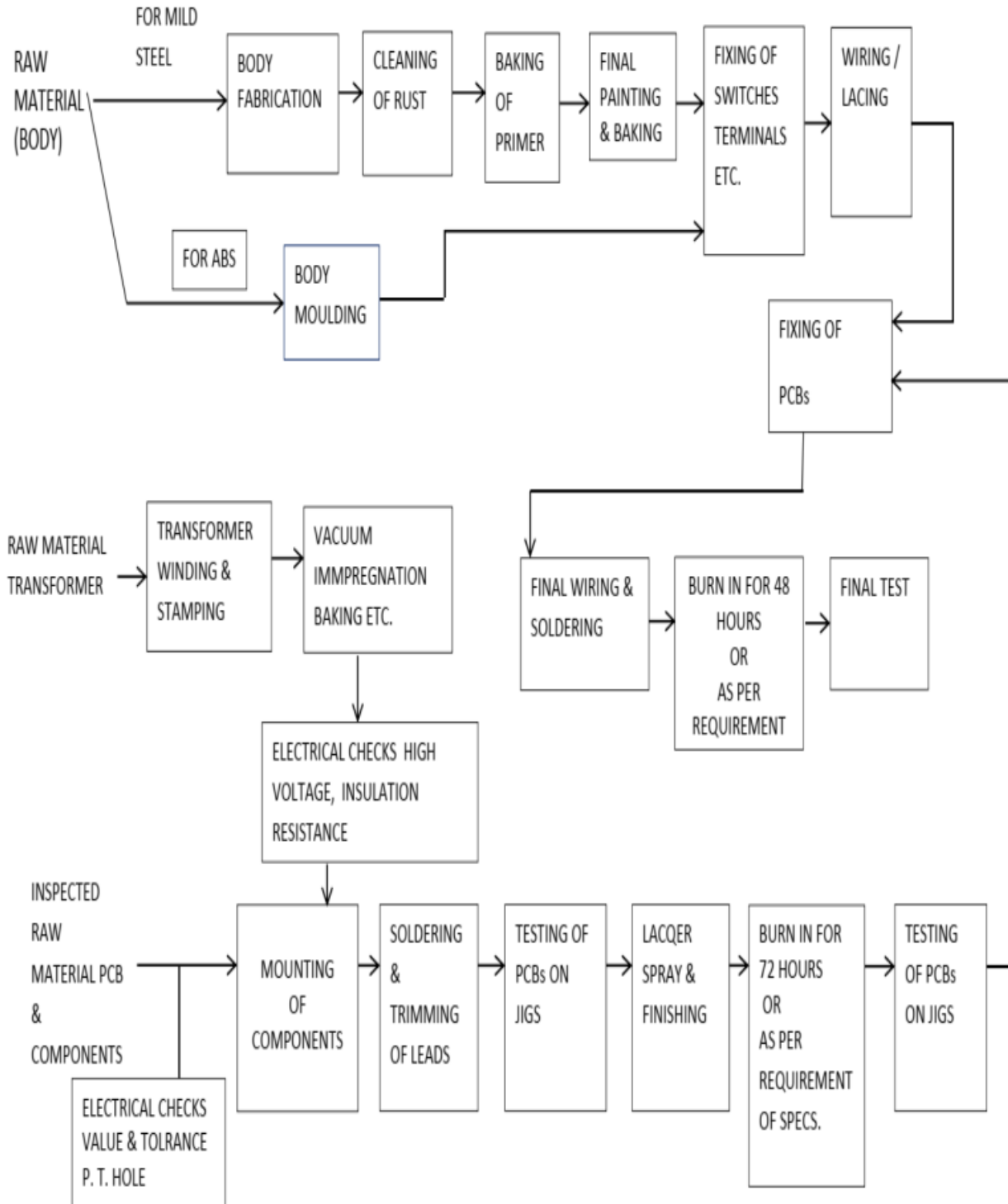
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11.	Digital IC Tester / IC testing jigs with Computer	1 No.								
12.	Frequency Counter	1 No.								
13.	Signal Generator or Audio Oscillator	1 No.								
14.	Vernier calipers, Scale, Micro meter, Filter Guages, Thermometer etc.	1 No.								

Note: All the measuring and testing equipment shall have valid calibration report from NABL accredited calibration laboratory/testing house.

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(IV) Process Flow Chart For Manufacturing of Telephone covered under this STR



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Note:

1. After every process necessary quality record shall be prepared and maintained.
2. After processes involving inspection/ testing etc., in case of any non-conformance, suitable corrective action shall be taken.
3. This process flow chart is only indicative and firms shall follow detailed process flow chart to ensure quality, showing corrective action in case of non-conformance at each stage.
4. Some of the processes can be outsourced.

UNDERTAKING OF THE FIRM

“I hereby give an undertaking that at any time after approval is accorded, some machinery is found deficient without intimation to RDSO, and then it will be presumed that machinery was not there since beginning and firm will be withdrawn immediately.”

Date:

Signature

Name in capitals & Designation

Place:

Stamp of the firm

Note:

1. Details of Machinery & Plants and Testing Equipments should be furnished by the vendor in complete as per format of STR. Vendor should also furnish the details of the ownership.
2. It should be mandatory to inform the RDSO through Fax (followed by confirmation copy through courier /speed post) as soon as any machinery is removed from the firm's premises (even for repair etc.) RDSO should be informed again, when is brought back and made operational.
