

ISO 9001:2008	Document No: SIQ 0210	Version No: 0.0	Date Effective: 01/01/2017
Document Title : Schedule of Technical Requirement (STR) for Vendor Approval for Manufacture and Supply of Choke Coil for Single Rail Track Circuits on 25 KV 50 Hz AC Electrified Section			



RESEARCH DESIGNS & STANDARDS ORGANIZATION

Manak Nagar, Lucknow – 226011

SIQ 0210

Schedule of Technical Requirement (STR)

For

Vendor Approval for Manufacture and Supply of
Choke Coil for Single Rail Track Circuits on 25 KV 50 Hz AC
Electrified Section

IRS: S 65-83

1.0 Amendment History:

S. No.	Amendment Date	Version	Reasons for Amendment
1.0	-	0.0	First issue. Approved by ED/Signal on 31.12.2015 on NP-17 of file No. STS/E/STR Vol-II

JE/SSE/Signal	ADE/Signal	Director/ Signal	Printed: 2016/01/04
Prepared By:	Checked By:	Issued By:	Page 1 of 3

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I. Essential machinery and plants required for production -

S. No.	Description
1	Coil winding machine
2	Vacuum Impregnation plant
3	Temperature controlled oven
4	Vertical drilling machine
5	Temperature controlled soldering station
6	Facilities for Spray painting/Powder coating (may be outsourced)
7	Crimping Machine

II. Essential testing equipment required for Quality Assurance –

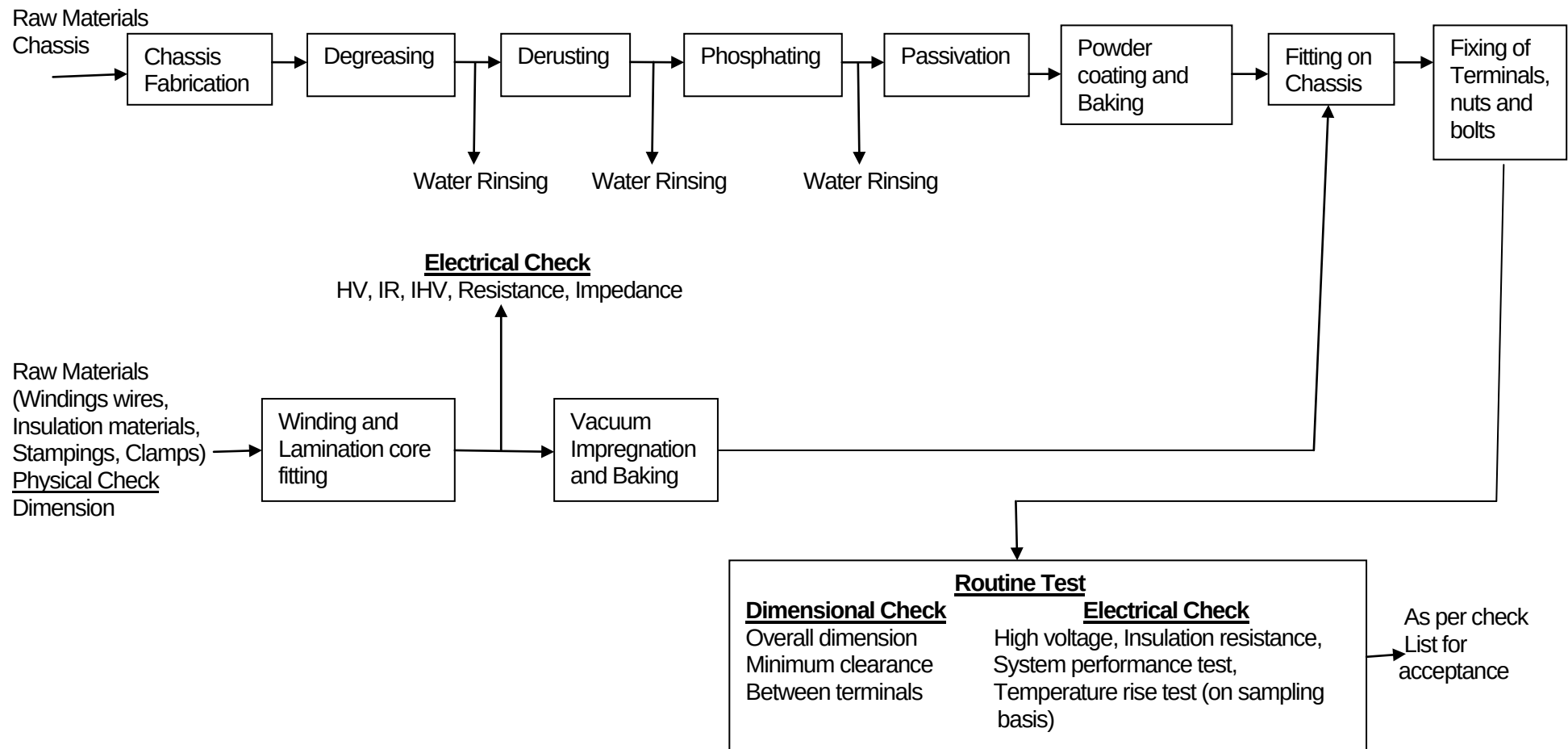
S. No.	Description
1	Test bench mounted with true r.m.s 4½ digit current, voltage for AC/DC measurement
2	Variac (25 Amp, 0-300V)
3	Portable AC & DC ammeter, voltmeter, AC wattmeter,
4	Transformer (1:2), Primary (270V max), Secondary (540V max)
5	Digital Insulation Tester 500 V DC, 1-2000 MΩ.
6	High voltage tester 0-3 KV, 50 Hz AC
7	Induced high voltage tester 0-500V / 200 Hz. AC
8	Variable resistance load (Rheostat), 0-100 Ω, 5 Amp.
9	Capacitor (1μF)
10	2 Ohms resistance
11	Digital micro meter (0-25mm), Accuracy-0.001 mm
12	Digital Vernier calipers (0-150 mm, Accuracy 0.01 mm)
13	Regulated power supply of rating (0-60 V, 5 amps)
14	Hand held True RMS digital Multimeter
15	Hour meter
16	Decade resistance box (1-100Ω), accuracy ±1%, calibrated by Govt./Reputed agency
17	Precision Multimeter with HV probe
18	Digital contact thermometer.
19	Clamp on meter.
20	Portable Digital Milli-Ohm meter, 0.1 Ω - 2 KΩ, Accuracy ±1%
21	Impedance Measurement Test Setup as given in Fig.- SDO/RE-21 in specification no. IRS- S: 65/83.

- Note:**
- Outsourced firms shall have ISO approval.
 - Spray painting/powder coating activity, if outsourced shall be incorporated in the QAP and is also to be got verified during assessment of the firm.
 - All the meters must be calibrated once a year by Government / Reputed agency. In-house calibration wherever feasible, may be done with specific permission of DI/QA/S&T.

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Quality Assurance Flow Chart for B Type Choke



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