



**Government of India
Ministry of Railways**

**QMS-23:2009
(Revision 0)**

**Schedule of Infrastructure, manufacturing & testing
and quality control requirements**

for

Spring Plank

(Specn. No. WD-21-Casnub-22NLB-93)

**Inspection & Liaison Directorate
Research Designs & Standards Organisation
Manak Nagar Lucknow – 226011**

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(Price Rs. 300/-)

1.0 SCOPE

1.1 This schedule covers the technical requirement for manufacture and supply of spring plank to be fitted in cast steel bogies.

2.0 REQUIREMENT

The vendor seeking approval shall have the required facilities as mentioned below:

2.1 General Infrastructure and manufacturing facilities

Manufacturer should have adequate covered accommodation for storing raw material, finished items awaiting despatch and arranging inspection.

2.2 Machinery and Plant

Following machinery and plant of suitable capacity should be available.

2.2.1 PSL cutting/line cutting/shearing m/c for cutting of plates.

2.2.2 Hand/pencil grinder

2.2.3 Hydraulic press with suitable due of 1200T capacity.

2.2.4 Planning m/c of suitable capacity must be available to accommodate entire length of spring plank.

2.2.5 Centre lathe m/c of suitable capacity.

2.2.6 Arc welding m/c in sufficient number.

2.2.7 Drilling m/c of suitable capacity capable of drilling holes upto 25.6mm

2.2.8 Drilling jig.

2.3 It is desirable to have a facility for testing of raw material.

3.0 TESTING FACILITIES

3.1 Vernier callipers etc. should be available to measure different dimensions.

3.2 Suitable gauges for dimensional accuracy of the component should be available.

4.0 QUALITY CONTROL REQUIREMENT

4.1 The firm should have acquired ISO 9000 series certification for the product for which an approval is sought should be broadly covered in the scope of the certification for manufacture and supply.

4.2 Quality manual of the form for ISO 9000 should clearly indicate at any stage the control over manufacturing and testing of the said railway product.

4.3 There exists system of easy traceability of the product from casting stage to finished product stage.

- 4.4 Quality assurance plan for the product detailing various aspects like:
- (a) Organisational chart
 - (b) Flow process chart
 - (c) Stage inspection details
 - (d) Various parameters to be maintained to ensure control
 - (e) Policy of disposal of rejected castings should be implemented and record is maintained for documentary evidence.
- 4.5 A diploma holder must be head of the inspection/final control section with 5 years experience in the relevant field.
- 4.6 There exists a quality manual of the firm indicating the extent of control over production and testing.
- 4.7 There exists a system of documentation in respect of rejection at customer end, warranty replacement
- 4.8 System should exist for documentation of the following :
- 4.8.1 Incoming raw material with TC reference of supplier as well as internal test/audit checking from outside agency.
 - 4.8.2 Ensure that the details regarding Stage inspection and test result are available.
 - 4.8.3 Ensure that a system exists for calibration of testing & measuring equipments and record is maintained.