

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			



RESEARCH DESIGNS & STANDARDS ORGANIZATION
Manaknagar, Lucknow – 226011

Document No: QC-G-7.1-22

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1.0 Amendment History:

S. No.	Amendment Date	Version	Reasons for Amendment
1.	26.11.2002	1.0	First issue under new documentation system
2.	01.10.2020	2.0	<p>Issue under new documentation system</p> <p>QC-G-7.1-22 rev '2' version number is added.</p> <p>ASSESSMENT is replaced by FRESH VENDOR REGISTRATION</p> <p>REASSESSMENT is replaced QUALITY AUDIT</p> <p>General Guidelines for Vendor Approval is replaced by ISO Apex Documents</p> <p>iv) We hereby undertake that all our equipment for manufacturing and testing as listed above shall be maintained in good working order at all times. is replaced by</p> <p>iv) We undertakes that ISO Apex Documents shall be read and abided by our company.</p>

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 1 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

2.0 Purpose:

This guideline covers all technical requirement for manufacture and supply of Switch Expansion Joints used for vendor registration/ quality audit of vendor. This guideline replaces the provisions of earlier guidelines issued on the subject i.e. **QC-G-7.1-22 rev '2'**

3.0 Scope of Application

This shall be applicable for initial capability assessment, quality audit, up-gradation of vendors and maintaining their approved list. In case of any variation between the procedure/provision given in the work instruction and that in this 'Item-specific guidelines', the later shall prevail. The competent authority wherever referred to in this document shall mean Executive Director, Quality Assurance Civil Dte.

4.0 Procedure / Details

Procedure/details is annexed.

5.0 Referenced Documents

S.No.	Document Name	Document No.
1.	IRST-10	Nil

6.0 Referenced Documents of External Origin

None.

7.0 Associated Records

None.

8.0 Responsibility and Authority

Activity	Responsible	Approver	Supporting	Consulted	Informed
Creation, maintenance of this document	Director/QAC	ED/QAC	DD/XEN/AIE/ARO	Track Design Dte. & M&C Dte.	All vendors/ concerned through website
Compliance of directives contained in this document	DD/XEN/AIE/ARO	Director/QAC	Respective staff	-	-
Requirement of deviation from this directive	Director/QAC	ED/QAC	DD/XEN/AIE/ARO	Track Design Dte. & M&C Dte.	All vendors/ concerned through website

9.0 Abbreviations

QA	Quality Assurance.
QAC	Quality Assurance Civil.
ED/QA	Executive Director/Quality Assurance Civil
RDSO	Research Designs & Standards Organisation
DD	Dy. Director
XEN	Executive Engineer

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 2 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

AIE	Assistant Inspecting Engineer.
ARO	Assistant Research Officer

Scheduled of Technical Requirements for manufacture, testing and Quality control of Switch Expansion Joints.

1. General and Manufacturing facilities required:

Adequate covered and uncovered area for storage of finished material and installation of all plants and equipment including testing equipment. General working condition i.e. proper lighting, ventilation and cleanliness etc.
2. Quality control requirements: There should be a system to ensure:
 - 2.1 The traceability of the product from raw material sample to finished product.
 - 2.2 That there is a QAP for the product detailing various aspects.
 - (i) Organisational Chart
 - (ii) Process Flow Chart
 - (iii) Stage Inspection Details
 - 2.3 That the relevant specifications, BIS Standards & Drawings are available.
- 3.0 Maintenance of records: Records in respect of manufacture of Switch Expansion Joint should be maintained in proper register.

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 3 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

ITEM SPECIFIC GUIDELINES FOR ASSESSMENT ~~FRESH VENDOR REGISTRATION~~ / ~~REASSESSMENT~~ ~~QUALITY AUDIT~~ OF FIRMS MANUFACTURING SWITCH EXPANSION JOINTS

In addition to the “~~General Guidelines for Vendor Approval~~ **ISO Apex Documents**”, the following shall also be applicable for ~~assessment~~ **fresh vendor registration** / ~~re-assessment~~ **quality audit** of firms for manufacturing Switch Expansion Joints:

- i) For the purpose of assessment **fresh vendor registration** of Switch Expansion Joints, the firm shall be required to manufacture proto-type comprising of two Tongue Rails, two Stock Rails and all components as per part list of the respective drawing, forming one complete set of SEJ of any design i.e. SEJ of 52 kg or 60 kg rail section.
- ii) For the purpose of re-assessment of Switch Expansion Joints, one sample set of any Design will be required to be offered for inspection.
- iii) The gauges shall be approved / revalidated at the time of inspection of Infrastructural facilities during assessment/re-assessment of the firm. Based on the joint inspection report, if there are sufficient prima-facie reasons to believe by RDSO that the failures are due to manufacturing defects, the production and inspection of the product would be suspended

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

MINIMUM FACILITIES & MACHINES REQUIRED FOR MANUFACTURE OF SWITCH EXPANSION JOINTS.

SN	Description	Minimum facilities / machinery considered essential	
		Min. Capacity	Min. Quantity
1	Covered area	-	700 Sqmt.
2	Gantry crane	2T.	2T.
3	Circular/band saw	350-500 T	1 no.
4	Hydraulic horizontal bending/straightening machine	350-500T	1 no.
5	Radial drill	32mm dia.	2 nos.
6	Shapers	600 mm stroke	2 nos.
7	Planing Machine	3 metre stroke	1 no.
8	Universal testing machine	40 t Min.	1 No..
9	Compressor with riveting arrangement	-	One complete set including furnace & riveting gun etc.
10	Assembly & Inspection Bay	-	A separate area to be dedicated with proper levelled flooring.
11	Chemical lab	For chemical analysis of MS, medium and low alloy steel	One unit installed in house
13	Non-destructive testing facility	1. USFD 2. DP test 3. Magna flux	1 No. 1 No. 1 No
14	Dedicated area with all above machineries installed in proper flow line	-	700 sq.mt.

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

ROFORMA FOR ~~CAPABILITY~~ FRESH VENDOR REGISTRATION /~~CAPACITY ASSESSMENT~~ QUALITY AUDIT OF FIRMS FOR MANUFACTURE OF SWITCH EXPANSION JOINTS (To be filled in duplicate)

Section-1 GENERAL INFORMATION

1. Name of the firm
2. Postal address of
 - 2.1 Head office
 - 2.2 Works
- 3 Telephone No. (with STD code)

Head office

Works

- 4.0 E-mail address, Telex & Fax of

- 4.1 Head office
- 4.2 Works

Description of works

- 5.1 Total land area (in sq. meters)
- 5.2 Total covered area (in sq. meters)
- 5.3 Different sub-unit.

5.4 A fully dimensioned plan of the works showing covered Area and different shops shall be enclosed.

5.5 Special features, if any Effective from 26/11/2002 Page 5 of 8 Document No. TDG 0022 Rev.'1'

6. Number of personnel employed (category wise)
 - 6.1 Managerial

6.2 Supervisory (Enclose list of Managers/ Technical Supervisors)

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 6 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

6.3 Skilled/Artisans

6.4 Unskilled

7 Hours of working

8 Weekly off day

9 State whether the firm is already in approved list with RDSO for supply of SEJ. If so, please give details of last approval

9.1 Letter date and issued by

9.2 Date of expiry of validity of approval

10. Details of important orders executed in past, in reference to the supplies made.

10.1 To other important firms / companies / undertaking.

10.2 Directly to the railways.

SECTION-II: TECHNICAL INFORMATION

1 Production capacity

per month

per year

2 Type of stores/items/which the firm is capable of manufacturing.

3 Crane facilities No. of Cranes Make of Crane Capacity

3.1 EOT Crane/Chain-Pulley block

3.2 Mobile Crane.

3.3 Jib crane

4 Total power Availability (in KVA/KW)

a) From the state electricity Board or other regular source. (enclose a copy of electricity bill)

b) From own stand-by generating sets (Also give make, capacity, and other details of each generating set)

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 7 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

5. Machines (for manufacturing of Switch Expansion joints and related components)
Name of Machine No of Machines Make of Machine Size & Capacity of Machine

5.1 Cold Saw Machine / Circular Saw

5.2 Radial Drill

5.3 Hydraulic Bending Machine (Horizontal 350T & 500T)

5.4 Milling machine

5.5 Shapers

5.6 Pillar Drills

5.7 Grinding Machine

5.8 Oil fired furnaces for rivets

5.9 Electric Welding sets

5.10 Gas Welding / Gas cutting facilities (including pre-heating arrangement)

5.11 Planning machine

a) Stroke length

b) Table length

5.12 Portable Drill Machine

5.13 Jim crow

5.14 Compressor

5.15 Pneumatic riveting Gun

6 Testing Equipment / facilities Name of Equipment | Nos. of equipment | Make of Equipment | Size & capacity of Equipment

6.1 Ultrasonic test of rails

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 8 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

6.2 Magna flux

6.3 Tensile testing machine

6.4 Hardness testing machine (Brinell or Rockwell & Poldi)

6.5 Lab. For finding out the chemical composition of any sample

6.6 Other NDT facilities (DP test etc.)

7. Handling facilities It should be mentioned whether there is proper facilities for handling for finished SEJs.

8. A fully dimensioned plan of the works showing locations of various equipment and facilities for manufacture of SEJ's, flow line indicating locations of various operations during manufacture in proper sequence and storage facilities for finished products and dispatch may please be enclosed.

B QUALITY ASSURANCE

1. Does the factory has any established Quality Assurance Programme as per ISO: 9000 series. If yes, please enclose a copy of the ISO certificate.

2. Details of Quality Assurance Organization. Name of key personnel, their Qualification, designations and positions in overall management Structure (enclose organizational chart for quality control)

3. Testing facilities and laboratory equipment available to be listed along with the make, year of procurement and commissioning.

4. Calibration of laboratory test equipment/gauge, indicated in para 3 above. (enclose copy of calibration certificates)

5. Frequency of calibration(Yearly)

6. Source of procurement of raw materials/bought out components and steps taken to ensure their quality

7. Brief details of manufacturing process as relevant to the items for which Registration is sought.

8. Details of inspection/checks done on material during various stages of the above manufacturing process (enclose a copy of QAP)

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 9 of 10

ISO9001:2008	Document No: QC-G-7.1-22	Version No: 2.0	Date Effective: 01.10.2020
Document Title: Item Specific guideline & Schedule of Technical Requirements for Vendor approval for manufacture and supply of Switch Expansion Joints.			

9. Has the acceptable value for the parameters inspected during above stage checks been laid down? If yes, the action taken if value of the parameters inspected does not meet the desired laid down value.

10. System for documentation of the results of the above stage checks.

11. Whether one sample set of SEJ is ready for inspection during reassessment **quality audit** (Report to be submitted by inspecting officials)

12. Whether the firm is possessing officially issued prints of relevant drawings and specifications.

SECTION-III

DECLARATION

i) We do hereby declare that the above particulars are correct and no discrepancy shall be found during actual investigation before and during execution of order on our firm.

ii) Any change in the plant and machinery and change of place of office and of works site shall be brought to the notice of RDSO for clearance and approval.

iii) We also declare that our concern has not been black listed by Railway, Railway Board / RDSO for business with the Railways.

~~iv) We hereby undertake that all our equipment for manufacturing and testing as listed above shall be maintained in good working order at all times.~~

iv) We undertakes that ISO Apex Documents shall be read and abided by our company.

Place

Signature of manufacturer

Date

Official Seal

AIE/QA/CE	Dir./QAC-III.	Printed: 25.08.2020
Prepared By:	Issued By:	Page 10 of 10