

Special Conditions for Process Inspection of Elastic Rail Clips (ERCs) by M/s RITES Ltd.

1.	This item to be purchased through this tender shall be inspected by TPI agency (M/s RITES Ltd.) through Process Inspection methodology.
2.	Inspection of goods through process inspection shall be done throughout the production cycle. Process Inspection Sheet and Process Inspection Order for inspection are enclosed as Annexure-A and Annexure-B Respectively.
3.	Attention of Tenderers/Bidders is invited to IRS conditions of contract, which will be the governing conditions of contracts to be placed against this tender. Particular attention is invited to IRS conditions 0701, 1301(a), 1301(b) and 1301(c), 1302 to 1309, 3400 to 3402.
4	In terms of IRS conditions of contract, following specific provisions shall apply in cases of supply of pre-inspected goods through Third Party Inspection (TPI) Agency (M/s RITES Ltd.).
4.1	Unless otherwise stated in the tender schedule, goods procured are required to be pre-inspected before dispatch by the TPI Agency appointed by Railways at its sole discretion i.e. M/s RITES Ltd. The TPI Agency appointed shall be indicated in the Purchase Order. Railway's right to appoint TPI Agency of its choice is absolute. Railway also reserves the right to change the TPI Agency at any time through issue of modification advice for all or any of the uninspected lots against the Purchase Order to be placed through this tender.
4.2	Vendors/suppliers will place online Inspection call for "Process Inspection" on TPI Agency (i.e. RITES Ltd.) timely so that the inspecting agency gets desired time to carry out all formalities for conducting process inspection.
4.3	The TPI Agency i.e. M/s RITES Ltd. appointed by Railways shall examine the inspection call and may, within 48 hrs. (excluding national holidays), seek additional information, if any, from the Supplier. The Supplier shall within one calendar day (excluding Sundays and national holidays) furnish the required information/documents to the TPI Agency to enable them to register inspection call. In case of incomplete information even after providing opportunity to the Supplier to furnish requisite information, the inspection call shall not be registered and the Supplier shall be advised of the observations of the inspecting agency, to comply these observations and place fresh inspection call. The inspection call may also be rejected by TPI Agency if sufficient time for carrying out the process inspection and release of IC before end of delivery period is not available.
4.4	Suppliers shall be allowed to withdraw inspection call placed, without any cost, before the inspection call has been registered by the Third-Party Inspection Agency. Once the inspection has been registered by the TPI Agency, withdrawal of inspection call shall not be permitted.
4.5	Inspection fee/charges will be paid directly by Railways to Third Party Inspection Agency. Payment Shall be based on mandays.
4.6	However, charges/expenses specifically provided for in IRS Conditions of Contract, particularly in Para 1304, 1305, 1306 and 1400 of IRS conditions of contract, shall be borne by the Supplier.

5.0	Process Inspection Sheet and Process Inspection Order are enclosed as Annexure-A and Annexure-B respectively. Process Inspection shall be done as per these documents.
5.1	TPI agency shall deploy one person Per shift per production line for the complete process Inspection of ERC (In whole numbers) and the minimum lot quantity should be 35,000 nos. of ERCs.
5.2	Manpower charges paid to TPI agency is Rs. 5450/- per manday + GST extra@18% or as applicable.
5.3	<p>Maximum mandays deployed for minimum quantity of 35000 nos. shall be 12 (35000/2880) for manual MPI and 6 (35000/5760) for automatic MPI. Maximum Inspection charges for process inspection of a lot shall not exceed 0.9% of the value of the lot (lot value calculated as per purchase order value).</p> <p>Note: Purchase Order Value for the purpose of calculating the inspection charges shall mean total value of Goods ordered specifically indicated in the Purchase Order as total order value which includes freight, packing, forwarding, taxes and duties etc. used in arriving at total order value but excludes any components or items not included specifically in calculation of total order value. The inspection charges shall be calculated using lot size, mandays consumed and value of Goods Inspected and GST applicable on inspection charges.</p>
5.4	Process inspection details and outcome shall be recorded by TPI Agency at every process cycle, including the quantity accepted and quantity rejected during the process, actual mandays utilized, attendance of each of the manpower deployed and call cancellation details, if any.
5.5	The manpower required (in whole number), for complete inspection of lot quantity, proposed for process inspection, in no case be more than the proportional number calculated in linear proportion to the number indicated for the minimum lot size. Manpower required for process inspection shall be worked out judiciously/optimally, and for this combining of various activities required for inspection should be kept in mind without, compromising quality of inspection. For ease of understanding, illustration for estimating man-power requirement for a Process Inspection has been worked out as under #

“Sample Process Inspection-XXX for Minimum Lot Size”

	Man-Power Required 1 st Shift	Man-Power Required 2 st Shift	Man-Power Required 3 st Shift
Process-Step#A1	1	1	1
Process-Step#A2	1	1	1
Process-Step#A3	1		
Process-Step#A4	1		
Process-Step#A5	1		
Process-Step#A6	1		
Process-Step#A7	1		
Process-Step#A8	1		

Process-Step#A9	1		
Process-Step#A10	1		
Any other activity required for inspection e.g. documentation etc.	X		
Sum	8	2	2
G. Total	12+X		
Minimum lot quantity	4		

Therefore the maximum mandays for process inspection, illustrated above, shall be (12+X) for minimum lot quantity of 4. In case process inspection of 6 lots is to be carried out, maximum mandays which can be booked for that inspection shall be $(6/4) \times (12+X)$ #

However this is maximum mandays for process inspection and TPI Agency shall do the optimisation to have minimum mandays deployed without compromising the quality.

5.6	In case of emergency/urgency, the procuring entity may order for inspection of a lot size less than the minimum lot size for process inspection. In such case, manday requirement shall not exceed the manday requirement indicated for the minimum lot size for process inspection.
5.7	Mandays deployed shall depend on the quantity offered for inspection. Hence, actual deployment of authorized inspectors and actual mandays deployed for a particular process inspection shall be the basis for payment of inspection charges. However, the payment for inspection of a particular lot will be limited to maximum mandays worked out earlier (as per para above). Subject to other provisions herein, the actual deployment shall be certified by the TPIA.
6.0	Inspection charges paid or due to be paid by Railways to the TPI Agency shall be recovered from Vendors in following cases:
i.	In case of rejection of part or full quantity at a particular process during the complete production cycle of the product by TPI Agency, the charges recovered from the vendor shall be as specified in para (v) below.
ii.	In case part quantity is accepted and balance quantity is rejected at a particular process cycle in the complete production cycle, mandays utilized shall be proportionately distributed between the quantity accepted and quantity rejected and payment shall be made accordingly based on the actual quantity accepted and rejected. For the quantity rejected, payment to TPI Agency shall be recovered by the Railway from the vendor. Inspection for the next process shall be only for the quantity passed in the preceding process.
iii.	When the Authorized Inspector of TPI Agency, on visit to the vendor's premises for inspection, finds that the vendor is not yet ready for inspection, Inspection call shall be cancelled by Authorized inspector by issuing call cancellation certificate. The Call Cancellation charges shall be recovered from Vendor as specified in para (v) below.
iv.	Inspection Certificate revalidation or re-inspection: If the Vendor fails to deliver the pre-inspected Goods during process inspection as per the terms of the purchase order within the validity period of inspection certificate, the TPI Agency, on request of Vendor, may, based on the merits of the case, decide to re-validate the inspection certificate. However, request for re-validation beyond 30 days of expiry of original validity period of the inspection certificate shall be permitted only with approval of

	procuring entity. Decision of the TPI agency in this respect shall be binding on the vendor.										
v.	<p>The following charges shall be recovered from Vendor*</p> <table border="1"> <thead> <tr> <th>Situation</th><th>Charges to be recovered from Vendor(plus GST extra)</th></tr> </thead> <tbody> <tr> <td>At the time of physical visit call is cancelled due to supplier/vendor is not ready for inspection (Call Cancellation through issue of Call Cancellation Certificate)</td><td>Amount equal to amount paid to TPI Agency by Railways (based on actual man days utilized)</td></tr> <tr> <td>In case of rejection of the full quantity at a particular process cycle and further inspection cannot be carried out under the complete production cycle. TPI agency closes the inspection and submits the process inspection report for rejection up to that particular process where rejection has taken place.</td><td>Amount equal to amount paid to TPI Agency by Railways (based on actual mandays utilized)</td></tr> <tr> <td>In case part quantity is accepted and balance quantity is rejected at a particular process cycle in the complete production cycle.</td><td>Mandays utilized shall be proportionately distributed between the quantity accepted and quantity rejected. For the quantity rejected, payment to TPIA shall be recovered by the Railway from the vendor:</td></tr> <tr> <td>Inspection Certification revalidation</td><td>Rs. 5000/-</td></tr> </tbody> </table> <p>* However, recovery shall not exceed 0.9% of the value of lot (lot value calculated as per purchase order value).</p>	Situation	Charges to be recovered from Vendor(plus GST extra)	At the time of physical visit call is cancelled due to supplier/vendor is not ready for inspection (Call Cancellation through issue of Call Cancellation Certificate)	Amount equal to amount paid to TPI Agency by Railways (based on actual man days utilized)	In case of rejection of the full quantity at a particular process cycle and further inspection cannot be carried out under the complete production cycle. TPI agency closes the inspection and submits the process inspection report for rejection up to that particular process where rejection has taken place.	Amount equal to amount paid to TPI Agency by Railways (based on actual mandays utilized)	In case part quantity is accepted and balance quantity is rejected at a particular process cycle in the complete production cycle.	Mandays utilized shall be proportionately distributed between the quantity accepted and quantity rejected. For the quantity rejected, payment to TPIA shall be recovered by the Railway from the vendor:	Inspection Certification revalidation	Rs. 5000/-
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Inspection Certification revalidation	Rs. 5000/-										
6.1	In case of rejection of goods after receipt by the consignee, pre-inspected through process inspection, on joint inspection, the TPI Agency shall not be entitled for inspection charges for the quantity of goods so rejected. The inspection charges, if and to the extent already paid, shall be recovered from the TPI Agency.										
7.	When pre-inspected Goods get rejected at consignee end, Joint Inspection will be held as per procedure below. Moreover, In case of rejection of Goods on Joint Inspection, the replacement supply against the rejected lot of Goods shall normally be inspected by the same Third Party Inspection Agency, which inspected and passed the original supply, unless purchaser under special circumstances decides to get the lot inspected by some other inspection agency/consignee and decision of purchaser in this respect shall be binding on supplier.										
8.	Procedure for Joint Inspection:										
(i)	If Goods, pre-inspected by TPI Agency, gets rejected at consignee end after receipt by consignee, the material rejection advice/rejection memo will be sent by consignee through online system to all concerned i.e. Vendor, TPI Agency, Procuring Entity and Paying Authority and to such others as required.										

(ii)	Before rejected goods are returned to the supplier, the consignee after or at the time of issue of rejection advice, at his discretion, shall call for a Joint Inspection between consignee, Vendor and TPI Agency. Such Joint Inspection shall be conducted at a place as mentioned in the notice for Joint Inspection.
(iii)	The Joint inspection is to be carried out by the consignee with the representatives of the inspecting agency and vendor.
(iv)	In case where either the firm or the representative of inspecting agency do not turn up for Joint Inspection, Joint Inspection shall be done with whosoever of the two is available. In case neither firm or inspection agency attend, consignee's decision to accept or reject such goods shall be final and binding.
(v)	A Joint Inspection report shall be signed by the Party(ies) attending the Joint Inspection. Failure to attend Joint Inspection shall not be an excuse to dispute the findings of Joint Inspection.
(vi)	Irrespective of the outcome of Joint Inspection, the TPI Agency will not be entitled for any fee or charges, whatsoever, for attending such Joint Inspection. In case of rejection of Goods on Joint Inspection, the TPI Agency shall not be entitled for inspection charges for the quantity of Goods rejected. The inspection charges, if and to the extent already paid, shall be recovered from the TPI Agency.
9.	Railway Board Letter No. : 2024/RS(G)/779/12(E3482675) dtd. 06.01.2025 may please be referred for all other term and condition for process inspection of ERCs.

Annexure-A

ERC Process Inspection Sheet

Sl. No.	Item	Sampling procedure	Frequency of internal inspection	Frequency of external inspection	Time taken
1	Checking of length of cut bars	Random	3 bars per hour	3 bars per hour	0.5minute/ERC = 1.5 minutes
2	Turning length	Random	3 bars per hour	3 bars per hour	0.5minute/ERC = 1.5 minutes
3	MPI Test	100%	100%	03 bars per hour	Manual:10sec/bar Automatic: 5sec/Bar =0.5 minutes
4	Forging temperature	Random	Once every hour	NA	1 minute
5	Checking of die	100%	At the start of the shift. If production per shift is more than 4000 ERCs, additional check in the middle of the shift.	At the start of the shift. If production per shift is more than 4000 ERCs, additional check in the middle of the shift.	15 - 20 minutes for each check
6	Quenching temperature and duration	Random	NA	Temperature to be checked every hour. Duration to be checked at the start of the shift.	1 minute each time for checking temperature. 4 minutes for checking duration
7	Quenching hardness	Random	2 ERCs per hour	2 ERCs per hour	4 minute/ERC =8 minutes
8	Tempering temperature and duration	Random	NA	Temperature to be checked every hour. Duration to be checked at the start of the shift.	1 minute each time for checking temperature. 4 minutes for checking duration
9	Dimension check	Random	2 ERCs per hour	2 ERCs per hour	1 minute/ERC =2 minutes
10	Hardness of finished ERC	Random	2 ERCs per hour	2 ERCs per hour	4 minutes/ERC =8 minutes
11	Documentation	100%	NA	NA	Can be done along with the above activities.

Notes:

1. The above activities can be performed by one official per shift per production line.
2. The above process inspection is over and above the inspection of raw material at the **ERC** Manufacturer's premises and the inspection of finished product.
3. The external inspecting official should carry these checks and maintain complete records. Additional checks may be carried out if required.
4. The external inspecting official should be Diploma / B Tech with minimum 2 years' experience.
5. Average production capacity per shift is 2880 ERCs for manual MPI and 5760 for automatic MPI.
6. The external inspecting official should check calibration of measuring equipment from time to time.

Annexure-B**ERC Process Inspection Order**

Sl. No.	Item	Sampling procedure	Frequency of external inspection
1	Checking of length of cut bars	Random	3 bars per hour
2	Turning length	Random	3 bars per hour
3	MPI Test	Random	03 bars per hour
4	Forging temperature	Random	NA
5	Checking of die	100%	At the start of the shift. If production per shift is more than 4000 ERCs, additional check in the middle of the shift.
6	Quenching temperature and duration	Random	Temperature to be checked every hour. Duration to be checked at the start of the shift.
7	Quenching hardness	Random	2 ERCs per hour
8	Tempering temperature and duration	Random	Temperature to be checked every hour. Duration to be checked at the start of the shift.
9	Dimension check	Random	2 ERCs per hour
10	Hardness of finished ERC	Random	2 ERCs per hour
11	Documentation	100%	Specific details / results of all the checks should be recorded.

Notes:

1. The above process inspection is over and above the existing inspection of raw material at the ERC Manufacturer's premises and the inspection of finished product.
2. The external inspecting official should carry these checks and maintain complete records. Additional checks may be carried out if required.
3. The external inspecting official should be Diploma / B Tech with minimum 2 years' experience.
4. The external inspecting official should be issued a Competency certificate by GM/AGM/Dy GM, RITES after testing his knowledge of specification, STR, QAP etc. The certificate shall be valid for a period of one year from the date of issue.
5. The external inspecting official should check calibration of measuring equipment from time to time.
6. Estimated production per shift: 2880 ERCs for manual MPI and 5760 ERCs for automatic MPI.