

**BEML LIMITED**

(A Govt. of India Mini Ratna Company under Ministry Of Defence)
BANGALORE COMPLEX, POST BOX: 7501, NEW THIPPASANDRA POST,
BANGALORE-560075

NOTICE INVITING TENDER

BEML SRM E-Tender No: 6300040369 dated 18/02/2026; Due date 28/02/2026 @ 17:00 HRS

Subject: Procurement of “UNDER FRAME & ROOF CABLE TRAYS” for Standard Gauge High Speed Train Project (Chair Car - Design/Operating Speed 280/249 kmph).

This Tender consists of the following documents:

- (a) Notice Inviting Tender (NIT)
- (b) Non-Disclosure Agreement
- (c) Drawings & PTS ref: FPIIC/TD/570 dated 15/12/2025
- (d) ReverseAuction Terms (Applicable in case Reverse Auction Event is conducted)

Bidders may submit their queries on the NIT document, if any, by email to ravikumar.adepu@bemltd.in / Prasanna.n@bemltd.in or contact on 080-25022639 / 080-25022634

Quotations are invited from Original Equipment Manufacturer (OEM) for Railway Rolling stock having experience in design, manufacturing, testing and commissioning in accordance with the enclosed terms and conditions by the due date mentioned below”

Quotations should be submitted in Two-Bid system in SRM PLATFORM portal as below:

- 1) Technical Bid
- 2) Commercial Bid

Enclosure : As above.

Note: - The tender consists of 42 no. of pages including this page.

No representation would be entertained on any errors if found in the NIT. However, vendors to bring such errors/omissions to the notice of BEML for necessary corrective action.

Please note that bidder should be having a valid Class-III Digital Signature Certificate issued by authorized Certifying Authority to submit bid in our SRM e-Procurement system. Interested bidders can contact BEML through e-mail: admin.srm@beml.co.in to obtain the username & password for submitting the quotations In case of any queries, you may contact BEML SRM Team on phone no. 080-22963269.

TABLE OF CONTENTS

S No.	Description	Page Nos.
1	Notice Inviting Tender	1
2	Table of Contents	2
3	Details of Tender	3-5
4	Submission of Technical Bid	6
5	Submission of Commercial Bid	7
6	Annexure – VI: General Terms & Conditions	8-25
7	Appendix A : Integrity Pact agreement	26-31
8	Appendix B: Compliance for submission of Non-Disclosure Agreement	32
9	Appendix C: Compliance report of General Terms & Conditions & Annexure-X	33-35
10	Appendix D: Performance Bank Guarantee	36-37
11	Appendix E: Confidential Agreement	38
12	Appendix F: MII (Make in India), Local content declaration	39
13	Appendix G: Compliance to Land Border Certificate Clause	40
14	Appendix I: Compliance to Drawings & Technical Delivery Conditions (TDC)	41
15	List of documents attached with the tender	42

DETAILS OF THE TENDER

1. This "Notice Inviting Tender" hereinafter referred to as the 'NIT' is designated as the tender for **Procurement of "UNDER FRAME & ROOF CABLE TRAYS" for Standard Gauge High Speed Train Project (Chair Car - Design/Operating Speed 280/249 kmph).**
2. The Bidders are advised to carefully go through the General Terms and Conditions that has been enclosed along with this NIT.
 - a. All entries in the NIT shall be in English either typed or written legibly. Erasing, over-writings and use of correction fluids are not permitted. All cancellations and insertions if any should be duly signed / attested by bidder concerned.
 - b. All the documents shall be uploaded in BEML SRM Platform.
 - c. In case, it comes to the knowledge of BEML that the bidder has submitted false information before awarding of contract then the offer would be rejected.
 - d. In the event, it comes to the knowledge of BEML that the successful bidder has submitted false information, subsequent to the award of contract, the contract shall be cancelled/short closed by the company and shall invoke Risk purchase clause with liabilities on such bidder for the entire contract quantity.
3. In case any person/persons, Company, firm, Associations having any litigation, arbitration cases between themselves and BEML Ltd, pending before any court of law/ Arbitrator shall not be eligible to participate in this tender.
4. Non-compliance with any of the tender conditions, incomplete offers, conditional and ambiguous offers are not acceptable and liable for rejection.
5. BEML reserves the right to accept or reject all tenders or any tender in part or full without assigning any reasons thereto, which is final & binding on the Bidder.
6. Bids of firms having any history of pending litigations, default in and Risk purchase against previous orders of BEML (including all Divisions) are liable for rejection at any stage if found at later stage. Hence, Bidders are requested to cross-check at their end before participation in the Tender.
7. **The tender consists of two parts as indicated below:**

Sl. No.	Nature of Bid	Mode of Submission	Details
1	Technical Bid	BEML SRM platform	<ul style="list-style-type: none"> Integrity pact. Bidders should upload duly filled, signed & stamped with two witnesses in Integrity Pact if the bid submission value is more than Rs 1 Cr. If the bid submission value is less than 1 Cr, Self-declaration has to be submitted on Bidder's letter head by the bidder stating "Integrity Pact is not submitted as the bid submission value is less than 1 Cr". Non-Disclosure Agreement as per prescribed format provided by BEML Compliance to BEML Drawings / PTS / Technical Delivery Conditions (TDC) Detailed BoM to be provided/submitted against each tendered line item along with technical bid

			<ul style="list-style-type: none"> • Clause by Clause compliance to General terms & conditions of NIT. • Clause by Clause compliance to Annexure-X. • Confidentiality agreement • MII (Make in India) declaration. • Compliance to Land Border Clause
2	Commercial Bid	BEML SRM platform	Price details in specified field on BEML SRM platform.

8. Details of Items, Services & Required Delivery Schedules:

TABLE-1						
I) Under Frame Cable Trays						
S/n	Part No	Description	Uom	Qty for 1 Train Set	Qty for 1 Mock Up DTC	Total Qty for 2 Train Set + 1 Mock Up
1	84321008	UF CONTROL CABLE TRAY KIT-DTC	SET	2	-	4
2	84321009	UF POWER CABLE TRAY KIT -DTC	SET	2	-	4
3	84421008	UF CONTROL CABLE TRAY KIT -MC	SET	4	-	8
4	84421009	UF POWER CABLE TRAY KIT -MC	SET	4	-	8
5	84521008	UF CONTROL CABLE TRAY KIT -TC1 PRM	SET	1	-	2
6	84521009	UF POWER CABLE TRAY KIT -TC1 PRM	SET	1	-	2
7	84621008	UF CONTROL CABLE TRAY KIT -TC2 EX	SET	1	-	2
8	84621009	UF POWER CABLE TRAY KIT -TC2 EX	SET	1	-	2
II) Roof Cable Trays						
S/n	Part No	Description	Uom	Qty for 1 Train Set	Qty for 1 Mock Up DTC	Total Qty for 2 Train Set + 1 Mock Up
1	84321006	ROOF LH CABLE TRAY KIT-DTC	SET	2	1	5
2	84321007	ROOF RH CABLE TRAY KIT -DTC	SET	2	1	5
3	84421006	ROOF LH CABLE TRAY KIT -MC	SET	4	-	8
4	84421007	ROOF RH CABLE TRAY KIT -MC	SET	4	-	8
5	84521006	ROOF LH CABLE TRAY KIT -TC1 PRM	SET	1	-	2
6	84521007	ROOF RH CABLE TRAY KIT -TC1 PRM	SET	1	-	2
7	84621006	ROOF LH CABLE TRAY KIT -TC2 EX	SET	1	-	2
8	84621007	ROOF RH CABLE TRAY KIT -TC2 EX	SET	1	-	2

TABLE - 2	
Tentative delivery schedule	
<p>“UNDER FRAME & ROOF CABLE TRAYS”:</p> <p>Supply Scope:</p>	<p>Mock Up – Mar 2026</p> <p>1st Train Set by May 2026</p> <p>2nd Train Set by Dec 2026.</p> <p>Bidders have to accommodate Preponement or Postponement of delivery schedules based on actual production as per BEML requirement.</p>

TABLE - 3	
SL No.	Description
1	All necessary spares, consumables and any other material for preventive maintenance as per Operation and Maintenance Manual(s) required till the completion of DNP shall be supplied at free of cost and shall be kept on site at his own cost.
2	Defect Notification Period: DNP starts from date of supply of materials and ends after 30 months from the date of placement of trains into revenue service.
3	<p>There will be additional requirement of UNDER FRAME & ROOF CABLE TRAYS for repair/replacement during CAMC period (15 Years) of revenue service. The supplier has to give concurrence for the additional requirement & support on as & when required basis.</p> <p>CAMC will start after successful completion of Defect Notification Period (DNP).</p>
4	Design and customization of product/sub system to meet requirement, at the cost of this project shall not be used by BEML’s supplier(s) in any other project other than BEML and ICF.

SUBMISSIONS OF TECHNICAL BID

<p>Technical Bid submission Conditions</p>	<p><u>TECHNICAL BID (Without Price/Price Details)</u> shall be uploaded and submitted in the BEML SRM Platform, wherein only technical Bid /technical information in BEML SRM Platform shall be uploaded as indicated below:</p> <ol style="list-style-type: none"> a. Bidders should upload Integrity Pact (duly filled, signed & stamped with two witnesses) [Appendix – A]. b. Bidders to refer Technical Specifications (Drawings / PTS / Technical Delivery Conditions (TDC)) enclosed along with this tender document. <p>Bidders should upload the following documents duly filled, signed & stamped under technical bid.</p> <ol style="list-style-type: none"> c. Compliance to BEML Drawings / PTS / Technical Delivery Conditions (TDC) [Appendix – I] d. Detailed BoM to be provided/submitted against each tendered line item along with technical bid e. Bidder to upload enclosures related to technical & other information deemed appropriate in respect of this tender on the letter head of the company, if any. f. Photographs / Drawings if any, may be uploaded. g. Bidders to refer “GENERAL TERMS AND CONDITIONS (GTC)” enclosed along with this tender document and upload following documents duly filled, signature & stamped under technical bid. <ol style="list-style-type: none"> a. Clause by clause compliance of GTC duly filled, signed & stamped along with the supporting documents as specified therein. [Appendix – C] & Annexure-X b. Confidentiality agreement filled & signed in plain paper [Appendix – E] c. MII (Make in India), Local content declaration [Appendix – F] d. Compliance to Land Border Certificate Clause [Appendix – G] e. Compliance to Submission of Non-Disclosure Agreement. [Appendix-B]. h. BEML at its sole discretion reserves the right to seek the hard copies of the documents which are already been uploaded in BEML SRM, through Courier / post pertaining to technical bid of this tender enquiry at a later date, if required. i. In such cases, only the documents uploaded in BEML SRM Platform in original has to be couriered at the request of BEML. Any irrelevant documents furnished through courier will not be considered.
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SUBMISSIONS OF COMMERCIAL BID

The price bid to be submitted through BEML SRM Portal. The following details are to be entered in the BEML SRM Portal.

Line Item No.	Stock Number	Material Description	Total Qty (SET)	Unit Price	Extended Value
1	84321008	UF CONTROL CABLE TRAY KIT-DTC	4	This is Format for reference only. Commercial bid document should not be enclosed during Technical Bid Submission. If uploaded the Quotation submitted by bidder will be liable for rejection without any discretion.	
2	84321009	UF POWER CABLE TRAY KIT -DTC	4		
3	84421008	UF CONTROL CABLE TRAY KIT -MC	8		
4	84421009	UF POWER CABLE TRAY KIT -MC	8		
5	84521008	UF CONTROL CABLE TRAY KIT -TC1 PRM	2		
6	84521009	UF POWER CABLE TRAY KIT -TC1 PRM	2		
7	84621008	UF CONTROL CABLE TRAY KIT -TC2 EX	2		
8	84621009	UF POWER CABLE TRAY KIT -TC2 EX	2		
9	84321006	ROOF LH CABLE TRAY KIT-DTC	5		
10	84321007	ROOF RH CABLE TRAY KIT -DTC	5		
11	84421006	ROOF LH CABLE TRAY KIT -MC	8		
12	84421007	ROOF RH CABLE TRAY KIT -MC	8		
13	84521006	ROOF LH CABLE TRAY KIT -TC1 PRM	2		
14	84521007	ROOF RH CABLE TRAY KIT -TC1 PRM	2		
15	84621006	ROOF LH CABLE TRAY KIT -TC2 EX	2		
16	84621007	ROOF RH CABLE TRAY KIT -TC2 EX	2		

Note:

- Bidder has to quote for all the items. Commercial evaluation will be based on total bid value for all the items put together.
- Reverse Auction shall be conducted if Minimum 2 technically accepted firms received & Reverse auction will be as per BEML SRM norms. (refer document **ReverseAuction_Terms**)
- Commercial Ranking shall be arrived based on the Grand Total of all the tendered items in above Table (1). The bidder whose offer is lowest will be considered as L1.
- The commercial bids of the vendors will be opened subject to technical acceptance based on Technical bid evaluation.
- Bidder should quote for all tendered line items. Bidders / Bids having partial participation will be rejected.

[ANNEXURE – VI]

GENERAL TERMS & CONDITIONS (GTC) FOR PROCUREMENT OF MATERIALS:

1. DEFINITIONS & INTERPRETATIONS

- 1.1 The Purchaser' means "(include company name and address)" (A Government of India Undertaking) incorporated under the Companies Act having its registered office at "BEML Soudha, No 23/1, 4th main, S.R. Nagar, Bengaluru – 560027" and shall be deemed to include its successors and assignee.
- 1.2 Supplier' means a person having been included in a contract as a Contractor and also means a firm or company with whom the order for supply/execution of work is placed and shall be deemed to include the supplier's successors, (approved by BEML Ltd.,) representatives, heirs, executors and administrators. The supplier may also be referred to as the supplier, Contractor or vendor.
- 1.3 Parties to the Contract' shall mean the Supplier and the Purchaser as named in the main body of the Purchase Order.
- 1.4 Tender' means and includes quotation, invitation to tender and all other documents like drawings, specifications, quality plan, etc that form part of the tender document.
- 1.5 Acceptance of Tender' Means the letter of memorandum communicating supplier, the acceptance of the Tender and includes advance acceptance of this tender.
- 1.6 Purchase Orders / Contract' means and includes the invitation to tender, instruction to Tenderers, acceptance of tender, Letter of intent / letter of award, the general terms and conditions of Purchase Order / contract, special conditions of Purchase Order /contract, particulars, descriptions, specifications, schedule of prices, quantities, quality plan, drawings enclosed and other condition specified in the acceptance of tenders and includes the repeat order which has been accepted or acted upon by / for the supplier for the supply of stores and includes an order for performance of service and includes amendments, if any, that may take place subsequent to the discussions, negotiations, mutual agreement if any.
- 1.7 Stores / Materials / Services' means the goods or services as described in Procurement Technical Specification (P.T.S.) and in the Purchase Order which the supplier has agreed to supply under the Purchase Order.
- 1.8 Specification means technical specifications of the Equipment / Material as set forth in Procurement technical specification (PTS) / technical drawings, which is part of tender
- 1.9 End-Customer / End-user means: ICF / Indian Railways / Rolling Stock Corporations.
- 1.10 Words in singular include the plural & vice-versa.
- 1.11 Words imparting the masculine gender shall be taken to include the feminine gender and words imparting persons shall include any firm, company or associations or body of individuals whether incorporated or not.

- 1.12 The heading of these conditions shall not affect the interpretations or construction thereof of the contract.

2. SUBMISSION OF THE TENDER:

Tender is in TWO-BID system (Technical & Commercial Bid)

Bids should be submitted online mode only as follows:

a) Submission of Technical bid (without price):

- i. The Bidder should upload all the requisite technical documents along with respective supporting documents and other information deemed appropriate in respect of the Tender.
- ii. The price details/commercial bid details should not be given in the Technical bid. If any of the bidder have given any price/commercial details in the Technical bid, their offer is liable for rejection and will not be considered.
- iii. Technical Bid will be opened on (date and time of bid opening) and the commercial Bids of those bidders whose technical bid is accepted only will be opened later.

b) Submission of Commercial bid:

- i. The commercial bids of the vendors will be opened subjected to technical acceptance of offers only.
- ii. Price details in specified field on BEML SRM Platform to be submitted.
- iii. If dealers are submitting the bids in place of OEM, Dealer should submit Authority letter from manufacturer.
- iv. BEML reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BEML projects / units.
- v. Bidders participating in the tender should declare in their offer that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be furnished to BEML.
- vi. In case any person/persons, Company, firm, Associations having any litigations, arbitration cases between themselves and BEML Ltd, pending before the Court / Arbitrator or initiated litigations/arbitrations in connection with any contract / tender issued by BEML Ltd and any contractor has defaulted against the BEML's orders are not eligible to participate in this tender.
- vii. BEML may decide to scrap the tender/refloat the tender without assigning any reasons thereof before LOI/PO is committed. BEML reserves the right to accept, split, divide, negotiate, cancel or reject any tender or reject all tenders at any time prior to the award of the contract without incurring any liability to the affected tenderers or any obligation to inform affected tenderer, the grounds of such action.
- viii. BEML reserves the right to verify, in its sole discretion, any information given by the bidders independently through any third party agencies. During this process, if it is found that any of the information given by the bidder is false / misleading, offers of such bidders would be out rightly rejected.

- ix. BEML also reserves the right to independently assess the capability and capacity of the bidder for execution of the order/contract. BEML's decision on any matter regarding short listing of bidders shall be final.
- x. The RFx / Notice Inviting Tender is not an offer or a contract.
- xi. Bidders will not be compensated or reimbursed for the costs incurred in preparing Proposals. Proposals shall become BEML property.
- xii. BEML's decision is final for Evaluation of the offers.

3. PURCHASE PREFERENCES:

Preference to Make in India products: Preference shall be given to Class-I local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products.

The 'Class-I local supplier (Local content more than 50%) / Class-II local supplier (Local content more than 20% less than 50%) at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for Class-I local supplier / Class-II local supplier, as the case may be. They shall also give the details of the location(s) at which the local value addition is made.

In cases of procurement for a value in excess of Rs.10 crores, Class-I local supplier / Class-II local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving percentage of local content. Bidders to upload signed & sealed [**Appendix - F**]

4. **SUPPLIERS SHARING LAND BORDER WITH INDIA:** Public Procurement Division order vide F.No. 6/18/2019-PPD dated 23.07.2020 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products, shall be applicable for bidders / suppliers sharing land border with India. Bidders to upload signed & sealed [**Appendix - G**], in compliance to Annex- III of the said Order.

5. DELIVERY TERMS:

- i) F.O.R (Free on Road), BEML Bangalore complex for supply scope. Freight & transit insurance to supplier's account.
- ii) For Spares / Comprehensive Annual Maintenance Contract (CAMC):
F.O.R (Free on Road), Customer Nominated Site / Depot (or) BEML Bangalore complex for supply scope. Freight & transit insurance to supplier's account.

6. PAYMENT:

Category	Payment Terms
Supply Scope (Materials)	<p>1) Supplier will raise GST invoice for 100% value. BEML will pay 80% of Invoice Value with 100% GST in 60 days / 45 days (MSE firms) through RTGS from the date of receipt of material at BEML subject to material acceptance by BEML.</p> <p>2) Balance 20% payment in 60 days / 45 days (MSE firms) through RTGS, from the date of successful completion of testing & commissioning activities as per BEML requirement duly certified by BEML R&D /BEML NOMINATED AGENCY/ICF/ICF NOMINATED AGENCY.</p> <p>In case of MSE Firms, The firm may also opt for 20% payment to be released immediately along with 80% payment in which case, Firm has to submit BANK GUARANTEE for 20% of the payment/amount to fulfil the contractual obligations.</p>

Bidders to indicate the category of their firm under Micro/Small/Medium/Major industries with necessary documentary proof of evidence for purpose of evaluation and our data updation.

The payment is further subject to the following:

- a) The Invoice shall be compliant with GST laws.
- b) GST liability is to be discharged and ensure filing of outward supply details on GSTN portal within timeline prescribed.
- c) Any debit note/supplementary invoice if any, is to be raised within September month following the respective financial year of filing of annual return by BEML, whichever is earlier.
- d) Any loss of tax credit due to the reason attributable to supplier shall be recovered from supplier along with applicable interest and penalty.
- e) Bidders to indicate the GST and other levies applicable. GST shall be paid only after confirmation of payment of GST by vendors on GST Website.
- f) Relevant TDS / TCS as applicable shall be deducted as per prevailing Income Tax / GST / GOI notifications.

7. **PRICE BID VALIDITY:** The Bid should be valid as per the details provided in below Table. BEML's acceptance of the tender at the quoted / negotiated rates will be binding on the tenderer during the tenure of contract.

SL No	Category	Price Bid Validity Should be Up to
1	i) Supply Scope (Mock Up & 2 Train Sets Materials)	180 days from the date of tender opening.

8. FIRM PRICE

The prices remain firm for the entire supplies of the purchase order and no escalation shall be entertained under any circumstances. The prices are to be firm & no increase in finalized price will be entertained after awarding contract during the period of Contract for any reasons whatsoever.

9. INSPECTION: By BEML/BEML NOMINATED AGENCY/ICF/ICF NOMINATED AGENCY

10. WARRANTY:

- a) The supplied goods/stores to the purchaser under the contract shall be of the highest grade, free of all the defects & faults in material and of the best quality, manufacture and workmanship and consistent with the established and generally accepted standards for materials of the type ordered and in full conformity with the contract specification, drawing or sample, if any and shall, if operable, operate properly throughout warranty period.

Any defect/fault & non-conformance to standards & descriptions as aforesaid, found during warranty period shall be rectified /repaired/replaced free of cost & at supplier's risk to the complete satisfaction of BEML / End user, within reasonable time at the ultimate destination.

The said goods/stores shall be warrantied /guaranteed **from date of supply of materials and ends after 30 months from the date of placement of trains into revenue service.**

In case of any contradiction in the terms and condition with respect to warranty appearing in Indian Railway standard (IRS) condition of contract and specifications, the later will prevail

b) Guarantee / Warranty replacement:

Guarantee / Warranty replacement shall be dispatched on "F.O.R – BEML Stores / designated destination" basis for replaceable items during warranty period.

- c) The provisions of this Warranty shall be without prejudice to and shall not be deemed or construed so as to limit or exclude any rights or remedies which the BEML may have against the supplier, whether in tort or otherwise.
- d) If any defect or damage is one requiring immediate attention from safety / environmental view point / operational viewpoint, the BEML has the authority to proceed with rectification in any

manner suitable and deduct such sums from the suppliers Bill or purchase order whichever is active.

11. PERFORMANCE BANK GUARANTEE (PBG):

- a) Firm shall submit Performance Guarantee for amount equivalent to **10%** of the Contract value. This performance guarantee shall be in the form of Bank Guarantee executed and submitted through any scheduled commercial Bank authorized by RBI. The Performance bank guarantee shall be valid up to Warranty period plus 6 months claim period. Format for PBG is attached as Appendix- D for reference.
- b) PBG shall be returned back only after completion of warranty period from date of last supply and if there is no defect /failure/negligence on part of contractor, complaints and / or any claims notified to the contractor within expiry of such date.
- c) The performance bank guarantee has to be furnished by the supplier as per prescribed format covering the entire supplies to be made against this order within 60 days from the date of receipt of purchase order from BEML but not later than 30 days before commencement of supplies pertaining to first delivery schedule indicated in the purchase order.
- d) In the absence of performance bank guarantee to be submitted by the supplier as per contract terms, BEML will not open Letter of Credit (LC) in the cases of LC in favor of supplier pertaining to the shipment / stores to be supplied as per first delivery schedule indicated in the purchase order. Any delay in submission of performance bank guarantee by the supplier, the subsequent delay in opening in Letter of Credit by BEML and supplies to be effected by the supplier are to the account of the supplier, which attracts liquidated damage charges as per contract terms.
- e) No claim shall lie against BEML Ltd., in respect of interest on cash deposits or Govt. Securities depreciation thereof.
- f) BEML shall be entitled to and it shall be lawful on its part to encash the Bank Guarantee in whole or in part in the event of any default, failure or neglect on the part of the supplier in the fulfillment or performance in all respect of the Purchase Order.
- g) The Bank Guarantee shall be established through **Structured Financial Messaging System (SFMS)** mode from a Scheduled Commercial Bank authorized by RBI in India as defined by RBI.
- h) A separate copy of the BG has to be sent by the issuing bank to the Purchaser's bank through SFMS. The details of Purchaser's bank are as under:

STATE BANK OF INDIA
Overseas Branch, No.65,
St. Marks Road,
Bangalore – 560001
IFSC Code: SBIN0006861

- i) Following codes are to be used by issuing bank for the purpose of Confirmation and amendment in Bank Guarantees:

Code	Purpose
MT760	Confirmation of Bank Guarantee
MT767	Amendment in Bank Guarantee

- j) Bank Guarantee issued on the SFMS platform with any other code other than mentioned above for the purpose shall not be acceptable to the Purchaser.

- k) The Bank Guarantee validity shall be extended as required till the completion of all contractual and warranty obligations in Full.
- l) In case BEML is constrained to extend the Performance Bank Guarantee beyond the warranty period submitted to its customer due to the failure of aggregates attributable to the supplies made by the bidder then the costs involved to BEML for such PBG extensions shall be borne by the supplier.
- m) E-PBG to be executed digitally through NeSL platform.
- n) UIN Number of BEML, Bengaluru Complex for executing E-PBG is **NCTGC2534P**

12. RIGHT TO VARY QUANTITIES &-QUANTITY OPTION CLAUSE:

- a) *Purchaser shall be entitled to increase the order quantity by 50 percent anytime during the currency of the contract, such that the contractor has reasonable time/notice for executing such increase.*
- b) BEML reserves the right to increase or decrease the quantity specified in the schedule of requirements without any change in the unit price or other terms and conditions within the agreed delivery schedule.

13. LIQUIDATED DAMAGES CLAUSE:

If the contractor fails to deliver the stores or any consignment thereof within the period prescribed for such delivery, BEML shall be entitled at their option to accept the delayed supply and to recover from the supplier as agreed liquidated damages, and not by way of penalty, a sum of 0.5% of the price of any stores per week subject to a maximum of 10% of the value of the purchase order which the supplier has failed to deliver as aforesaid for each week or part thereof during which the delivery of such stores may be in arrears.

The LD will be charged on the value of the affected delivery schedule excluding statutory levies, freight and insurance wherever not included in the price.

14. RISK PURCHASE CLAUSE:

The time and the date of delivery of the stores stipulated in the PO shall be deemed to be the essence of PO and delivery must be completed not later than the date specified therein. Shall the supplier fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, BEML shall be entitled at their option either;

- a. To purchase elsewhere, without notice to the supplier on the account and at the risk and cost of the supplier the stores not delivered or other of a similar description (where stores exactly complying with the description and readily procurable) without cancelling the PO in respect of consignment not due for delivery

or

- b. To cancel the purchase order.

In the event of action being taken under clause (a) or (b) above, the supplier shall be liable for any loss, which BEML may sustain on that account but the supplier shall not be entitled to any gain or purchases made against default. As soon as it is apparent that the

scheduled dates cannot be adhered to, an application shall be sent by the supplier to BEML, well before the expiry of the delivery period specified in the purchase order. Without prejudice to the foregoing rights, if such failure to deliver in proper time as aforesaid shall have arisen from any cause which BEML may admit as a reasonable ground for an extension of the time (and their decision shall be final) they may allow such additional time as they may consider justified by circumstances of the case. Delivery required to be made in lots shall be made in lots only and any extra deliveries involved either on account of repeated rejections or variance in supply of lots shall be liable for service charges of 5% of the purchase order value for each extra delivery.

15. SECRECY AND CONFIDENTIALITY:

- a) All the information, know-how, technical data, specification and drawing models or specimens furnished by BEML for the purpose of or in connection with the manufacture and supply of the stores hereby tendered constitute the property of BEML and the supplier shall keep them in strict confidence and he shall not divulge the same to anyone else except under the authority and for the purpose of BEML. All such documents, data, drawing, models and specimens are the property of BEML and shall be returned when done with or when demanded by BEML.
- b) The supplier shall not supply the components / spares exclusively manufactured for BEML with the Technical Data / Specifications / assistance furnished by BEML and shall not disclose my initiations, development of adaptations thereof to anyone else except with the written consent of BEML.
- c) BEML shall be entitled to prevent breach of the above and to claim damages in case of any breach. It is hereby mutually agreed that for breach of this agreement the Vendor shall pay, without actual proof of damages, a liquidated amount of Rs. 1.00 Crore (Rupees One Crore only).

Confidentiality agreement is attached as **Appendix E**.

16. AUTHORITY OF PERSONS SIGNING DOCUMENT

A person signing the tender or any other document in respect of the Purchase Order shall be deemed to have power to do so on behalf of the Supplier.

17. ACCEPTANCE OF ORDER

The supplier shall send Order Acceptance within two weeks from the date of LOI / LOA / Purchase Order or such other period as specified / agreed by the Purchaser. Purchaser reserves the right to revoke the order placed if the order confirmation differs from original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. The acceptance of deliveries or supplies by Purchaser as well as payments made in this regard shall not imply acceptance of any deviations. The Purchase Order in whole shall be deemed to have been accepted if supplier failing to no communicate is received within two weeks.

18. OTHER CONDITIONS

- a) The firm shall take necessary permission for their employees to enter the factory premises and the firm shall arrange ESI & PF coverage to their employees/labourers if any from their end.

The firm shall indicate ESI NUMBERS for the labourers hired or employed in advance in order to prepare work permit inside the factory.

- b) BEML will not have any kind of binding towards the compensation on case of injury / death to the firms employees while working in BEML premises or other wises.
- c) BEML will not have any kind of binding on damages or loss to the tools/instruments etc. brought by the firm for commissioning purpose.

19. PRICE, INVOICING AND PAYMENT: The agreed prices are fixed prices in the currency as specified in the Purchase Order. They shall include packing, forwarding, loading and carriage to the place specified by the Purchaser and are inclusive of all applicable taxes, duties etc. except for those specifically agreed between the supplier and purchaser. The method of invoicing shall be without prejudice to the parties; agreement as to the place of performance. Invoices shall be submitted bearing the Purchase Order number & date, item number / s and supporting documents as called for in the Purchase Order.

As soon as each shipment is made in line with the delivery schedule specified in the purchase order, the supplier shall send **one set of Original documents and three (3) sets of photocopies** each of the following documents to the address indicated below by courier service.

- i. Commercial Invoice
- ii. Delivery Challan
- iii. Packing List
- iv. BEML's Inspection clearance document(s), material test certificates and other applicable quality documents pertaining to the supplies.

Postal Address

The Deputy General Manager,
BEML, Bangalore Complex,
PB No.7501, New Thippasandra post,
Bangalore, Karnataka, India,
Postal Code - 560 075

20. PROGRESS REPORT:

The supplier shall regularly inform the progress of work and in such form as may be called for by the Purchaser from time to time. The submission and acceptance of such reports shall not prejudice the rights of the Purchaser in any manner.

21. QUALITY & WORKMANSHIP

The stores supplied shall be of the best quality and Workmanship shall be in strict conformity with all the drawings and specifications furnished with the Purchase Orders and shall answer to the description in all respects. All supplies shall be accompanied by supplier's works inspections / test certificates duly certifying, the Stores are in strict conformity with the drawings / specifications. However, final acceptance will be subject to inspection and approval at BEML works. Once the materials are rejected and communicated to the supplier, no request shall be entertained for re-inspection or acceptance of the stores. However, BEML reserves the right to re-inspect the stores and consider acceptance at its discretion.

22. QUALITY, CONDITION OF DELIVERY: The Supplier shall guarantee that the delivery is of good quality and free from all defects and in the case of services rendered that they are performed by skilled personnel and that new materials are used. The Supplier shall guarantee that the delivery corresponds exactly with the provisions of the agreement, the reasonable expectations of Purchaser regarding the characteristics, quality and reliability of delivery. The Supplier guarantees that the delivery is suitable for the purpose for which it is intended by its very nature or which is evident from the specifications listed and from the order.

The Supplier shall guarantee that the delivery complies with legal requirements applicable in India and other (international) Government regulations, as applicable. The Supplier guarantees that the delivery complies with legal requirements applicable in India and other (international) Government regulations, as applicable. The supplier shall guarantee that the delivery complies with the customary norms and standards in the relevant branch of trade or industry. The supplier shall be responsible for compliance with applicable technical, safety, quality, environmental requirements and other regulations in relation to his product, packaging, and raw and ancillary materials.

23. SUPPLY OF SAMPLE: (if applicable) The Contractor shall produce samples of all materials and shall obtain approval before he places bulk order for the material for incorporation in the works. In respect of materials for which samples are not kept or detailed specifications is not given hereinafter, such materials shall comply with the latest relevant Indian Standard Specifications a published up to the date of issue of this tender. The Contractor shall on demand produce original receipts vouchers/invoices in respects of materials supplied by him.

24. INSPECTION, TESTING & CONSEQUENCE OF REJECTION:

The goods and stores shall be of approved design and each part /component may be inspected and tested by the Purchaser prior to shipment and shall fully comply with relevant requirements of purchaser.

Purchaser has the right to inspect the delivery. In the event of rejection, Purchaser shall inform the Supplier accordingly and Purchaser shall be entitled to replacement or repair at its discretion or may proceed to terminate or annul the agreement. All this does not affect Purchaser's right to compensation.

In case the goods / stores are rejected at the time of inspection at BEML or the rejections are notices at the time of further processing the supplier will be informed of these rejections. On receipt of this information the supplier shall immediately arrange to collect the rejected items at his cost and risk and arrange for the replacement of goods within the shortest possible time. Under no circumstances the supplier shall compel the Purchaser to rework the rejected goods.

Wherever the supplier has not collected the rejected items within 60 days from the date of intimation, BEML shall have the right to dispose the goods and all cost related to the cost of material, statutory levies incurred both in procurement and disposal shall be recovered from the supplier from any of the bills that are due. The supplier shall have no claims whatsoever against the Purchaser for such disposal.

Purchaser or his authorized representative shall be entitled at all reasonable times during execution to inspect, examine and test at the Supplier's premises the material and workmanship of all stores to be supplied under the Contract, and if the part of the stores are being manufactured at other premises the Supplier shall obtain Purchaser's or his authorized representative's permission to inspect, examine and test as if the said stores are being manufactured at the Supplier's premises. Such inspection, examination and testing, if made shall not release the Supplier from any obligation under the Contract.

All costs related to inspections and re-inspections shall be borne by the Supplier. The cost of inspection staff / third party specified by the Purchaser shall be borne by Purchaser, unless otherwise specifically agreed. Whether the Contract provides for tests on the premises of the Supplier or any of his Sub-contractor/s, Supplier shall be responsible to provide assistance such as, labour, materials, electricity, fuels, stores, apparatus, instruments as may be required and as may be reasonably demanded to carry out such tests efficiently. Cost of any type test or such other special tests shall be borne by the Purchaser only if specifically agreed.

The supplier shall give the authorized representative of the Purchaser reasonable prior notice in writing of the date on and the place at which any stores will be ready for inspection / testing as provided in the Contract.

25. LAWS APPLICABLE

Domestic laws both substantive and procedure, for the time being in force including modification thereto shall govern contract. The competent Domestic courts shall have sole jurisdiction over the disputes between the BEML and the supplier. The making of all stores supplied must comply with the requirements of Domestic Acts relating to trade and merchandise marks and all the rules made under such acts.

26. RAW MATERIALS ARRANGEMENT

The supplier shall make his own arrangement to procure all raw materials required and BEML shall not be responsible for any assistance in such procurement or whatsoever.

27. IDENTIFICATION OF ITEMS / PIECES

The supplier shall indicate / emboss / engrave, suitable identification marks (Viz. BEML stock number, supplier code number, batch no. etc.,) on each item/piece (or) on all components at convenient non-machinable place as per drawing, wherever applicable.

Also, shall indicate BEML part number, PO No. and date in all delivery documents, invoices and correspondence, wherever applicable.

28. PACKING AND MARKING

- a) Packing to be in such a way that it should avoid transit/storage/handling damage.
- b) The supplier shall package the deliveries safely and carefully and pack them suitably in all respects considering the peculiarity of the material for normal safe transport by Sea / Air / Rail / Road to its destination suitably protected against loss, damage, corrosion in transit and the effect of tropical salt laden atmosphere. The packages shall be provided with fixtures / hooks and sling marks as may be required for easy and safe handling by mechanical means.

- c) The packing, shipping, storage and processing of the delivery must comply with the prevailing legislation and regulations concerning safety, the environment and working conditions. Items packed with raw / solid wood packing material shall be treated as per ISPM – 15 (fumigation) and accompanied by Phytosanitary / Fumigation certificate. If safety information sheets exist for a delivery or the packaging, the Supplier must always supply these sheets direct (at the same time).
- d) Supplier shall indicate approximate net weight, gross weight and dimension of the package to enable BEML to determine the mode of dispatch. The packing should withstand the weather conditions during transit. The packing should not damage the contents in the package while transporting and handling. The safety and handling precautions should be clearly marked on the packages. The packing should be easily transportable without any damage. Each consignment should have individual packing list.
- e) Marking shall include the following information in sequence on the frame commensurate with the size of package.

**To: M/s. BEML Limited, Bangalore Complex,
New Thippasandra,
Bangalore – 560075,
Karnataka State, India.**

Purchase order number:

Shipper's mark:

Package number:

Identification number:

Caution marks, if applicable:

Net weight, gross weight and cubic measurement, whichever is appropriate for the shipment.

- 29. APPLICABLE LAWS AND JURISDICTION OF COURTS:** Indian laws both substantive and procedure, for the time being in force including modifications thereto, shall govern Contract. The competent Indian courts shall have sole jurisdiction over disputes between purchaser and the Supplier.
- 30. JURISDICTION:** Courts of Bangalore alone shall have jurisdiction to decide any issue / dispute arising out of the Arbitration or this Purchase Order in exclusion of all other Courts. However, jurisdiction of any other court may be accepted by mutual discussion and agreement by and between BEML and the Supplier.
- 31. ARBITRATION:** Disputes if any, arising between BEML and the supplier in connection with this Purchase Order or any other matters connected herewith, the same will be mutually discussed and settled, failing which, the disputes shall be referred to a sole arbitrator to be appointed by BEML. The arbitration / proceedings shall be in accordance with the provisions of Arbitration and Conciliation Act 1996 and Rules framed there under. The place of arbitration shall be at Bangalore or any other place mutually decided by and between BEML and the supplier and all arbitration proceedings shall be conducted in English language. The award of the sole arbitrator shall be final and binding on all the parties.

DURING ARBITRATION: “Supplies under this Purchase Order, if reasonably possible, may continue by mutual agreement during the dispute / Arbitration proceedings”

32. INTELLECTUAL PROPERTY RIGHTS; LICENSES: If any Patent design, trademark or any other intellectual property rights apply to the delivery or accompanying documentation, Purchaser shall be entitled to the legal use thereof free of charge by means of a non-exclusive, worldwide, perpetual license. All intellectual property rights that arise due to the execution of the delivery by the Supplier and by its employees or third parties involved by the Supplier for performance of the agreement belong to Purchaser. The Supplier shall be obligated to do everything necessary to obtain or establish the above mentioned rights. The Supplier guarantees that the delivery does not infringe on any of the intellectual property rights of third parties. The Supplier shall also be obligated to do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged) claims by third parties.

The Supplier shall defend and indemnify the BEML against any claims, costs or expenses incurred by reason of any infringement of alleged infringement of any letters, patent, registered design, trademarks or trade name by the use of sale of the stores / goods / material and against all costs or damages which the BEML may undergo in legal action for such infringement or for which the BEML may become liable in any such action.

The supplier shall at all times indemnify BEML and shall take all risk of accidents or damage which causes a failure of the supply. The supplier shall comply with the provisions of Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971-as modified from time to time wherever applicable and shall also indemnify the Company from and against any claims under the aforesaid Act and the Rules.

33. BRIBES AND GIFTS:

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the supplier or his partner, agent or servant or anyone on his or their behalf to any officer, servant, representative or agent of BEML or any person on his or their behalf in relation to the obtaining or to the execution of or any other contract with BEML shall in addition to any criminal liability which the supplier may incur, subject the supplier to the cancellation of the PO and all other contracts with BEML and also to payment of any loss or damage resulting from any such cancellation to like extent as is provided in case of cancellation under **Clause-15** hereof. Any question or dispute as to the commission of any offence under the present clause shall be settled by BEML in such manner and on such evidence of information as they may think fit and sufficient and their decision shall be final and conclusive.

34. FORCE MAJEURE CLAUSE:

- a) Notwithstanding anything contained in the Contract, neither the Supplier nor the Purchaser shall be held responsible for total or partial non-execution of any of the contractual obligations, shall the obligation become unreasonably onerous or impossible due to occurrence of a 'Force Majeure' conditions which directly affect the obligations to be performed by the Purchaser or the Supplier. Such events include war, military operations of any nature, blockages, revolutions, insurrections, riots, civil commotions, insurgency, sabotage, acts of public enemy, fires, explosion, epidemics, quarantine restrictions, floods, earthquake, or acts of God, restrictions by Govt. authorities over which the Supplier or the acts on which the Purchaser has no control.

- b) The party claiming to be affected by Force Majeure shall notify the other party in writing without delay, within two weeks on the intervention and on the cessation of such circumstance. Extension of time sought by the Supplier along with supporting evidence and so granted by the Purchaser for the supply / work affected, if any, shall not be construed as waiver in respect of remaining deliveries.
- c) Notwithstanding above provisions, Purchaser shall reserve the right to cancel the order/ Contract, wholly or partly, in order to meet the overall delivery schedule and make alternative arrangements including arrangements with third party for completion of deliveries and other schedules. Purchase may takeover partly processed material at a mutually agreed price.

35. FALL CLAUSE

- a) The prices charged for the stores supplied under this P.O by the supplier shall in no event exceed the lowest price at which the supplier sells the stores of identical description to any other BEML Office / Division during the pendency of this PO.
- b) If at any time, during the said period, the supplier reduces the sale price of such stores or sells such stores to any other BEML Office / Division at a price lower than the price chargeable under this P.O and the price payable under this PO for the stores supplied after the date of coming into force of such reduction shall stand correspondingly reduced.

36. NON DISCLOSURE AND INFORMATION OBLIGATIONS:

The supplier shall provide Purchaser with all information pertaining to the delivery in so far as it could be of importance to Purchaser. The Supplier shall not reveal confidential information to its own employees not involved with the tender / Contract & its execution and delivery or to third parties. The supplier shall not be entitled to use the Purchaser's name in advertisements and other commercial publications without prior written permission from Purchaser.

37. ASSIGNMENT OF RIGHTS AND OBLIGATIONS; SUBCONTRACTING: The supplier is not permitted to sub-contract the delivery or any part thereof to third parties or to assign the rights and obligations resulting from this agreement in whole or in part to third parties without prior written permission from Purchaser. Any permission or approval given by the Purchaser shall, however, not absolve the supplier of the responsibility of his obligations under the contract.

38. DIVISION OF PATRONAGE: BEML reserves the right to avail the price offered for full quantity of the tender or part thereof or ignore the offer completely without assigning any reason whatsoever.

Splitting of Quantities not applicable considering the fact that "All the above UNDER FRAME & ROOF CABLE TRAYS items to be procured from Single Source in order to maintain uniformity."

Preference to Micro and small Enterprises (MSEs): NOT APPLICABLE considering the fact that this being first time project in India and splitting of quantities is not applicable.

39. INTEGRITY PACT:

The bidder / contractor should upload duly signed & stamped **Integrity Pact** (if the tender value is more than or equal to Rs.1.00 crore) as per prescribed format (**APPENDIX- A**) on plain paper as part of technical bid.

The bidder should put their authorized signature in the Integrity pact as a Contractor / bidder with their company seal along with witness's signature, name & address. **The agreement shall be in full as per format enclosed on a plain A4 size paper duly signed & stamped on all pages.**

The Integrity Pact envisages an agreement between the prospective tenderer and the buyer committing the persons/officials of both the parties not to exercise any corrupt influence on any aspect of the contract.

For the successful bidder, the integrity pact will remain valid up to 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

The Central Vigilance Commission (CVC) has appointed Shri Kasividyasagar & Shri Lt. Gen. Abhay Krishna as Independent External Monitor (IEM) to oversee the implementation of the Integrity Pact.

Address of IEM is as below:-

Shri Kasividyasagar, IAS (Retd.)

House no. 55,

Dream valley gated community,

Manikonda, Hyderabad – 500089.

Mobile no. +91 9771407778

Email : kasividyasagar@gmail.com

Shri Lt. Gen. Abhay Krishna , (Retd.)

4A-902, Gurjinder Vihar,

AWHO Township, Sector CHI-1

Greater Noida, UP - 201310

Mobile no: +91 9871234353

Email: abhayabk@gmail.com

40. GST TERMS & CONDITIONS:

1. The Supplier is required to comply with all the applicable provisions of the GST Laws/Rules/Notifications/Circulars and to furnish required documents/details within the prescribed time limit to enable BEML to claim the benefits of GST Input Tax Credit or any other benefit.
2. The Supplier is required to furnish proper Invoice/Supplementary Invoice/Debit Note/Credit Note in the form and manner prescribed under GST Laws/Rules/Notifications/Circulars containing all the particulars mentioned therein and within the prescribed time limit as per prevailing GST Laws/Rules/Notifications/Circulars. In case of non-compliance by the Supplier, BEML shall not make any payment towards GST against such invoice until it is complied with within the timeline prescribed under GST Laws/Rules/Notifications/Circulars, and also subject to BEML being in a position to avail GST Input Tax Credit as per applicable GST Laws/Rules/Notifications/Circulars.
3. In case of discrepancy in the data uploaded by the Supplier in the GSTN portal or in case of any shortages or rejection in the supply, BEML will notify the Supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue Credit note (details to be

uploaded in GSTN portal) for the shortages or rejections in the supplies, within the prescribed time limit to enable BEML to avail GST Input Tax Credit.

4. In case, the availment of GST Input Tax Credit by BEML is delayed for any reason other than those attributable to BEML, interest at applicable rate as prescribed under GST Laws/Rules/Notifications/Circulars for such delays shall be recovered from the Supplier.
5. In case Supplier delays declaring such invoice in his GST Return and GST Input Tax Credit availed by BEML is denied or reversed subsequently as per GST Laws/Rules/Notifications/Circulars, GST amount paid by BEML towards such reversal as per GST Laws/Rules/Notifications/Circulars shall be recoverable from Supplier along with applicable interest

If BEML has not paid/short paid to the Supplier for any invoices within the time limit prescribed under GST Laws/Rules/Notifications/Circulars due to non-compliance of GST Laws/Rules/Notifications/Circulars by Supplier or any other reason attributable to Supplier and leads to any GST Input Tax Credit reversal by BEML, any losses/expenses/cost/penalty, etc incurred by BEML shall be recoverable from the Supplier.

6. Wherever applicable, BEML will have the right to deduct "Tax Deducted at Source" at the rate prescribed under the GST Laws/Rules/Notifications/Circulars and to remit the same to the Government
7. In case of supplies made under Reverse Charge Mechanism, the Supplier needs to comply with the provisions under the GST Laws/Rules/Notifications/Circulars in terms of supply of Goods/Services and raising of invoice, so as to enable BEML to remit applicable GST to Govt., within the prescribed time limit and avail GST Input Tax Credit on the same. If the Supplier fails to comply with the above and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier. Further the Supplier has to mention that "the liability of payment of GST amounting to Rs is on the Recipient of Service" in the invoice raised on BEML.
8. The Supplier is required to comply with the E-Way Bill Provisions under GST Laws/Rules/Notifications/Circulars. If the Supplier fails to comply with the said provisions and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier.
9. In case of materials/goods issued to Supplier for Job Work, the Job Work Supplier is required to return the goods within the time limit prescribed in the Purchase Order. If the Job Work Supplier fails to return the goods as above, BEML will be entitled to raise a GST Supply Invoice on the Job Worker Supplier with applicable interest as per the provisions of GST Laws/Rules/Notifications/Circulars. In such cases, BEML will be entitled to recover all such GST/interest on GST /losses/expenses/cost/penalty, etc. incurred by BEML along with interest from the Job Work Supplier. Further in such cases where the GST invoice has been raised by BEML, on return of such goods after the prescribed time limit, the Job Work Supplier needs to return the same under GST invoice.
10. The Supplier have the option to give one Bank Guarantee of appropriate value after considering his estimated value of GST involved in invoices raised on BEML instead of Bank Guarantee for each Contract/Invoice. In case of payment through LC, suitable provisions/clause will be inserted while opening LC to ensure compliances of above conditions. However, if at any point of time value of such Bank Guarantee falls short of GST plus interest thereof, Supplier will have to either furnish Bank Guarantee for Differential value or such shortfall value of Bank Guarantee vis-à-vis GST plus interest thereof shall be withheld till Suppliers fulfils its obligations specified under above clauses.

BEML will be entitled to recover all losses/expenses/cost/penalty, etc. incurred by BEML along with applicable interest from the Supplier due to reasons other than those attributable to BEML.

11. If the Supplier is a Composition/Unregistered Dealer, the Supplier needs to comply with the provisions under the GST Laws/Rules/Notifications/Circulars in terms of supply of Goods/Service and raising of invoice. In case, the Supplier fails to comply with the above and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier along with applicable interest.

41. TDS clause:

Applicability of TDS under Income Tax Act 1961:

- a) Tax deduction at source will be applicable on the supplies made by domestic vendors against service purchase orders at the rate as applicable and will be deducted from invoice at the time of accounting of invoice (or) at the time of payment, whichever is earlier as per Income Tax Act, 1961.
- b) Tax deduction at source will be applicable on the supplies made by foreign vendors against service purchase orders at the rate as applicable and will be deducted from invoice at the time of accounting of invoice (or) at the time of payment, whichever is earlier as per Income Tax Act, 1961 or as per law of land as well as Double Taxation Avoidance Agreement (DTAA) between the countries.

Under Income Tax Act, Sec “194Q - Deduction of tax at source on payment of certain sum for purchase of goods” has been introduced effective from 01-07-2021

Extracts of the new provision is brought out below:

1. Any person, being a buyer who is responsible for paying any sum to any resident year, shall, at the time of credit of such sum to the account of the seller or at the time of payment thereof by any mode, whichever is earlier, deduct an amount equal to 0.1 per cent of such sum exceeding fifty lakh rupees as income tax.
- 2) If seller does not have PAN, rate of TDS applicable in such cases is 5%. In such cases income tax return filed u/s 139.
3. Provisions of this section shall not apply to a transaction on which (a) tax is deductible under any of the provisions of this act; and (b) tax is collected under the provisions of section 206C other than a transaction to which sub-section (iH) of section 206C Applies.

To meet the above compliance the below points will be followed by BEML:

- TDS at applicable rate will be deducted on all purchase of goods in line with Sec 194Q of the Income Tax Act, effective from 01-07-2021.
- Rate of TDS as per the extant Govt notification is 0.1% of sum exceeding Rs.50 lakhs during the year
- Wherever PAN details are not furnished, TDS at 5% will be recovered. In such cases income tax return filed u/s 139.
- The seller shall furnish PAN details immediately if not furnished earlier.

Note: For the purpose of arriving at Rs 50lakhs as at 2 above, value inclusive of GST combining purchases made by all units of BEML will be considered.

- 42. PRODUCT LIABILITY:** Supplier shall assume full responsibility for, indemnify and hold BEML and BEML's sub-contractors harmless from and against any liabilities, product liabilities, action, demand arising out of death of or injury to any person or damage to any property to have resulted from the defects of the ordered parts which are installed in BEML and BEML sub-

contractors' rolling stocks either as original facility or as spare parts and replacement parts under the control of this agreement. The total liability of the bidder to BEML under the purchase order shall not exceed the total purchase order value including Service Purchase Order, if any. However, this shall not limit the liability of the contractor under any other provisions of the contract which expressly impose a greater liability.

43. REVERSE AUCTION RFQ: Reverse Auction shall be conducted if Minimum 2 technically accepted firms received & Reverse auction will be as per BEML norms. (refer document **ReverseAuction_Terms** for details)

BEML LIMITED

PPENDIX- A

(To be executed on plain paper and applicable for all tenders of value _ Rs. 1 Crore and above)

INTEGRITY PACT

Between

BEML Limited (BEML) hereinafter referred to as “The Principal”

And

..... hereinafter referred to as “The Bidder/Contractor”

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for

.....
The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s). In order to achieve these goals, the Principal will appoint an independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or it there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitment of the Bidder(s)/ contractor(s)

- (1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c) The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further, the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or documents provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any. Similarly, the Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign Principals, if any. Further, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at **Appendix (A-1)**.
 - e) The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or any other form such as to put his reliability or creditability in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or act as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous Transgression

- (1) Bidders to disclose any transgression with any other public / government organisation that may impinge on the anti-corruption principle. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The period for which such transgression (s) is / are to be reported by the bidder shall be the last three years to be reckoned from date of bid submission. The transgression(s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in “Guidelines on Banning of business dealings”.

Section 6 – Equal treatment of all Bidders /Contractors /Sub-contractors

- (1) The Bidder(s)/ Contractor(s) undertaker(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or of the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer

Section 8 – Independent External Monitor / Monitors

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact.
The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. It will be obligatory for him to treat the information and documents of the Bidders/Contractors as confidential. He reports to the CMD, BEML.
- (3) The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Subcontractor(s) with

confidentiality.

- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will submit a written report to the CMD, BEML, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise submit proposals for correcting problematic situations.
- (7) If the Monitor has reported to the CMD, BEML, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, BEML has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (8) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by CMD of BEML

Section 10 – Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Corporate Office of the Principal, i.e. Bangalore.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) The bidder shall not approach the Courts while representing the matters to IEMs and he/ she will await their decision in the matter.
- (6) In case of joint venture, all the partners of the joint venture should sign the Integrity Pact. In

case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub- contractors also sign IP.

- (7) In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organization may adopt any mediation rules for this purpose.

In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract.

The fees / expenses on dispute resolution shall be equally shared by both the parties.

- (8) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the integrity pact will prevail

(For & On behalf of the Principal)

(Office Seal)

Place-----

Date -----

Witness 1:
(Name & Address)

Witness 2:
(Name & Address)

(For & On behalf of Bidder/Contractor)

(Office Seal)

Place-----

Date -----

Witness 1:
(Name & Address)

Witness 2:
(Name & Address)

Appendix A-1**(Applicable Agents / Suppliers to Sign, Seal & Upload / Submit)****GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS**

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with BEML LTD shall apply for registration in the prescribed Application-Form available on www.bemlindia.in.
- 1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/ salary/ retainer ship being paid by the principal to the agent before the placement of order by BEML LTD.
- 1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.
- 2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY:
 - 2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:
 - 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
 - 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.
 - 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/representatives in India, may be paid by BEML LTD in Indian Rupees only.
 - 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
 - 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.
 - 2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.
 - 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by BEML LTD in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.
 - 2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
 - 2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BEML LTD. Besides this there would be a penalty of banning business dealings with BEML LTD or damage or payment of a named sum.

Signature

(For & On behalf of Bidder/Contractor)

APPENDIX-B**COMPLIANCE FOR SUBMISSION OF NON - DISCLOSURE AGREEMENT****Bid Invitation No** :**Firm** :

Sl. No.	Clause Description	Complied / Not Complied	Remarks
01	Interested Bidders have to submit Non-Disclosure Agreement as per the prescribed format provided by BEML along with this tender.		

Authorized signatory with company seal / stamp

APPENDIX – C

COMPLIANCE REPORT OF GENERAL TERMS & CONDITIONS

(To be submitted along with Technical Bid)

Bid Invitation No :**Firm** :**Item details** :

Sl. No.	Terms / Clause	Complied	Not Complied	Remarks
1.	DEFINITIONS & INTERPRETATIONS			
2.	SUBMISSION OF THE TENDER			
3.	PURCHASE PREFERENCES			
4.	SUPPLIERS SHARING LAND BORDER WITH INDIA			
5.	DELIVERY TERMS			
6.	PAYMENT			
7.	PRICE BID VALIDITY			
8.	FIRM PRICE			
9.	INSPECTION			
10.	WARRANTY			
11.	PERFORMANCE BANK GUARANTEE (PBG)			
12.	RIGHT TO VARY QUANTITIES & QUANTITY OPTION CLAUSE			
13.	LIQUIDATED DAMAGES CLAUSE			
14.	RISK PURCHASE CLAUSE			
15.	SECRECY AND CONFIDENTIALITY			
16.	AUTHORITY OF PERSONS SIGNING DOCUMENT			
17.	ACCEPTANCE OF ORDER			
18.	OTHER CONDITIONS			
19.	PRICE, INVOICING AND PAYMENT			
20.	PROGRESS REPORT			
21.	QUALITY & WORKMANSHIP			

Authorized signatory with company seal / stamp

APPENDIX – C

COMPLIANCE REPORT OF GENERAL TERMS & CONDITIONS

(To be submitted along with Technical Bid)

Bid Invitation No :**Firm** :**Item details** :

22.	QUALITY, CONDITION OF DELIVERY			
23.	SUPPLY OF SAMPLE (If Applicable)			
24.	INSPECTION, TESTING & CONSEQUENCE OF REJECTION			
25.	LAWS APPLICABLE			
26.	RAWMATERIALS ARRANGEMENT			
27.	IDENTIFICATION OF ITEMS / PIECES			
28.	PACKING AND MARKING			
29.	APPLICABLE LAWS AND JURISDICTION OF COURTS			
30.	JURISDICTION			
31.	ARBITRATION			
32.	INTELLECTUAL PROPERTY RIGHTS; LICENSES			
33.	BRIBES AND GIFTS			
34.	FORCE MAJEURE CLAUSE			
35.	FALL CLAUSE			
36.	NON DISCLOSURE AND INFORMATION OBLIGATIONS			
37.	ASSIGNMENT OF RIGHTS AND OBLIGATIONS; SUBCONTRACTING			
38.	DIVISION OF PATRONAGE			
39.	INTEGRITY PACT			
40.	GST TERMS & CONDITIONS			
41.	TDS CLAUSE			
42.	PRODUCT LIABILITY			
43.	REVERSE AUCTION TERMS			

Authorized signatory with company seal / stamp

APPENDIX – X

SL No.	Description	Complied / Not-Complied	Remarks
1	All necessary spares, consumables and any other material for preventive maintenance as per Operation and Maintenance Manual(s) required till the completion of DNP shall be supplied at free of cost and shall be kept on site at his own cost.		
2	Defect Notification Period: DNP starts from date of supply of materials and ends after 30 months from the date of placement of trains into revenue service.		
3	There will be additional requirement of UNDER FRAME & ROOF CABLE TRAYS for repair/replacement during CAMC period (15 Years) of revenue service. The supplier has to give concurrence for the additional requirement & support on as & when required basis. CAMC will start after successful completion of Defect Notification Period (DNP).		
4	Design and customization of product/sub system to meet requirement, at the cost of this project shall not be used by BEML's supplier(s) in any other project other than BEML and ICF.		

APPENDIX D

PERFORMANCE BANK GUARANTEE

Bank Guarantee No.....
 Dated
 Amount
 Valid upto
 Claim upto

The General Manager (Materials- Management)

BEML

Bangalore Complex

PB No 7501

New Thippasandra

Bangalore 560075

1. This deed of Guarantee made this day of..... (Month& year) between Bank of..... (Hereinafter called the "Bank") of the one part, and BEML LIMITED (Hereinafter called "the Employer") of the other part.
2. Whereas BEML LIMITED has awarded the contract for..... (Name of work as per PO) (Hereinafter called the "Contract") to..... (Name of the Contractor) (Hereinafter called "the Contractor").
3. AND WHEREAS the Contractor is bound by the said Contract to submit to the Employer a Performance Security for a total amount of.....(Amount in figures and words).
4. Now, We the Undersigned.....(Name of the Bank) being fully authorized to sign and to incur obligations for and on behalf of and in the name of.....(Full name of Bank), hereby declare that the said Bank will guarantee the Employer the full amount of Rs. (Amount in figures and words) as stated above.
5. NOW THEREFORE, We hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor and we hereby unconditionally, irrevocably and without demur undertake to immediately pay to the Employer upon first written demand and without cavil or argument, any sum or sums within limits of.....(Amount of Guarantee) as aforesaid without reference to the Contractor and without your needing to prove or show grounds or reasons for your demand for the sum specified therein. The Bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this Guarantee shall be absolute and unequivocal.
6. This Guarantee is valid till.....(The initial period for which this Guarantee will be valid must be for at least 6-months (six months) longer than the anticipated expiry date of defect liability period / Warranty period as stated in Clause 11 of Annexure IV - Notice Inviting Tenders.
7. At any time during the period in which this Guarantee is still valid, if the Employer agrees to grant a time extension to the Contractor or if the Contractor fails to complete the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under Para 5, above, it is

understood that the Bank will extend this Guarantee under the same conditions for the required time on demand by the Employer and at the cost of the Contractor.

8. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Contractor, will in no way release us from the liability under this Guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.
9. The Guarantee here in before contained shall not be affected by any change in the Constitution of the Bank or of the Contractor.
10. The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this deed.
11. The expressions "the Employer", "the Bank" and "the Contractor" hereinbefore used shall include their respective successors and assigns.
12. Notwithstanding anything contained herein:
 - (a) Our liability under this Bank Guarantee shall not exceed Rs.....
(Rs.....)
 - (b) This Bank Guarantee shall be valid up to.....
 - (c) We are liable to pay the Guarantee amount or part thereof under this Bank Guarantee only & only if you serve upon us a written claim or demand on or before

In witness whereof I/We of the bank have signed and sealed this Guarantee on the.....day of..... (Month & year) being herewith duly authorized.

For and on behalf of theBank.

Signature of Authorized Bank officials.

Name :.....

Designation :

Stamp/Seal of the Bank.....

Signed, sealed and delivered for and on behalf of the Bank by the above namedin the presence of:

Witness 1.

Signature.....

Name.....

Address.....

Witness 2.

Signature.....

Name.....

Address.....

APPENDIX- E

CONFIDENTIALITY AGREEMENT**(To be typed on plain paper and submitted along with the technical bid)**

This Confidentiality Agreement is made and entered into between M/s BEML, (hereinafter referred to as BEML), a Govt. of India Undertaking under Ministry of Defence, having its Registered Office at BEML Soudha, No.23/1, 4th Main, Sampangirama Nagar, Bangalore – 560 027 and M/s ----- (hereinafter referred as XXXX) having its Registered Office at..... M/s. BEML, has been patronizing XXXX for components / spares listed in Annexure hereto. A need has been felt to revitalize the business relationship for mutual advantage.

- 1) It is mutually, therefore, agreed that the following shall form part of the terms and conditions for continued business:
 - a) The supplier shall not divulge to anyone else except under the authority and for the purpose of BEML, all information such as technical data, specifications, drawings, models of specimens furnished / supplied by BEML for the purpose of manufacture or in connection with developmental activities, constitute the property of BEML and the supplier shall keep them in strict confidence. This has been explicitly stated in all the details to the supplier through Purchase Order / Drawings etc., released.
 - b) The supplier shall not supply the components / spares exclusively manufactured for BEML with the Technical Data / Specifications / assistance furnished by BEML and shall not disclose my initiations, development of adaptations thereof to anyone else except with the written consent of BEML.
 - c) BEML shall be entitled to prevent breach of the above and to claim damages in case of any breach. It is hereby mutually agreed that for breach of this agreement the Vendor shall pay, without actual proof of damages, a liquidated amount of Rs. 1.00 Crore (Rupees One Crore only).
 - d) **ARBITRATION:** In the event of any question or disputes arising under these conditions or any other terms and conditions of contract or in connection with this contract (except as to any matters the decision of which is specially provided for by these conditions) the same shall be referred to an award of a Sole to be appointed by BEML with the consent of the Contractor / Vendor Supplier and the Arbitration proceedings of Arbitration and Conciliation Act 1996. The Courts in Bangalore alone shall have jurisdiction to deal and decide any legal matter or dispute whatsoever arising out of this Contract.
- 2) BEML shall be entitled to prevent breach of the above and to claim damages in case of any breach.
- 3) The Signatories hereto declare that they have the sanction and power to execute and deliver this binding agreement.

IN WITNESS WHEREOF, the parties hereto have set their respective hands to this Confidentiality Agreement on written in the presence of Witness.

For BEML**For M/s. XXXX****WITNESS:**

1.

1.

2.

2.

APPENDIX – F

**DECLARATION TO CLAIM PURCHASE PREFERENCE UNDER PUBLIC
PROCUREMENT POLICY - PREFERENCE TO 'MAKE IN INDIA' ORDER 2017**

(To be executed in plain paper and to be submitted along with technical bid)

Preference shall be given to Class-I local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products.

The Bidder shall self certify (or) provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving percentage of local content.

In cases of procurement for a value in excess of Rs.10 crores, Class-I local supplier / Class-II local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving percentage of local content

We, M/s _____ with its registered office at _____ claim purchase preference under Public Procurement Policy – Preference to 'Make in India' Order 2017

CONDITION	Bidder to tick (√) the respective Boxes	
	COMPLIED	NOT COMPLIED
The Goods / Items / Stores, offered meets the minimum local content of 50% . Local content means the amount of value added in India which shall be the total value of the item / Goods/ Stores procured (excluding net domestic Indirect taxes) minus the Value of the import content in the item (including all custom duties) as a proportion of the total value in Percent		
The Goods / Items / Stores, offered meets the minimum local content of more than 20% and less than 50% . Local content means the amount of value added in India which shall be the total value of the item / Goods/ Stores procured (excluding net domestic Indirect taxes) minus the Value of the import content in the item (including all custom duties) as a proportion of the total value in Percent		
Address of Location(s) at which the local value addition is made.		

Authorized signatory with company seal / stamp

APPENDIX – G

CERTIFICATE FOR LAND BORDER SHARING

(To be executed in plain paper and to be submitted along with technical bid)

Bidders to refer, GOI office memorandum No. F.No.6/18/2019-PPD of Department of Expenditure Public Procurement Division, amended time to time and its subsequent Orders/Notifications

The Bidder accordingly Certifies as below:

“ I / We, have read the clause regarding restrictions on procurement from the bidder of a country which shares a land border with India; I certify that the Bidder / Vendor is not from such a country or, if from such a country, has been registered with the Competent Authority. I here by Certify that this Vendor / Bidder fulfills all requirements in this regard and is eligible to be concerned for procurement on BEML SRM / GeM ”

[Where ever applicable, evidence of valid registration by the Competent Authority shall be attached]

Authorized signatory with company seal / stamp

APPENDIX – I

**COMPLIANCE REPORT TO BEML DRAWINGS / TECHNICAL DELIVERY
CONDITIONS (TDC)**

(To be submitted along with Technical Bid)

Bid Invitation No :

Firm :

Sl. No.	Clause Description	Complied / Not Complied	Remarks
01	The technical requirement as per the PTS & Drawings enclosed is fully understood by the bidding firm and the firm is bidding for the same. PTS ref: FPIIC/TD/570 dated 15/12/2025 Roof Cable Trays (LH & RH) Drawings Underframe Cable Trays (LH & RH) Drawings		
02	Bidders to confirm whether quotation is submitted for all tendered line items as evaluation / Commercial ranking shall be arrived based on the Grand Total of all the tendered items together.		

1. Bids of firms having any history of pending litigations, default in and Risk purchase against previous orders of BEML (including all Divisions) are liable for rejection at any stage if found at later stage. Hence, Bidders are requested to cross-check at their end before participation in the Tender.

2. Technical offers not complying / fulfilling the above requirements are liable to be rejected.

3. The Price details/commercial bid details should not be given in Technical bid , if any bidder have given any price/commercial details in the Technical bid , their offer is liable for rejection and will not be considered.

I / We certify that to the best of my/our knowledge, the information & particulars furnished above are true. It is understood that the information furnished will be treated as confidential and will not be divulged to unauthorized persons.

Authorized signatory with company seal / stamp

LIST OF DOCUMENTS ATTACHED WITH THE TENDER

- 1) Notice Inviting Tender (NIT)
- 2) Non-Disclosure Agreement
- 3) PTS ref: FPIIC/TD/570 dated 15/12/2025
- 4) ReverseAuction_Terms (Applicable in case Reverse Auction Event is conducted)

Contact Details:

Email ID: ravikumar.adepu@bemltd.in / Prasanna.n@bemltd.in

Phone: 080-25022639 / 080-25022634

Address Details for Sending Original Hard Copy of Non-Disclosure Agreement

Kind Attn: Mr. Prasanna N
DGM (MM B/O Rail BC)
Functional Head- Purchase- Commuter Rail
M/s. BEML LIMITED
BANGALORE COMPLEX,
POST BOX: 7501,
NEW THIPPASANDRA POST,
BANGALORE-560075

- Email ids for correspondence : ravikumar.adepu@bemltd.in / prasanna.n@bemltd.in / mahanthesh.gm@bemltd.in
- Any queries/clarifications may be sent to the above mail ids.
- It is suggested that all the interested bidders may obtain all the clarifications if any before submitting the bids.
- Any modification of tender conditions which may become necessary, shall be made by BEML and the same will be intimated in BEML SRM portal.
- All Corrigenda, Addenda, Amendments, Clarifications etc, if any issued shall be part of the Bidding documents. Prospective Bidders shall sign the same with seal and upload as a part technical bid

NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement (hereinafter referred to as “the Agreement”) is made on this.....day of (“Effective date”) by and between:

BEML Limited, a Govt. of India Undertaking under the administrative control of Ministry of Defence, Government of India and a company incorporated under the provisions of Companies Act 1956, having its registered & Corporate Office at BEML SOUDHA", 23/1, 4th Main, SR Nagar, Bengaluru-560 027, represented by **Mr. Prasanna.N, DGM, Materials, Commuter Rail SBU** (hereinafter referred to as “The Principal”/”BEML”, which expression shall mean and include its successors in interest and permitted assigns) on the First Part

AND

M/s having its registered Office at represented by its Mr./Ms. (hereinafter called as “The contractor”, which expression shall mean and include its successors in interest and permitted assigns) on the Other Part.

Hereinafter the Principal and the contractor shall be collectively referred as the “Parties” and individually referred to as a “Party” in reference to this agreement.

1.0 PURPOSE

Ministry of Railways (hereinafter referred to as MOR), Government of India have decided to develop indigenous trainsets for speeds of 280/249 km/h on Standard Gauge through BEML (“Project”).

The purpose of this Agreement is to enable the contractor to properly manage and maintain the confidentiality of the information being provided or disclosed by The Principal for the development of the indigenous trainset compatible with the Project.

2.0 DEFINITIONS

The following terms as used in this Agreement are defined as follows:

2.1 “Confidential Information” shall mean:

Confidential information as provided or shared by the Principal, in connection with or relating to the Project, to the contractor, any information related to the Project (such as, but not limited to technical documents and technical data, business documents, drawings and commercial data) including written information, and information contained in any form of media or device, that is clearly identified by The Principal as ‘confidential’/’Proprietary’ at the time of its disclosure.

2.2 Notwithstanding anything else contained in this Agreement, the Confidential Information shall not include any information:

- (a) that is, at the time of its disclosure, possessed by the contractor without owing any confidentiality obligation;
 - (b) with regard to the technology or knowledge that is independently developed by the contractor without use of or reference to any Confidential Information;
 - (c) that is properly acquired by the contractor from a third party without owing any
-

confidentiality obligation and such third party is not in breach of any confidentiality obligation relating to such information.

- (d) that the Principal, by prior written consent, permits the disclosure (however subject to terms and conditions of such consent from the Principal).
- (e) that is disclosed by the Principal to a third party without imposing any confidentiality obligation thereon; or
- (f) that subsequently becomes publicly known for a reason other than that attributable, directly or indirectly, to the contractor after its disclosure.

3.0 CONFIDENTIALITY

3.1 The contractor shall be obligated to keep the Confidential Information in confidence with the reasonable care of a good manager and shall not disclose or divulge the Confidential Information to any third party. Upon discovery of any breach of this Agreement or improper disclosure or misuse of the Confidential Information, the contractor shall notify the Principal and shall take all necessary actions to prevent any further breach, improper disclosure or misuse, including by causing the persons to whom the contractor disclosed the Confidential Information to agree and adhere to non-disclosure terms similar to those set forth in this Agreement.

3.2 Notwithstanding Section 3.1 above, the contractor may disclose Confidential Information:

- (i) to the extent necessary, to (a) The contractor's officers and employees (hereinafter collectively referred to as the "Employees") who need to know such Confidential Information for purposes of the Project, (b) lawyers, advisors and other specialists owing confidentiality obligations under applicable laws, regulations or agreements and who are engaged by the contractor to render services in connection with the Project (c) potential subcontractors/manufacturers/suppliers of the contractor and (ii) in accordance with applicable laws, rules and regulations, and any mandatory order by a court with jurisdiction or other public agency with jurisdiction; provided, however, that, if, and legally permitted to do so, the contractor shall promptly notify the Principal and take reasonable steps to assist the Principal in contesting such order or otherwise in protecting the Principal's rights prior to disclosure, to minimize the Confidential Information which is disclosed to follow such order.

3.3 The contractor shall impose upon all of the employees who have or have had access to the confidential information, confidentiality obligations which continue after such Employee's retirement/resignation /leave from the contractor, equivalent to those of the contractor under this Agreement and shall ensure such Employees comply there with. The contractor shall be jointly and severally responsible with such Employees (including former Employees) for any breach of such confidentiality obligations by such Employees (including former Employees).

3.4 The contractor shall insert the relevant clause in their agreement/contract to impose the same obligation as stipulated in this Agreement to other members, consultants, subcontractors, attorneys, manufacturers, suppliers etc. as stated at Section 3.2 above.

Provided always that for breach of the confidentiality obligation by the consultants, subcontractors, attorneys, manufacturers, suppliers etc., the Contractor shall be held liable and responsible for its consequences.

4.0 INTELLECTUAL PROPERTY RIGHTS

The Parties have expressly understood and agreed that all rights, including but not limited to those rights for property and intellectual property rights (including but not limited to patent rights, design rights, copyrights, trade secret rights and all other intellectual and industrial property rights of any sort throughout the world, the same shall apply hereinafter), regarding the Confidential Information or any other information mutually shared among the Parties will remain the exclusive property rights of the Principal.

5.0 NO WARRANTIES

The contractor has expressly understood and agreed that the Principal only have obligation under or by virtue of this Agreement to enter into furnishing, trading, development, or technology licensing agreement, or any other agreement, any products, services, or any technologies with respect to the Project.

The Principal does not warranty on the accuracy or suitability of the Confidential /Proprietary Information being exchanged under this Agreement and all Confidential Information is provided on an "As Is" basis.

6.0 EXPORT CONTROL

Parties hereby confirm and agree to adhere to the Export Control laws and regulations and perform any necessary procedures, including obtaining export permits.

7.0 DAMAGES

The Contractor agrees to indemnify, save and hold harmless the Principal from and against any and all losses, liabilities, expenses (including, legal fees and costs), claims, liens, damages or the like (limited to common direct damages actually incurred) incurred by the Principal as a result of any breach of any provision of this Agreement.

8.0 GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the Republic of India.

9.0 JURISDICTION

This NDA shall be subject to the exclusive Jurisdiction of courts at Bangalore.

10.0 DISPUTE RESOLUTION:

The Parties shall endeavor to resolve all disputes arising out of this Agreement or relation thereto, amicably through mutual discussions through their authorized representatives or by negotiation, mediation, conciliation etc.

In case of disputes between CPSE's or a Government Department(s)/Organization(s)

Any unresolved disputes between the parties shall be settled

by referring the same to AMRCD forum of DPE, Government of India in terms of the DPE OM No. 05/0003/2019-FTS-10937 dated 14.12.2022 and DPE OM No : 05/0002/2023-AMRCD dated 25/07/2024 in case of Government agencies.

(In case of Private firms)

Any unresolved disputes shall be referred to and resolved by arbitration with the rules of Arbitration of the India International Arbitration Centre (IIAC), New Delhi. The Arbitration shall consist of a Sole Arbitrator to be appointed in accordance with the Rules of IIAC. The arbitration proceedings shall take place/seat of arbitration shall be New Delhi, and be conducted in the English Language. The Arbitration proceedings will be administered by the India International Arbitration Centre (Conduct of Arbitration) Regulations, 2023 and all arbitration proceedings shall be conducted in English language. The award of the sole arbitrator shall be final and binding on all the parties

11.0 TERM

11.1 The effective term of this Agreement shall be for a six (6) years period from the date hereof, and thereafter automatically extended for successive period of one (1) year each, unless each party shall have otherwise notified to the other parties in writing at least one (1) month prior to the expiry of this agreement or any extension thereof.

11.2 Notwithstanding the above, the obligations of the contractor in relation to the Confidential Information shall survive after the termination of this Agreement.

11.3 Upon the termination of this Agreement, or at any time prior thereto upon the written request of The Principal, The contractor shall cease all use of and shall promptly return to The Principal (at the expense of the contractor), or shall promptly destroy in accordance with the reasonable instructions of The Principal, all of the Confidential Information it received that is in tangible or electronic/digital form (including but not limited to originals, all summaries, copies and excerpts). In the event of its destroying, the contractor shall destroy such Confidential Information by the way of non-reusable.

12.0 MISCELLANEOUS

12.1 This Agreement constitute the entire agreement between the Parties as to the subject matter hereof and supersedes any and all previous agreements or communication, whether oral or written, as to its subject matter. It may be modified only by the written agreement of the Parties.

12.2 Any confidential information disclosed to contractor by The Principal before execution of this Agreement shall be treated subject to this agreement.

12.3 If any provision or provisions of this Agreement declared invalid or unenforceable, such invalidity or unenforceability shall not render the entire agreement invalid. Rather, this Agreement shall be construed as if not containing the particular invalid or unenforceable provision, and the right and obligations of each Party shall be construed and enforced accordingly.

12.4 No failure or delay by each Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercises of any rights, powers or privileges hereunder.

12.5 This Agreement constitutes a non-disclosure agreement only and shall not be construed as a teaming, joint venture or other such arrangement. Nothing in this Agreement shall grant any Party the right to make commitments of any kind for or on behalf of the other Party without the prior written consent of the such other Party.

13 It is expressly understood and agreed by and between.....and BEML that BEML is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that BEML is an independent legal entity with power and authority to enter into contracts solely in its own behalf under the applicable Laws of India and general principles of Contract Law. expressly agrees, acknowledges

and understands that BEML is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly,..... hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this contract and covenants not to sue the Government of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement"

"Whereof, the parties hereto have caused this Agreement to be executed on the day, month and year specified below.

For & on behalf of **The Principal**

For and on behalf of **The contractor**

Signed by

Signed by

Name

Name

Position

Position

Date

Date

Company

Company

Company Stamp

Company Stamp

WITNESSES:

1 Signed by

2. Signed by

Name

Name

Designation

Designation

REVERSE AUCTION TERMS:

Reverse Auction would be conducted for the technically qualified firms (2 or more firms) with proper training on Reverse Auction process.

If reverse auction is conducted, then the start bid price in reverse auction by any vendor shall be lesser than or equal to the quote by that vendor in their commercial bid.

On completion of reverse auction, the commercial bids of technically acceptable vendors would be opened to verify the start bid price in reverse auction by any vendor is equal or less than the commercial bid by that vendor. In case it is noticed that the start bid price by any vendor is more than the commercial bid, then the vendor will not be considered for further commercial evaluation.

In case the technically accepted vendor is not participating in reverse auction, then the commercial bid of the firm would not be opened.

Bid invitation

Information

Description: Cable Trays (Underframe and Roof) - HSR
Bid invitation number: 6300040369

Bid invitation rules

Bid invitation currency: INR
Timezone: UTC+53
Submission period: 28.02.2026 17:00:00
Tech Opening date: 28.02.2026 17:30:00
Created On: 17.02.2026 03:46:14

Bid invitation text:

Please note that bidder should be having a valid Class-III Digital Signature Certificate issued by authorized Certifying Authority to submit bid in our SRM e-Procurement system. Interested bidders can contact BEML through e-mail: admin.srm@beml.co.in to obtain the username & password for submitting the quotations. In case of any queries, you may contact BEML SRM Team on phone no: 080-22963269.

Commercial bid document SHOULD NOT BE enclosed with Technical Bid Documents. If uploaded the Quotation submitted by bidder will be liable for rejection without any discretion.

Bidders to note that post tender price increases will not be permitted / considered.

Attachments:

TENDER-6300040369-DOCS

TENDER-6300040369-DOCS

Digital Signature

Bid invitation details

Item	Product Price Condition	Description	Vendor product number	Delivery date/ performance period	Quantity
1	84321008	UF CONTROL CABLE TRAY KIT-DTC		00:00:00	4.000 SET
	Basic Price		INR		

Bid invitation

Information

Description: Cable Trays (Underframe and Roof) - HSR

Bid invitation number: 6300040369

Item	Product Price Condition	Description	Vendor product number	Delivery date/ performance period	Quantity
	CGST - Central GST	%			
	SGST - State GST	%			
	UTGST	%			
	IGST -Integrated GST	%			
2	84321009	UF POWER CABLE TRAY KIT -DTC		00:00:00	4.000 SET
	UTGST	%			
	IGST -Integrated GST	%			
	SGST - State GST	%			
	CGST - Central GST	%			
	Basic Price	INR			
3	84421008	UF CONTROL CABLE TRAY KIT -MC		00:00:00	8.000 SET
	Basic Price	INR			
	CGST - Central GST	%			
	SGST - State GST	%			
	IGST -Integrated GST	%			
	UTGST	%			
4	84421009	UF POWER CABLE TRAY KIT -MC		00:00:00	8.000 SET
	Basic Price	INR			
	CGST - Central GST	%			
	SGST - State GST	%			
	IGST -Integrated GST	%			
	UTGST	%			
5	84521008	UF CONTROL CABLE TRAY KIT -TC1 PRM		00:00:00	2.000 SET
	Basic Price	INR			
	CGST - Central GST	%			
	SGST - State GST	%			
	IGST -Integrated GST	%			
	UTGST	%			
6	84521009	UF POWER CABLE TRAY KIT -TC1 PRM		00:00:00	2.000 SET

Bid invitation

Information

Description:Cable Trays (Underframe and Roof) - HSR

Bid invitation number:6300040369

Item	Product Price Condition	Description	Vendor product number	Delivery date/ performance period	Quantity
	Basic Price		INR		
	CGST - Central GST		%		
	SGST - State GST		%		
	IGST -Integrated GST		%		
	UTGST		%		
7	84621008	UF CONTROL CABLE TRAY KIT -TC2 EX		00:00:00	2.000 SET
	CGST - Central GST		%		
	Basic Price		INR		
	SGST - State GST		%		
	IGST -Integrated GST		%		
	UTGST		%		
8	84621009	UF POWER CABLE TRAY KIT -TC2 EX		00:00:00	2.000 SET
	UTGST		%		
	IGST -Integrated GST		%		
	SGST - State GST		%		
	CGST - Central GST		%		
	Basic Price		INR		
9	84321006	ROOF LH CABLE TRAY KIT-DTC		00:00:00	5.000 SET
	Basic Price		INR		
	CGST - Central GST		%		
	UTGST		%		
	IGST -Integrated GST		%		
	SGST - State GST		%		
10	84321007	ROOF RH CABLE TRAY KIT -DTC		00:00:00	5.000 SET
	Basic Price		INR		
	CGST - Central GST		%		
	SGST - State GST		%		
	IGST -Integrated GST		%		
	UTGST		%		

Bid invitation

Information

Description: Cable Trays (Underframe and Roof) - HSR

Bid invitation number: 6300040369

Item	Product Price Condition	Description	Vendor product number	Delivery date/ performance period	Quantity
11	84421006	ROOF LH CABLE TRAY KIT -MC		00:00:00	8.000 SET
		Basic Price	INR		
		CGST - Central GST	%		
		SGST - State GST	%		
		IGST -Integrated GST	%		
		UTGST	%		
12	84421007	ROOF RH CABLE TRAY KIT -MC		00:00:00	8.000 SET
		Basic Price	INR		
		CGST - Central GST	%		
		SGST - State GST	%		
		IGST -Integrated GST	%		
		UTGST	%		
13	84521006	ROOF LH CABLE TRAY KIT -TC1 PRM		00:00:00	2.000 SET
		UTGST	%		
		IGST -Integrated GST	%		
		SGST - State GST	%		
		CGST - Central GST	%		
		Basic Price	INR		
14	84521007	ROOF RH CABLE TRAY KIT -TC1 PRM		00:00:00	2.000 SET
		Basic Price	INR		
		CGST - Central GST	%		
		SGST - State GST	%		
		IGST -Integrated GST	%		
		UTGST	%		
15	84621006	ROOF LH CABLE TRAY KIT -TC2 EX		00:00:00	2.000 SET
		UTGST	%		
		IGST -Integrated GST	%		
		SGST - State GST	%		
		CGST - Central GST	%		

Bid invitation

Information

Description: Cable Trays (Underframe and Roof) - HSR

Bid invitation number: 6300040369




Item	Product	Description	Vendor product	Delivery date/	Quantity
	Price Condition		number	performance period	
	Basic Price		INR		
16	84621007	ROOF RH CABLE TRAY KIT -TC2 EX		00:00:00	2.000 SET
	Basic Price		INR		
	CGST - Central GST		%		
	UTGST		%		
	IGST -Integrated GST		%		
	SGST - State GST		%		



BEML LIMITED BENGALURU

DOC No.	FPIIC/TD/570
DATE	15-12 -2025
REV. No.	00
PAGE No.	1 /16

Train B28 Project Procurement Technical Specification of Cable Tray Assemblies

Approved	15.12.25	MAHANTESH GM	
Reviewed	15.12.25	HARISH SN	
Prepared	15.12.25	KIRAN A	
	Date	Name	Signature

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	3 / 16

TABLE OF CONTENTS

1. Introduction	5
1.1. General.....	5
1.2. Train Composition	5
1.3. Climatic and environmental Condition (ICF MD SPEC-447, Clause 3.6).....	5
1.4. Performance requirement.....	7
2. Definitions and Abbreviations	7
2.1. Definitions.....	7
2.2. Abbreviations.....	8
3. Standards	9
4. Requirements of documentation	9
5. Qualifying Criteria for supplier and Vendor Approval	9
5.1. Qualifying Criteria	9
6. Scope of Supply.....	10
6.1. Responsibility of Supplier	10
6.2. Defining of unclear aspects	10
6.3. Process requirements.....	10
6.4. Marking and Packing.....	11
7. Technical Requirements and Specification	11
7.1. Technical Requirements	11
7.1.1. Design & Construction	11
7.1.2. Material Properties.....	11
7.1.3. Qualification of Welding procedures.....	12
7.1.4. Welders Qualification.....	12
7.1.5. Manufacturing of Cable Trays.....	12

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	4 / 16

7.1.5.1. Forming/Machining	12
7.1.5.2. Fabrication:	12
7.1.5.3. Finish:.....	12
7.2. Split of Responsibilities.....	12
8. Testing.....	13
8.1. General.....	13
8.2. Raw Material Inspection	13
8.2.1. Inspection of sheets	13
8.3. Inspection of Cable Trays assemblies	14
8.3.1. Laser Cutting/Punching	14
8.3.2. Inspection of fabricated Cable Trays assemblies	14
8.3.3. Inspection of Powder Coating.....	14
8.3.4. Inspection of Pop nuts and Bonding of Rubber	14
8.3.5. First Article Inspection	15
9. Delivery Schedule.....	15
10. Submittals- Technical offer.....	15

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	5 / 16

1. Introduction

1.1. General

- This document, Procurement Technical Specification (PTS) describes the complete technical requirement of Underframe & Roof Cable Tray Assemblies to be supplied for 8-Car High Speed Trainset (Chair car) designed to operate at 249 kmph with test speed of 280 kmph.
- BEML will carry out all required works and activities as Contractor for NHRCL/ICF's Train B28 project while the Supplier shall be responsible for all works required in this PTS with regard to Design, Development, Manufacture, Supply, Testing and Commissioning of Underframe & Roof Cable Trays and shall be responsible for supporting BEML activities as Contractor for Train B28 Project. The Cable Trays shall be supplied as kits for 2 trainsets as per quantity mentioned in the P.O.
- The scope of work shall include all items of work as per drawings which may be required to meet the performance requirements, trouble free, reliable and efficient operation of trains and meeting the best international practices even if not specifically mentioned in this PTS and in the tender specifications as specified in ICF/MD/SPEC-447, Rev-00, dt. 03.02.2025.

1.2. Train Composition

The scope of supply is for 8-Chair car High Speed Trainset (also referred as a rake).

The tentative configuration of train formation is as follows.

For 8 car formation –

* DTC1 + MC1 + TC1 (PRM) + MC2 + MC1 + TC(Ex) + MC2 + DTC2 *

DTC1/DTC2	–	Driving Trailer Car,
MC1/MC2	–	Motor Car,
TC1 (PRM)	–	Trailer Car Person with Reduced Mobility
TC2 (Ex)	–	Trailer Car with Executive Class
" * "	–	Automatic Coupler
" + "	–	Semi- permanent coupler

Each DTC will be provided with Automatic couplers with electric head, at the Driving End (DE) of the train. The Non-Driving End (NDE)/other end of DTC and either ends of TC & MC will be equipped with semi-permanent couplers.

The trains will be tested, commissioned by BEML at its factory and at the nominated Train Maintenance Depots of NHRCL. The Supplier shall ensure the requisite support during the testing and commissioning at BEML's factory and at the nominated depot.

1.3. Climatic and environmental Condition (ICF MD SPEC-447, Clause 3.6)

The NHRCL/ICF Car shall operate reliably and safely under Mumbai climatic and Environmental conditions as per as per Clause 3.6 shown in following Table. Accordingly, the

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	6 / 16

cable tray assemblies shall be designed to operate with satisfactory performance under the following climatic and environmental conditions:

Description	Limiting Values
Atmospheric temperature [Note-1]	Minimum temperature: - 5°C Maximum temperature: 50°C Maximum touch temperature of metallic surface under the sunlit and shade shall be considered and calculated as per ASHRAE 2021.
Humidity	100% saturation during rainy season
Solar radiation	Value and calculation method shall be based on ASHRAE 2021. (approx. 1000 W/m ²)
Altitude	1000 meter above mean sea level
Rainfall	Very heavy and continuous rainfall in certain areas (heavy continuous rainfall up to 2500mm, rainy season is as long as 5 months in some stretches)
Atmospheric conditions	Extremely dusty and desert terrain in certain areas. The dust concentration in air may reach a high value of 1.6 mg/m ³ .
Coastal area	Humid, salt laden and corrosive atmosphere as prevailing in coastal region.
Wind speed	High wind speed in certain areas, with wind pressure reaching 216 kg/m ² . [Note-2]
Flood level	<p>The Train shall function in accordance with these Specifications and Standards in the event of flooding up to 50 mm above Rail Level as follows:</p> <ul style="list-style-type: none"> In the event of flooding at any level below Rail Level, the Train shall operate in full compliance with these Specifications and Standards. In the event of flooding at a height between Rail Level and 50 mm above Rail Level, the Train shall operate in full compliance with these Specifications and Standards with the exception that it is permissible to restrict the operation of the Train to a maximum of 10 km/h. <p>Allowance is to be made in addition for increase in the height of water level due to the "bow wave" effect of the Train passing through the water.</p>
Design Life	Train is designed for min.30 year of life. Accordingly, the subject items & accessories shall also not deteriorate in their performance for 30 years.

Note-1: Ambient temperature for HVAC calculations shall be based on the highest temperature of the Indian region specified in ASHRAE-2021.

Note-2: Depending on the operational rule, special speed limits shall be imposed on the Train Sets in conditions where wind speed is 20 m/s or greater. Train Set operation shall cease at wind speeds of 30 m/s or greater

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	7 / 16

General requirements

- In developing the detailed design, the supplier shall acquaint himself and take note of the environmental operating conditions prevailing on the Trial Section during heavy monsoon, track flooding conditions, saline, humid and dusty atmosphere etc.
- The temperature of the metal surfaces of the vehicles when exposed directly to the sun, for long periods of time, may be assumed to rise to 70°C.
- Any moisture condensation shall not lead to any malfunction or failure.
- Adequate margin shall specially be built into the design particularly to take care of the higher ambient temperatures, high humidity, dusty and corrosive conditions, etc. prevailing in MAHSR Corridor.

1.4. Performance requirement

The train performance requirements shall be governed according to following table.

Item	Values
Maximum operational speed during service	249 kmph
Maximum operational speed during testing	280 kmph
Minimum average acceleration for speed not less than 75 kmph	0.54 m/s ²
Minimum residual acceleration at 249 kmph	0.05 m/s ²
Minimum deceleration during full-service braking following jerk limit	0.8 m/s ²
Jerk rate (Maximum)	0.7 m/ s ³ during full-service braking (for all speed range) and 1.0 m/s ³ during emergency braking (for speed >10 Kmph)
Passenger load	80kg/person 2-4 standing/m ²
Average running distance of one train (for design purpose)	2,000 km / day


2. Definitions and Abbreviations

The following definitions and abbreviations are applicable to the PTS.

2.1. Definitions

The following definitions are applicable to the PTS.


- a) **"Employer"** means ICF-Chennai, its legal successors and assignees.
- b) **"Nominated Agency"** shall mean NHSRCL and its representatives including an ISA (if any) deployed by NHSRCL for the purpose of carrying out Design approvals, Tests, Trials etc.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	8 / 16

- c) **"BEML"** means the contractor for Design, Development, Manufacture, Testing and Commissioning of Trainsets for the project.
- d) **"Supplier"** means the supplier who supplies the Cable tray assemblies required by BEML for NHRCL/ICF High Speed Train project. Supplier Shall Carry out the works in accordance with this Specification and General Industrial practices with regards to Cable duct/Trays assemblies.
- e) **"GTC"** means "General Terms and Conditions for Supply Cable Duct/trays assemblies for NHRCL/ICF High Speed Rail Project" issued by BEML.
- f) **"ICF-MD-SPEC-447"** means Employer's requirements for both Technical and General Specification for NHRCL High Speed Rail Project contract.
- g) **"PTS"** means BEML's Procurement Technical Specification.
- h) **"Contract"** means the contract between Supplier and BEML in relation to the supply of Cable Duct/Trays assemblies for Train B28 project or NHRCL/ICF High Speed Train Set.

2.2. Abbreviations

S. N.	Abbreviation	Full-form
1.	ASHRAE	American Society of Heating, Refrigeration and Air-conditioning Engineers
2.	DNP	Defect Notifications Period
3.	EN	Euro Norm (European Standard)
4.	IEC	International Electro technical Commission
5.	IER	Indian Electricity Rules
6.	IR	Indian Railways
7.	IRIS	International Railway Industry Standard
8.	IRS	Indian Railway Standard
9.	ISO	International Organization for Standardization
10.	MAHSR	Mumbai – Ahmedabad High Speed Rail
11.	N/A	Not Applicable
12.	OEM	Original Equipment Manufacturer
13.	RAMS	Reliability, Availability, Maintainability and Safety
14.	RDSO	Research Designs & Standards Organization, Manak Nagar Lucknow 226011
15.	RS	Rolling Stock
16.	SIL	Safety Integrity level
17.	SOD	Schedule of Dimension

	Procurement Technical Specification of Cable Tray Assemblies		DOC No.	FPIIC/TD/570
			DATE	15-12-2025
			REV. No.	00
			PAGE No.	9 / 16
S. N.	Abbreviation	Full-form		
18.	TBD	To Be Determined		
19.	LRU	Least Replacement Unit		

3. Standards

The Standards applicable for the cable tray assemblies shall confirm to the standards as per BEML Drawings.

4. Requirements of documentation

The Supplier shall submit the following documents as a minimum

- Details of existing infrastructure facilities with the supplier for the aluminum fabrication.
- Details of weld jigs and fixtures required for each cable duct sub-assembly as per BEML drawings.
- Welder qualification certificates.
- Infrastructure for Pretreatment/Powder coating
- Details of Pretreatment/Powder coating process.
- Welding Process Qualification (WPS & PQR)
- Details of Rubber Supplier to meet EN 45545 HL-2 requirements.
- Quality Assurance Plan
- Documents mentioned as per General Qualifying Criteria.

The Supplier shall submit the following documents conforming to the Technical Specification along with every batch of supplies.

- Dimensional; Check Sheets
- Material Test Certificate
- Powder Coating test certificate

5. Qualifying Criteria for supplier and Vendor Approval

5.1. Qualifying Criteria

- The Supplier should be an Original Equipment Manufacturer (OEM) of the Cable Duct/ Tray assemblies and should have carried out design, manufacturing, supply, testing and commissioning of cable duct/trays in similar Vande Bharat/Metro Rail/ 3 Phase MEMU passenger trains.
- The OEM should have supplied Cable Duct/trays and the same should be in service during the preceding three years or more in similar passenger trains like Vande Bharat/Metro Rail/3 Phase MEMU.** The sub-contractor shall submit PO (Purchase order) copies/Satisfactory performance reports from the customers/Rail Corporations.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	10 / 16

- c) All 'aggregates, sub systems, sub-assemblies' shall be procured from the approved vendors and sourced from only such manufacturing units that have supplied the 'aggregates, sub systems, sub-assemblies' that fulfill the proven design requirements as above.
- d) The Supplier shall have established International Quality systems and certification like ISO 9001/ISO 14001/IRIS. The Supplier shall submit supporting documents in this regard.
- e) The Supplier shall submit Inspection & Test Plan / Quality Manual.
- f) The Supplier shall undertake to provide support during Installation, Testing & Commissioning, service trials, revenue service and DNP period either by themselves or through sister company or a partner in India. The Supplier shall submit detailed proposal in this regard.

6. Scope of Supply

6.1. Responsibility of Supplier

The Supplier shall supply Cable Tray assemblies in fully welded & and powder coated condition in conformance to this PTS, Purchase order requirements and applicable drawings.

6.2. Defining of unclear aspects

If any term or clause Is not described in the specification pr thought to be unclear, Supplier shall discuss those with the design tea, in BEML, prior to making a contract, supplier shall follow definition an opinions of design team in BEML .

6.3. Process requirements

The Supplier shall ensure the following in the cable duct/trays assemblies supplies.

1. Procure the Aluminum & stainless steel raw material to the required specifications as per drawings.
2. Procure the required rivet nuts/fasteners.
3. Procure the required rubber items/sealants/powder coating materials as per specifications.
4. Laser cutting/Punching & Forming of sheets as per dimensions. Supplier shall confirm with Beml any design changes & the latest drawings to be followed before start of metal cutting process.
5. Positioning of different parts on the weld jig and tack welding. Ensuring the

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	11 / 16

assembly drawing dimensions and then fully **TIG / MAG** Welding employing qualified welders and qualified welding process.

6. Plug welding of Partitions.
7. Crimping of rivet nuts/pop nuts and bonding of rubber.
8. Mounting of all parts & fasteners as per assembly drawing.
9. Powder coating of the trays as per drawing specifications.
10. Final Inspection and Dispatch.

6.4. Marking and Packing

Each sub-assembly shall be marked with the details of Drawing No. with a permanent marker. Each sub-assembly shall be wrapped separately so as to avoid scratch marks on the powder coated surface. Items to be supplied in loose condition shall be packed separately.

The Cable tray assemblies shall be properly packed and due care shall be taken to ensure that no damage occurs during transit. The packing shall be strictly carried out as a kit with each kit comprising of complete cable tray assemblies & loose items required for one car.

7. Technical Requirements and Specification

7.1. Technical Requirements

7.1.1. Design & Construction

Generally, the cable tray assembly consists of aluminum formed channels with perforations, aluminum drop box assemblies, inspection covers welded together to form cable trays assemblies. The cable tray assemblies are covered with aluminum covers & fitted with inspection cover plates at inspection cutouts. All the cable trays are designed to be fabricated with simple laser cut sheet metal parts made of 2 mm sheet that can be bent and welded. The perforations & holes in the tray are made through punching/laser cutting operation, wherein slots & holes are provided at predetermined intermediate intervals. The partitions incorporate corresponding protruding elements designed to accurately align with the holes. During assembly, the protruding elements are inserted into the punched holes in the base, and the joints are secured by plug welding from the underside. Weld burrs and splatters are grinded and flushed. Acid Pickling is proposed as pre-treatment followed by powder coating to a thickness of 60 to 80 microns.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	12 / 16

7.1.2. Material Properties

The cable Trays used in this project shall be of Aluminum 5052 H32. This alloy has very good corrosion resistance & offers good weldability and cold forming.

Al 5052 H32 material has the following properties:

Tensile Strength	210-260 MPa
Proof Stress	130 MPa
Modulus of Elasticity	70 GPa
Chemical Composition	Al:94-97%, Mg: 2.8%, Cr 0.35%
Density	2680 kg/m3
Melting Point	605°C
Annealed Temperature	415 °C
H32 Temper	Work hardened by rolling and stabilized by low temperature heat treatment

7.1.3. Qualification of Welding procedures

The welding procedures adopted for the welding shall be qualified in accordance with the EN ISO-9606-2. WPS and PQR shall be established.

7.1.4. Welders Qualification

The welders shall be qualified in accordance with EN-ISO-4063, Type – TIG

7.1.5. Manufacturing of Cable Trays

7.1.5.1. Forming/Machining

All detail parts shall be as per BEML drawings and all linear and angular dimensions shall be maintained as specified in the drawings.

7.1.5.2. Fabrication:

Fabrication of cable trays shall be carried out using proper weld jigs and fixtures. Suitable clamping arrangement shall be used during welding so as to avoid distortion.

Proper de-greasing of the components shall be ensured before taking up for Welding.

TIG Welding process shall be employed for the welding of the cable tray assemblies

Weld filter rod to grade ER 5356 of AWS A5.10 shall be used for the welding of cable tray assemblies

Qualified welders shall be employed for the fabrication of the cable tray assemblies

Qualified TIG welding process shall be adopted for welding of the cable tray assemblies.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	13 / 16

Due care shall be taken to obtain good quality welds without defects.

Any welding scarps, sharp edges arising due to welding inside cable duct/trays shall be ground smooth before anodizing to avoid damages to the cable.

7.1.5.3. Finish:

All cable tray assemblies after fabrication shall be pretreated by acid pickling or equivalent process. All tray assemblies to be powder coated to a depth of 60-80 microns. Powder coating specifications to be as per Interpon D1036 Matt, AkzoNobel make or equivalent make.

All sharp edges in cutouts & partitions shall be bonded with rubber using Loctite – 401 adhesives.

7.2. Split of Responsibilities

- a) When Supplier submits the design submission, BEML/Nominated agency/Design Verifier (Third Party) will complete the review of the design package at the intermediate and each design levels after which the review comments in writing or on marked-up drawing and specification will be furnished to the supplier within 2 weeks. If the design submission is acceptable to BEML, it will be submitted to end user for approval and it will be reviewed by them for 4 weeks. Supplier shall re-submit the revised document incorporating end-clients comments issued during first review within 2 weeks, if any. Supplier shall supply requested documents / drawings during approval process within 1-2 weeks from each request. Supplier must establish the project schedule (including design completion schedule) by considering this review turnaround time.
- b) In the event that the submission is rejected the supplier shall improve the design to the acceptable completion level and resubmit it for review within 1-2 weeks. Any adjustment in design activities to recover the lost time due to the resubmission shall be the full responsibility of the supplier and shall submit the catch-up plan for no schedule impact.
- c) The supplier shall be responsible for meeting the requirement of constructional details, material, and workmanship. All materials and workmanship shall be in every respect in accordance with the proven up-to date best practice.
- d) The supplier should take whole responsibility for occurring liquidated damage due to delays with regard to design data submission, production, supply, design error and so on.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	14 / 16

8. Inspection & Testing

8.1. General

The supplier shall perform all the test in accordance with the standards specified mentioned in the drawing. BEML and/or NHSRCL representative have the right to witness any of these tests at any stage of the test progress.

8.2. Raw Material Inspection

8.2.1. Inspection of sheets

Visual inspection

Every sheet irrespective of lot size shall be examined visually for surface defects and irregularities. The sheets shall be free from defects that would impair the utility of the items.

Chemical Composition and Mechanical Properties

The Chemical composition and mechanical properties of the sheets shall conform to grade Aluminum 5052 H32 standards. The supplier shall submit test reports for every batch of supplies

Dimensional Inspection

Sheets: The Dimensions of the sheets shall conform to IS 2676 Latest standard.

The supplier shall submit the dimensional check sheet for every batch of supplies.

8.2.2. Laser Cutting/Punching

The sheet metal parts cut and formed shall be inspected and shall conform to drawings. The inspection cut outs and other holes made in the sheets shall be inspected and the dimensions shall conform to the drawing.

8.2.3. Inspection of fabricated Cable Trays assemblies

- Inspection of the weld jigs, fixture and the clamping arrangement.
- Check for welder qualification certificates and process qualification records and shall conform to 8.1.4 and 8.1.5 of this specification.
- Ensure that weld filler rod to grade ER 5356 of AWS A5.10 is used for the TIG Welding.
- After Welding, check if welding scarps and sharp edges arising due to welding inside cable duct/tray are ground smooth

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	15 / 16

- e. All weld areas shall be visually inspected and the defects shall not exceed Level 'C' of ISO: 10042.
- f. All the dimensions as per drawing requirements shall be checked and recorded for each cable duct assembly and dimensional check sheets shall be submitted.

8.2.4. Inspection of Powder Coating

After powder coating, the following parameters shall be checked and all the test reports shall be submitted.

- a. Thickness of the powder coating: 60-80 microns
- b. Color and Appearance: As per drawing
- c. Continuity


8.2.5. Inspection of Weld nuts/Rivet nuts and Bonding of Rubber

Crimping of rivet nuts/pop nuts shall be inspected to ensure proper flaring and tightness.

All rubber items shall conform to the technical specification and testing methods as per EN 45545 HL-2 standards. Proper bonding of rubber to sharp edges using Loctite – 401 adhesives to be checked.

8.2.6. First Article Inspection

- a) All the components and assemblies shall be offered to First article inspection (FAI) by BEML and /or NHRCL's representative at the place of manufacture. Bulk production shall be taken up only after clearance.
- b) Any changes arising due to incorporation of various design modifications in the proto train shall be accommodated by the supplier during the bulk production at no additional cost.
- c) If FAI has to be repeated due to non-compliances/ deficiencies noticed, the cost towards the same and the cost towards BEML/NHRCL's visit to Supplier's place for witness of re-FAI shall be to Supplier's responsibility.
- d) Supplier shall note that the Nominated agency/NHRCL, FAI clearance will not relieve the Supplier's responsibility towards design, production, quality, reliability, availability, maintainability and safety of the systems and sub-systems during the revenue service.
- e) The Supplier shall submit summary report for the failures that happened to similar application in the previous project, if any, so that BEML can review the reflection of them on the design and production.
- f) At the FAI, the Supplier shall make available all pertinent design and manufacturing process documentation, test records, material certifications, etc. Should all the requirements of the FAI not be met, then the inspection shall be considered at a Hardware Review.

	Procurement Technical Specification of Cable Tray Assemblies	DOC No.	FPIIC/TD/570
		DATE	15-12-2025
		REV. No.	00
		PAGE No.	16 / 16

9. Delivery Schedule

S. N.	Complete Cable Duct/Assemblies	Delivery Schedule
2	1 st Trainset	2 nd June, 2026
3	2 nd Trainset	31 st Dec, 2026

10. Submittals- Technical offer

The Supplier shall provide the following as part of technical offer:

- a) Clause wise compliance against,
 - i) PTS - Doc no. FPIIC/TD/570 in the following format

Clause No	Response (Complied/ Noted/ Not Complied)	Remarks

Where,

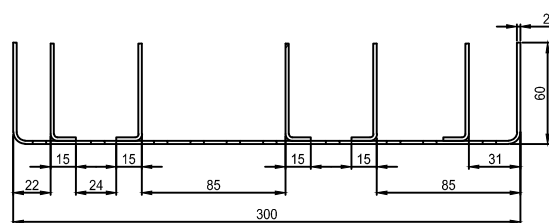
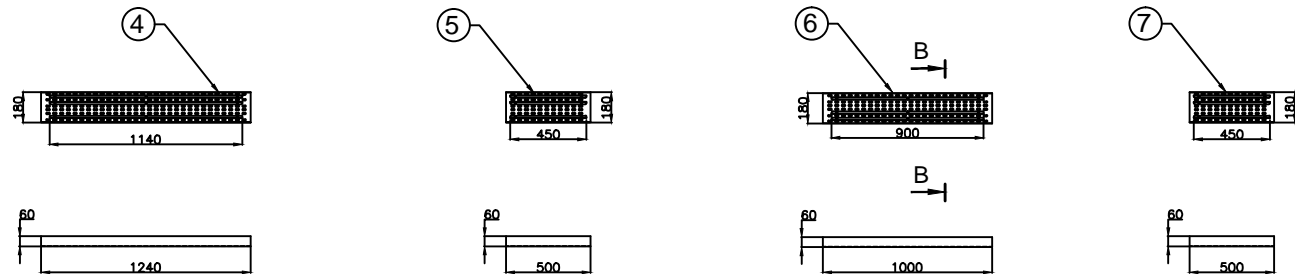
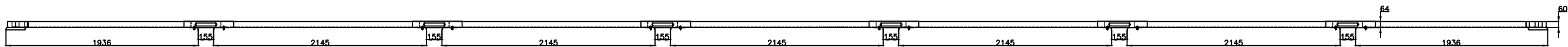
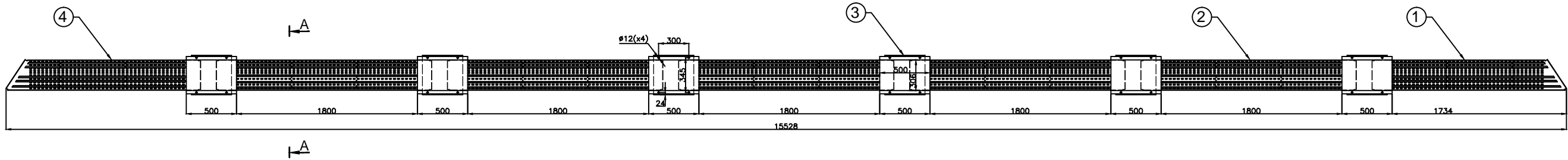
- i) Complied: "Complied" shall be indicated by the supplier where the supplier is able to comply with the clause.
 - ii) Noted: Where a clause merely provides information.
 - iii) Complied with comments" will be considered as fully complied for the clause with no additional commercial impact.
- b) Documents as per Clause 5 as per this specification.
 - c) Document submission check sheet
 - d) Qualifying Criteria – Cable Trays
 - e) Supply details with references for same / similar design satisfactory performance and reliability trainset as per qualification criteria (section 6) of this document.
 - f) The Supplier shall hold ISO 9001/ISO 14001 /IRIS certification and shall manufacture the products accordingly. The supplier shall submit company profile with infrastructure facilities, product range etc., along with technical offer.

[illegible]

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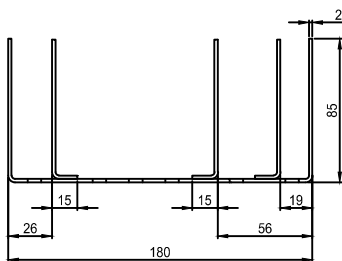
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VALUE	1	2	3	4	5	6	7	8	9	10	11	12
SYMBOL												
SURFACE												
ROUGHNESS												

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)						QUALITY OF WELD JOINTS REF. RD 230 MEDIUM				
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C						STATUS: PROTO				
WELDING SHALL BE CARRIED OUT AS PER IS. 9595-96										



SECTION-AA

(FOR ITEM - 1,2&4)



SECTION-BB

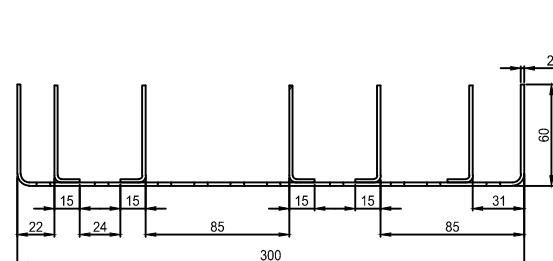
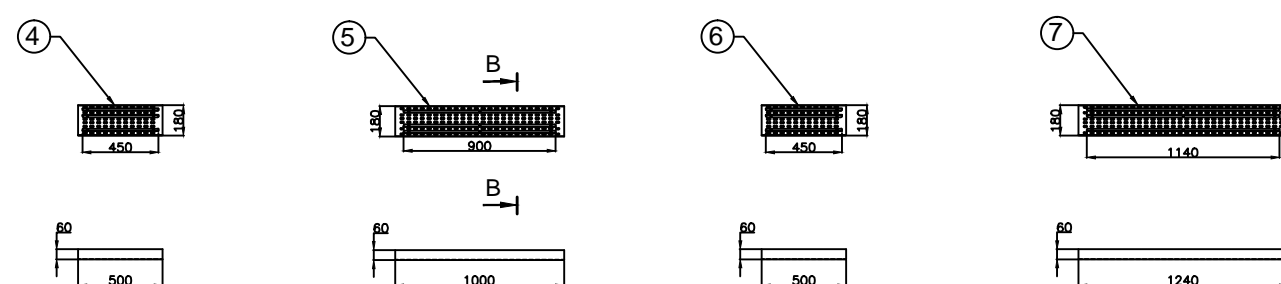
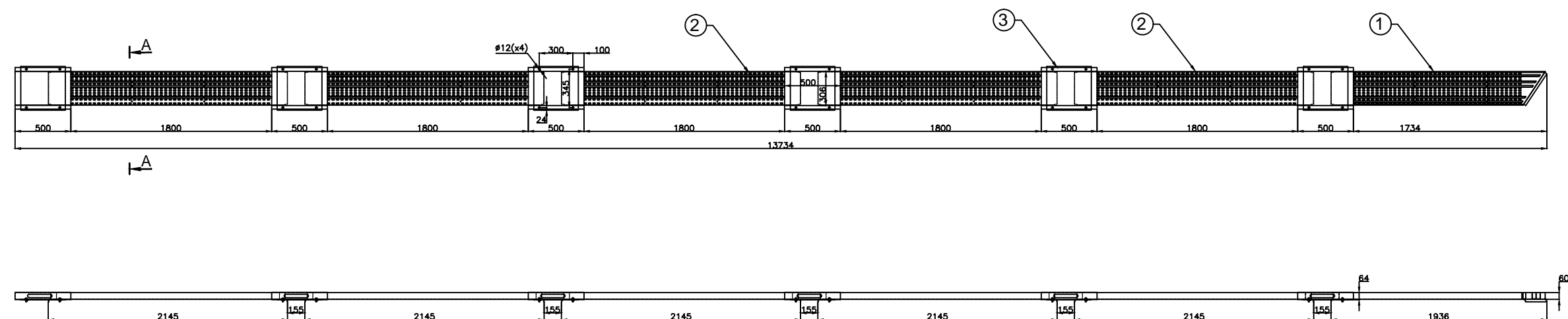
(FOR ITEM - 5 TO 8)

NOTE:

1. ALL RUBBERS SHALL BE BONDED FIRMLY USING LOCTITE-401 ADHESIVE
2. PROTECTIVE RUBBER SHALL BE PASTED ON ALL INSIDE WELD JOINTS, VERTICAL RIB ENDS AT CUTOUTS OF INSPECTION COVER (REFER DOC. GR/TD/6864)
3. M5 POPNUTS TO BE RIVETTED AT INSPECTION COVER CUTOUTS & SHALL BE COVERED WITH POPNUT CAPS AS SHOWN.
4. TIG WELDING TO BE CARRIED OUT AT ALL JOINTS AND PLUG WELDING TO BE FOLLOWED FOR RIBS (FOR WELDING REFER DOC GR/TD/6864)
5. UPPER SIDE OF THE MOUNTING BRACKET SHALL BE COVERED WITH PROTECTION FILM
6. ITEM-1&2 AND ITS ASSOCIATED WELDED ALUMINIUM PARTS SHALL BE POWDER COATED TO DFT OF 50 MICRONS AFTER COMPLETE WELDING.
7. ALL TECHNICAL REQUIREMENT SHALL BE AS PER PTS DOC No. FPIIC/TD/570 LATEST REV

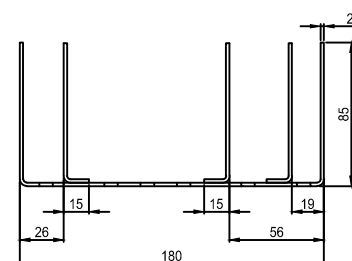
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6	1	843-21006-06	CABLE TRAY -6 (DTC-RH)	t-2	A5052 H32		
5	1	843-21006-05	CABLE TRAY -5 (DTC-RH)	t-2	A5052 H32		
4	1	843-21006-04	CABLE TRAY -5 (DTC-RH)	t-2	A5052 H32		
3	6	843-21006-03	DROP BOX ASSY	t-2	A5052 H32		
2	5	843-21006-02	CABLE TRAY -2 (DTC-RH)	t-2	A5052 H32		
1	1	843-21006-01	CABLE TRAY -1 (DTC-RH)	t-2	A5052 H32		
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE	COMPANY STD./S. MATERIAL	WT. (kg)
△				PRODUCT	B28 HIGH SPEED TRAIN PROJECT		
				REF. DRG.			
				MATERIAL			
				HEAT TREAT.	APPD	HGS	03.12.2025
				SURFACE TREAT.	REV'D	SNH	03.12.2025
△				TITLE	CHK'D	KIRAN	03.12.2025
				ROOF RLH CABLE TRAY KIT- DTC	DRWN	JAGADISH	02.12.2025
△					SCALE		

3		2							1			
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000		RA
TOLERANCE		±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~		
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227												
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VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD.DS. 1012.C								STATUS:		PROTO		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96												



SECTION-AA

(FOR ITEM - 1,2 & 4)



SECTION-BB

(FOR ITEM - 5 TO 8)

NOTE:

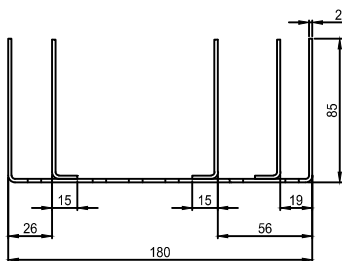
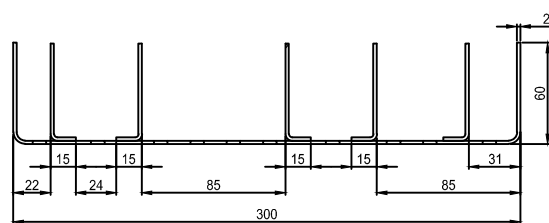
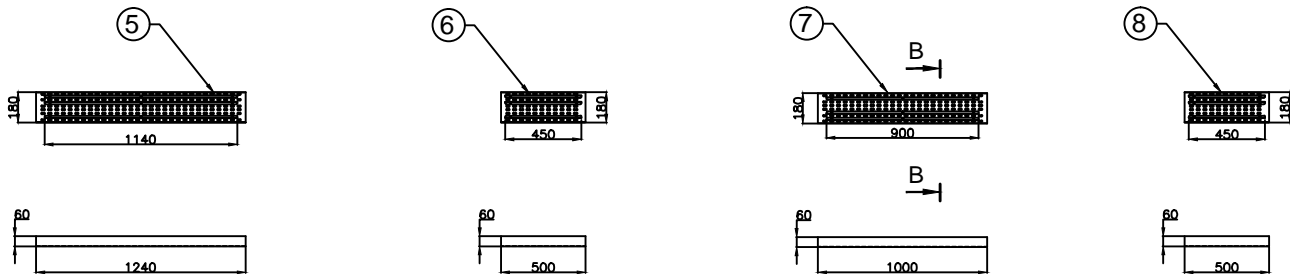
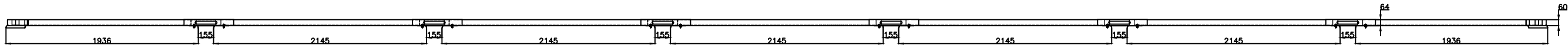
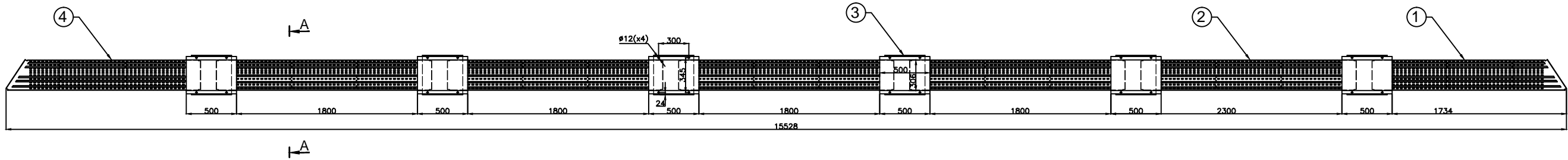
1. ALL RUBBERS SHALL BE BONDED FIRMLY USING LOCTITE-401 ADHESIVE
2. PROTECTIVE RUBBER SHALL BE PASTED ON ALL INSIDE WELD JOINTS, VERTICAL RIB ENDS AT CUTOUTS OF INSPECTION COVER (REFER DOC.GR/TD/6864)
3. M5 POPNUTS TO BE RIVETTED AT INSPECTION COVER CUTOUTS & SHALL BE COVERED WITH POPNUT CAPS AS SHOWN.
4. TIG WELDING TO BE CARRIED OUT AT ALL JOINTS AND PLUG WELDING TO BE FALLOWED FOR RIBS (FOR WELDING REFER DOC GR/TD/6864)
5. UPPER SIDE OF THE MOUNTING BRACKET SHALL BE COVERED WITH PROTECTION FILM
6. ITEM-1&2 AND ITS ASSOCIATED WELDED ALUMINIUM PARTS SHALL BE POWDER COATED TO DFT OF 50 MICRONS AFTER COMPLETE WELDING.
7. ALL TECHNICAL REQUIREMENT SHALL BE AS PER PTS DOC No. FPIIC/TD/570 LATEST REV

7	1	844-21006-07	CABLE TRAY -7 (MC-LH)	t-2	A5052 H32	
6	1	844-21006-06	CABLE TRAY -6 (MC-LH)	t-2	A5052 H32	
5	1	844-21006-05	CABLE TRAY -5 (MC-LH)	t-2	A5052 H32	
4	1	844-21006-04	CABLE TRAY -4 (MC-LH)	t-2	A5052 H32	
3	6	844-21006-03	DROP BOX ASSY	t-2	A5052 H32	
2	5	844-21006-02	CABLE TRAY -2 (MC-LH)	t-2	A5052 H32	
1	1	844-21006-01	CABLE TRAY -1 (MC-LH)	t-2	A5052 H32	
SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE	COMPANY STD./IS MATERIAL	Wt. (kg)
			PRODUCT	B28 HIGH SPEED TRAIN PROJECT		
			REF DRG			
			MATERIAL			
			HEAT TREAT			
			SURFACE TREAT			
			TITLE			
			ROOF LH CABLE TRAY KIT- MC			
				APPD	HGS	03.12.2025
				REV'D	SNH	03.12.2025
				CHKD	KIRAN	03.12.2025
				DRWN	JAGADISH	02.12.2025
				SCALE	1:30	-
				DRG No.		SHEET 1 OF 1 Wt.(Kg)
ALT.NO	EEN NO/CHANGES	DATE	BY	CHKD	DATE	APPROVED
			BEML LIMITED		844-21006	
						-

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





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SYMBOL	✓	✓	✓	✓
SURFACE	✓	✓	✓	✓
ROUGHNESS	✓	✓	✓	✓

3	2					1			
	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227									
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)									
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS 1012.C									
WELDING SHALL BE CARRIED OUT AS PER IS 9595-96							STATUS: PROTO		



NOTE:

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8	1	844-21007-08	CABLE TRAY -8 (MC-RH)	t-2	A5052 H32			
7	1	844-21007-07	CABLE TRAY -7 (MC-RH)	t-2	A5052 H32			
6	1	844-21007-06	CABLE TRAY -6 (MC-RH)	t-2	A5052 H32			
5	1	844-21007-05	CABLE TRAY -5 (MC-RH)	t-2	A5052 H32			
4	1	844-21007-04	CABLE TRAY -5 (MC-RH)	t-2	A5052 H32			
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2	5	844-21007-02	CABLE TRAY -2 (MC-RH)	t-2	A5052 H32			
1	1	844-21007-01	CABLE TRAY -1 (MC-RH)	t-2	A5052 H32			
SL No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE	COMPANY STD./S. MATERIAL	wt. (kg)	
				PRODUCT	B28 HIGH SPEED TRAIN PROJECT			
				REF. DRG.				
				MATERIAL				
				HEAT TREAT.	APPD	HGS	03.12.2025	
				SURFACE TREAT.	REV'D	SNH	03.12.2025	
				TITLE	CHK'D	KIRAN	03.12.2025	
				ROOF RH CABLE TRAY KIT- MC	BRWN	JAGADISH	02.12.2025	
					SCALE	1:30	 SHEET	wt.(kg)
					DWG No.	1 OF 1	-	
ALT.NO	ECN NO/CHANGES	DATE	BY	APPD	 BEML LIMITED		ALT	
					844-21007			

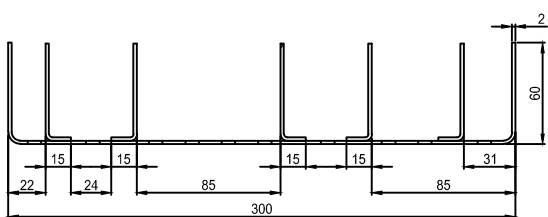
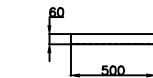
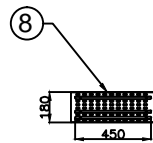
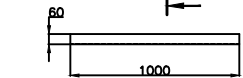
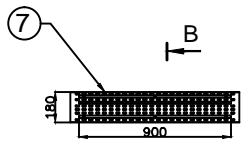
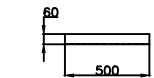
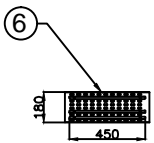
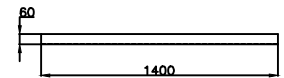
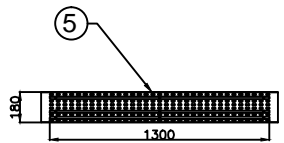
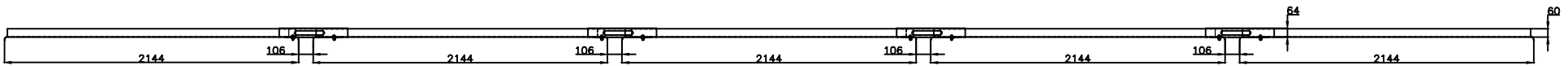
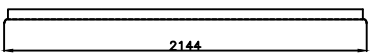
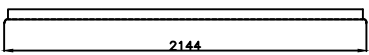
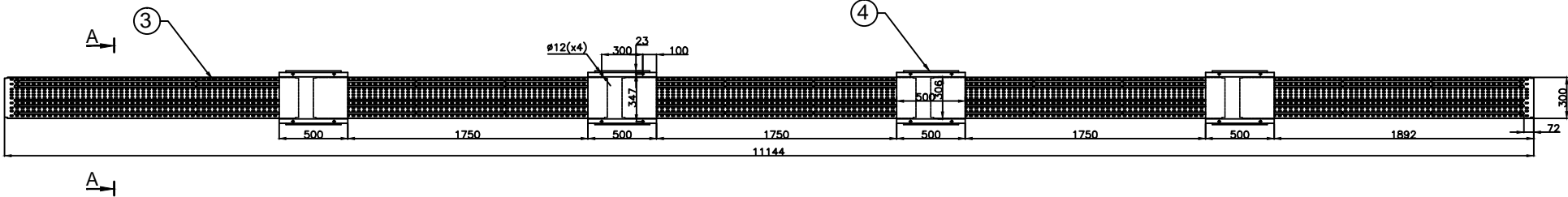
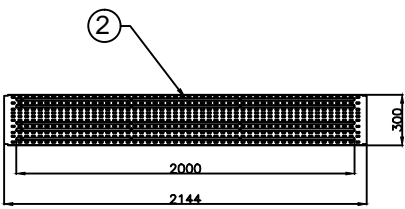
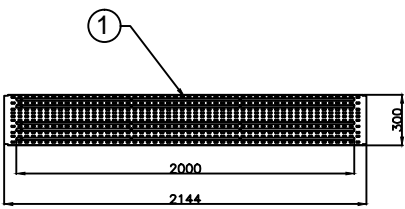
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GRADE No.	INT2	INT1	INT0	INT3	INT4	INT5	INT6	INT7	INT8	INT9	INT10	INT11	INT12	INT13	INT14	INT15	INT16	INT17	INT18	INT19	INT20	INT21	INT22	INT23	INT24	INT25	INT26	INT27	INT28	INT29	INT30	INT31	INT32	INT33	INT34	INT35	INT36	INT37	INT38	INT39	INT40	INT41	INT42	INT43	INT44	INT45	INT46	INT47	INT48	INT49	INT50	INT51	INT52	INT53	INT54	INT55	INT56	INT57	INT58	INT59	INT60	INT61	INT62	INT63	INT64	INT65	INT66	INT67	INT68	INT69	INT70	INT71	INT72	INT73	INT74	INT75	INT76	INT77	INT78	INT79	INT80	INT81	INT82	INT83	INT84	INT85	INT86	INT87	INT88	INT89	INT90	INT91	INT92	INT93	INT94	INT95	INT96	INT97	INT98	INT99	INT100	INT101	INT102	INT103	INT104	INT105	INT106	INT107	INT108	INT109	INT110	INT111	INT112	INT113	INT114	INT115	INT116	INT117	INT118	INT119	INT120	INT121	INT122	INT123	INT124	INT125	INT126	INT127	INT128	INT129	INT130	INT131	INT132	INT133	INT134	INT135	INT136	INT137	INT138	INT139	INT140	INT141	INT142	INT143	INT144	INT145	INT146	INT147	INT148	INT149	INT150	INT151	INT152	INT153	INT154	INT155	INT156	INT157	INT158	INT159	INT160	INT161	INT162	INT163	INT164	INT165	INT166	INT167	INT168	INT169	INT170	INT171	INT172	INT173	INT174	INT175	INT176	INT177	INT178	INT179	INT180	INT181	INT182	INT183	INT184	INT185	INT186	INT187	INT188	INT189	INT190	INT191	INT192	INT193	INT194	INT195	INT196	INT197	INT198	INT199	INT200	INT201	INT202	INT203	INT204	INT205	INT206	INT207	INT208	INT209	INT210	INT211	INT212	INT213	INT214	INT215	INT216	INT217	INT218	INT219	INT220	INT221	INT222	INT223	INT224	INT225	INT226	INT227	INT228	INT229	INT230	INT231	INT232	INT233	INT234	INT235	INT236	INT237	INT238	INT239	INT240	INT241	INT242	INT243	INT244	INT245	INT246	INT247	INT248	INT249	INT250	INT251	INT252	INT253	INT254	INT255	INT256	INT257	INT258	INT259	INT260	INT261	INT262	INT263	INT264	INT265	INT266	INT267	INT268	INT269	INT270	INT271	INT272	INT273	INT274	INT275	INT276	INT277	INT278	INT279	INT280	INT281	INT282	INT283	INT284	INT285	INT286	INT287	INT288	INT289	INT290	INT291	INT292	INT293	INT294	INT295	INT296	INT297	INT298	INT299	INT300	INT301	INT302	INT303	INT304	INT305	INT306	INT307	INT308	INT309	INT310	INT311	INT312	INT313	INT314	INT315	INT316	INT317	INT318	INT319	INT320	INT321	INT322	INT323	INT324	INT325	INT326	INT327	INT328	INT329	INT330	INT331	INT332	INT333	INT334	INT335	INT336	INT337	INT338	INT339	INT340	INT341	INT342	INT343	INT344	INT345	INT346	INT347	INT348	INT349	INT350	INT351	INT352	INT353	INT354	INT355	INT356	INT357	INT358	INT359	INT360	INT361	INT362	INT363	INT364	INT365	INT366	INT367	INT368	INT369	INT370	INT371	INT372	INT373	INT374	INT375	INT376	INT377	INT378	INT379	INT380	INT381	INT382	INT383	INT384	INT385	INT386	INT387	INT388	INT389	INT390	INT391	INT392	INT393	INT394	INT395	INT396	INT397	INT398	INT399	INT400	INT401	INT402	INT403	INT404	INT405	INT406	INT407	INT408	INT409	INT410	INT411	INT412	INT413	INT414	INT415	INT416	INT417	INT418	INT419	INT420	INT421	INT422	INT423	INT424	INT425	INT426	INT427	INT428	INT429	INT430	INT431	INT432	INT433	INT434	INT435	INT436	INT437	INT438	INT439	INT440	INT441	INT442	INT443	INT444	INT445	INT446	INT447	INT448	INT449	INT450	INT451	INT452	INT453	INT454	INT455	INT456	INT457	INT458	INT459	INT460	INT461	INT462	INT463	INT464	INT465	INT466	INT467	INT468	INT469	INT470	INT471	INT472	INT473	INT474	INT475	INT476	INT477	INT478	INT479	INT480	INT481	INT482	INT483	INT484	INT485	INT486	INT487	INT488	INT489	INT490	INT491	INT492	INT493	INT494	INT495	INT496	INT497	INT498	INT499	INT500	INT501	INT502	INT503	INT504	INT505	INT506	INT507	INT508	INT509	INT510	INT511	INT512	INT513	INT514	INT515	INT516	INT517	INT518	INT519	INT520	INT521	INT522	INT523	INT524	INT525	INT526	INT527	INT528	INT529	INT530	INT531	INT532	INT533	INT534	INT535	INT536	INT537	INT538	INT539	INT540	INT541	INT542	INT543	INT544	INT545	INT546	INT547	INT548	INT549	INT550	INT551	INT552	INT553	INT554	INT555	INT556	INT557	INT558	INT559	INT560	INT561	INT562	INT563	INT564	INT565	INT566	INT567	INT568	INT569	INT570	INT571	INT572	INT573	INT574	INT575	INT576	INT577	INT578	INT579	INT580	INT581	INT582	INT583	INT584	INT585	INT586	INT587	INT588	INT589	INT590	INT591	INT592	INT593	INT594	INT595	INT596	INT597	INT598	INT599	INT600	INT601	INT602	INT603	INT604	INT605	INT606	INT607	INT608	INT609	INT610	INT611	INT612	INT613	INT614	INT615	INT616	INT617	INT618	INT619	INT620	INT621	INT622	INT623	INT624	INT625	INT626	INT627	INT628	INT629	INT630	INT631	INT632	INT633	INT634	INT635	INT636	INT637	INT638	INT639	INT640	INT641	INT642	INT643	INT644	INT645	INT646	INT647	INT648	INT649	INT650	INT651	INT652	INT653	INT654	INT655	INT656	INT657	INT658	INT659	INT660	INT661	INT662	INT663	INT664	INT665	INT666	INT667	INT668	INT669	INT670	INT671	INT672	INT673	INT674	INT675	INT676	INT677	INT678	INT679	INT680	INT681	INT682	INT683	INT684	INT685	INT686	INT687	INT688	INT689	INT690	INT691	INT692	INT693	INT694	INT695	INT696	INT697	INT698	INT699	INT700	INT701	INT702	INT703	INT704	INT705	INT706	INT707	INT708	INT709	INT710	INT711	INT712	INT713	INT714	INT715	INT716	INT717	INT718	INT719	INT720	INT721	INT722	INT723	INT724	INT725	INT726	INT727	INT728	INT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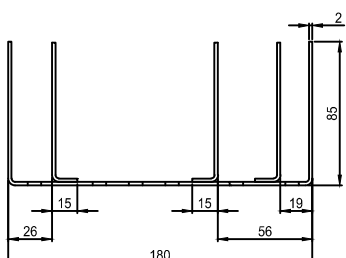
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VALUE	1	2	3	4	5	6	7	8	9	10	11	12
SYMBOL												
SURFACE ROUGHNESS												

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE										1		
TOLERANCE		0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA				
		±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~				
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227												QUALITY OF WELD JOINTS REF. RD 230 MEDIUM		
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2802 (PT-1) (MEDIUM)														
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS 1012.C														
WELDING SHALL BE CARRIED OUT AS PER IS. 9595-96												STATUS:		PROTO



SECTION-AA

(FOR ITEM - 1 TO 3)



SECTION-BB

(FOR ITEM - 5 TO 8)

NOTE:

1. ALL RUBBERS SHALL BE BONDED FIRMLY USING LOCTITE-401 ADHESIVE
2. PROTECTIVE RUBBER SHALL BE PASTED ON ALL INSIDE WELD JOINTS, VERTICAL RIB ENDS AT CUTOUTS OF INSPECTION COVER (REFER DOC. GR/TD/6864)
3. M5 POPNUTS TO BE RIVETTED AT INSPECTION COVER CUTOUTS & SHALL BE COVERED WITH POPNUT CAPS AS SHOWN.
4. TIG WELDING TO BE CARRIED OUT AT ALL JOINTS AND PLUG WELDING TO BE FOLLOWED FOR RIBS (FOR WELDING REFER DOC GR/TD/6864)
5. UPPER SIDE OF THE MOUNTING BRACKET SHALL BE COVERED WITH PROTECTION FILM
6. ITEM-1&2 AND ITS ASSOCIATED WELDED ALUMINIUM PARTS SHALL BE POWDER COATED TO DFT OF 50 MICRONS AFTER COMPLETE WELDING.
7. ALL TECHNICAL REQUIREMENT SHALL BE AS PER PTS DOC No. FPIIC/TD/570 LATEST REV

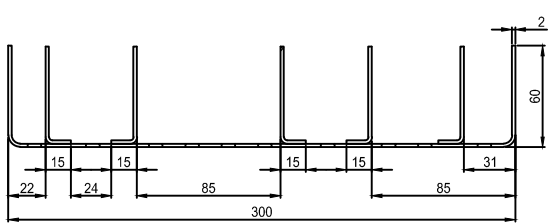
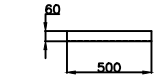
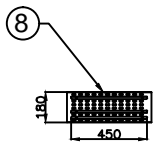
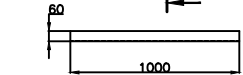
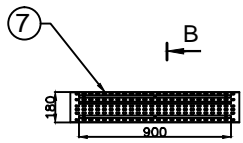
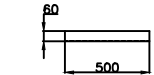
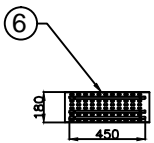
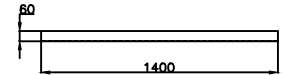
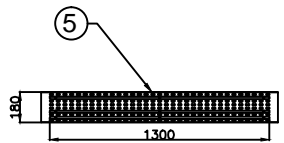
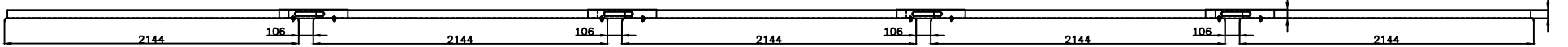
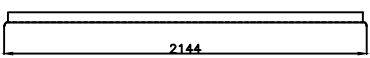
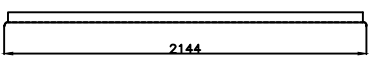
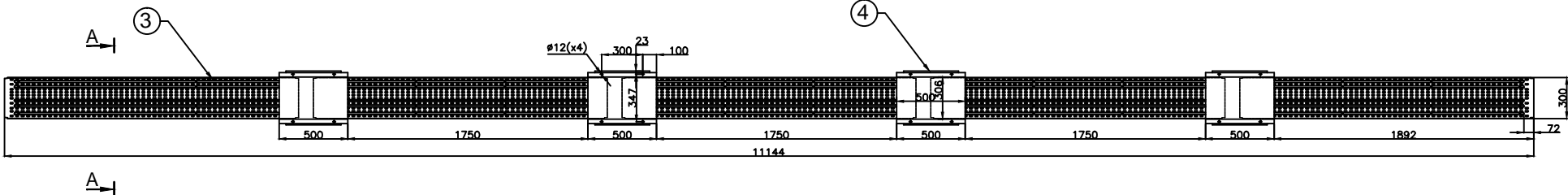
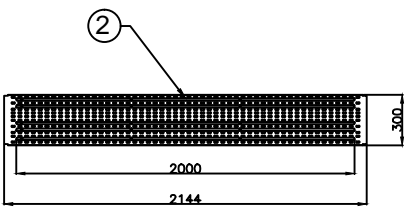
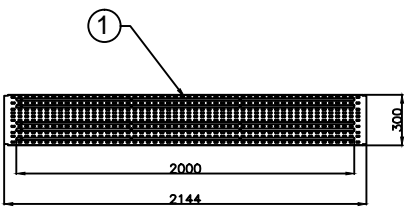
8	1	845-21007-08	CABLE TRAY -8 (TC-RH)	t-2	A5052 H32		
7	1	845-21007-07	CABLE TRAY -7 (TC-RH)	t-2	A5052 H32		
6	1	845-21007-06	CABLE TRAY -6 (TC-RH)	t-2	A5052 H32		
5	1	845-21007-05	CABLE TRAY -5 (TC-RH)	t-2	A5052 H32		
4	4	845-21007-04	DROP BOX ASSY	t-2	A5052 H32		
3	4	845-21007-03	CABLE TRAY -3 (TC-RH)	t-2	A5052 H32		
2	1	845-21007-02	CABLE TRAY -2 (TC-RH)	t-2	A5052 H32		
1	1	845-21007-01	CABLE TRAY -1 (TC-RH)	t-2	A5052 H32		
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE	COMPANY STD./S	Wt. (kg)
						MATERIAL	
<div>△</div>			B28 HIGH SPEED TRAIN PROJECT				
<div>△</div>			REF.DRG.				
<div>△</div>			MATERIAL				
<div>△</div>			HEAT TREAT.				
<div>△</div>			SURFACE TREAT.				
<div>△</div>			TITLE				
<div>△</div>			ROOF RH CABLE TRAY KIT- TC2				
<div>△</div>			SCALE				
<div>△</div>			1:30				
<div>△</div>			DRG No.				
<div>△</div>			1 OF 1				
<div>△</div>			SHEET				
<div>△</div>			WT.(kg)				
<div>△</div>			-				
<div>△</div>			ALT				
<div>△</div>			-				
<div>△</div>			BHEL LIMITED				
<div>△</div>			845-21007				
<div>△</div>			ALT				
<div>△</div>			-				

[illegible]

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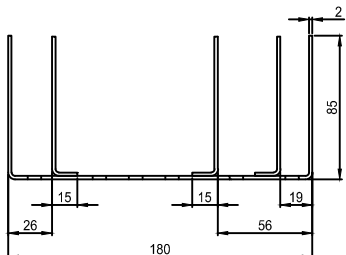
GRADE No.	NT1	NT2	NT3	NT4	NT5	NT6	NT7	NT8	NT9	NT10	NT11	NT12
VALUE	1	2	3	4	5	6	7	8	9	10	11	12
SYMBOL												
SURFACE ROUGHNESS												

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE										1		
TOLERANCE		0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA				
		±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~				
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227												QUALITY OF WELD JOINTS REF. RD 230 MEDIUM		
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)														
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS 1012.C														
WELDING SHALL BE CARRIED OUT AS PER IS. 9595-96												STATUS:		PROTO



SECTION-AA

(FOR ITEM - 1 TO 3)


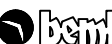


SECTION-BB

(FOR ITEM - 5 TO 8)

NOTE:

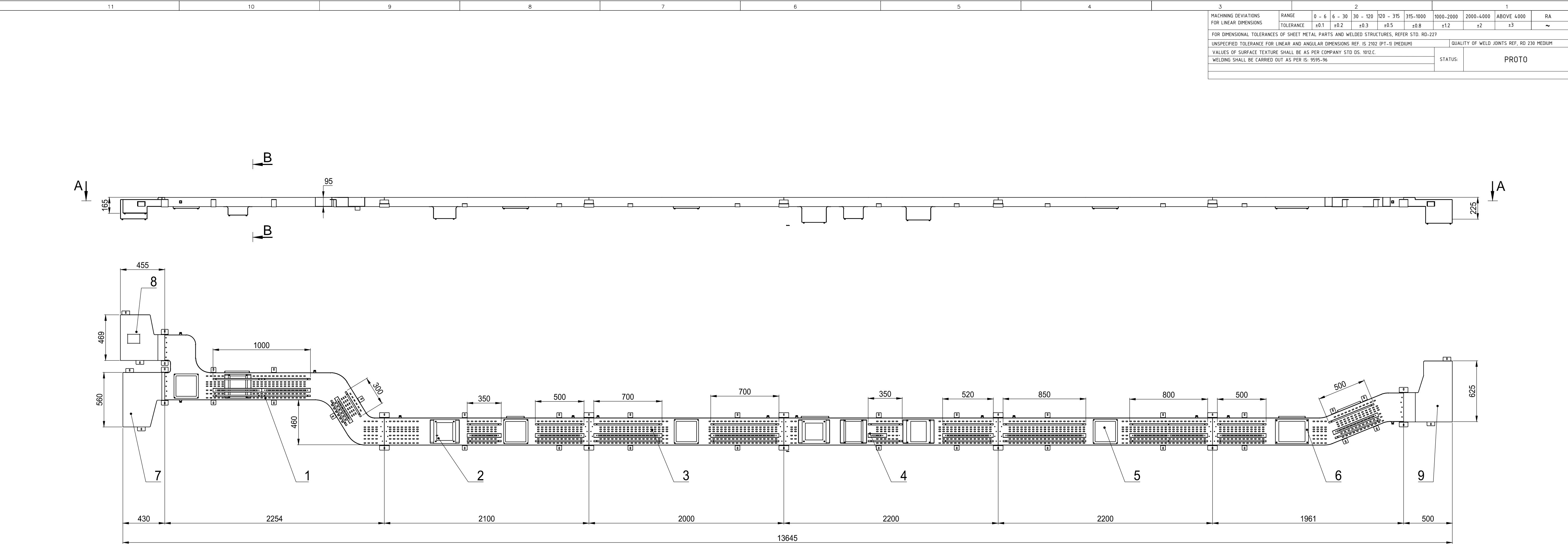
1. ALL RUBBERS SHALL BE BONDED FIRMLY USING LOCTITE-401 ADHESIVE
2. PROTECTIVE RUBBER SHALL BE PASTED ON ALL INSIDE WELD JOINTS, VERTICAL RIB ENDS AT CUTOUTS OF INSPECTION COVER (REFER DOC. GR/TD/6864)
3. M5 POPNUTS TO BE RIVETTED AT INSPECTION COVER CUTOUTS & SHALL BE COVERED WITH POPNUT CAPS AS SHOWN.
4. TIG WELDING TO BE CARRIED OUT AT ALL JOINTS AND PLUG WELDING TO BE FOLLOWED FOR RIBS (FOR WELDING REFER DOC GR/TD/6864)
5. UPPER SIDE OF THE MOUNTING BRACKET SHALL BE COVERED WITH PROTECTION FILM
6. ITEM-1&2 AND ITS ASSOCIATED WELDED ALUMINIUM PARTS SHALL BE POWDER COATED TO DFT OF 50 MICRONS AFTER COMPLETE WELDING.
7. ALL TECHNICAL REQUIREMENT SHALL BE AS PER PTS DOC No. FPIIC/TD/570 LATEST REV

8	1	846-21007-08	CABLE TRAY -8 (TC-RH)	t-2	A5052 H32		
7	1	846-21007-07	CABLE TRAY -7 (TC-RH)	t-2	A5052 H32		
6	1	846-21007-06	CABLE TRAY -6 (TC-RH)	t-2	A5052 H32		
5	1	846-21007-05	CABLE TRAY -5 (TC-RH)	t-2	A5052 H32		
4	4	846-21007-04	DROP BOX ASSY	t-2	A5052 H32		
3	4	846-21007-03	CABLE TRAY -3 (TC-RH)	t-2	A5052 H32		
2	1	846-21007-02	CABLE TRAY -2 (TC-RH)	t-2	A5052 H32		
1	1	846-21007-01	CABLE TRAY -1 (TC-RH)	t-2	A5052 H32		
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE	COMPANY STD./I.S. MATERIAL	Wt. (kg)
△				PRODUCT	B28 HIGH SPEED TRAIN PROJECT		
△				REF.DRG.			
△				MATERIAL			
△				HEAT TREAT.	APPD	HGS	03.12.2025
△				SURFACE TREAT.	REV'D	SNH	03.12.2025
△				TITLE	CHKD	KIRAN	03.12.2025
△				ROOF RH CABLE TRAY KIT- TC2	DRWN	JAGADISH	02.12.2025
△					SCALE	1:30	WT.(kg)
△						 SHEET 1 OF 1	-
ALT.NO	ECN NO/CHANGES	DATE	BY	APPD	ORG. No.		ALT
				 BEML LIMITED	846-21007		△

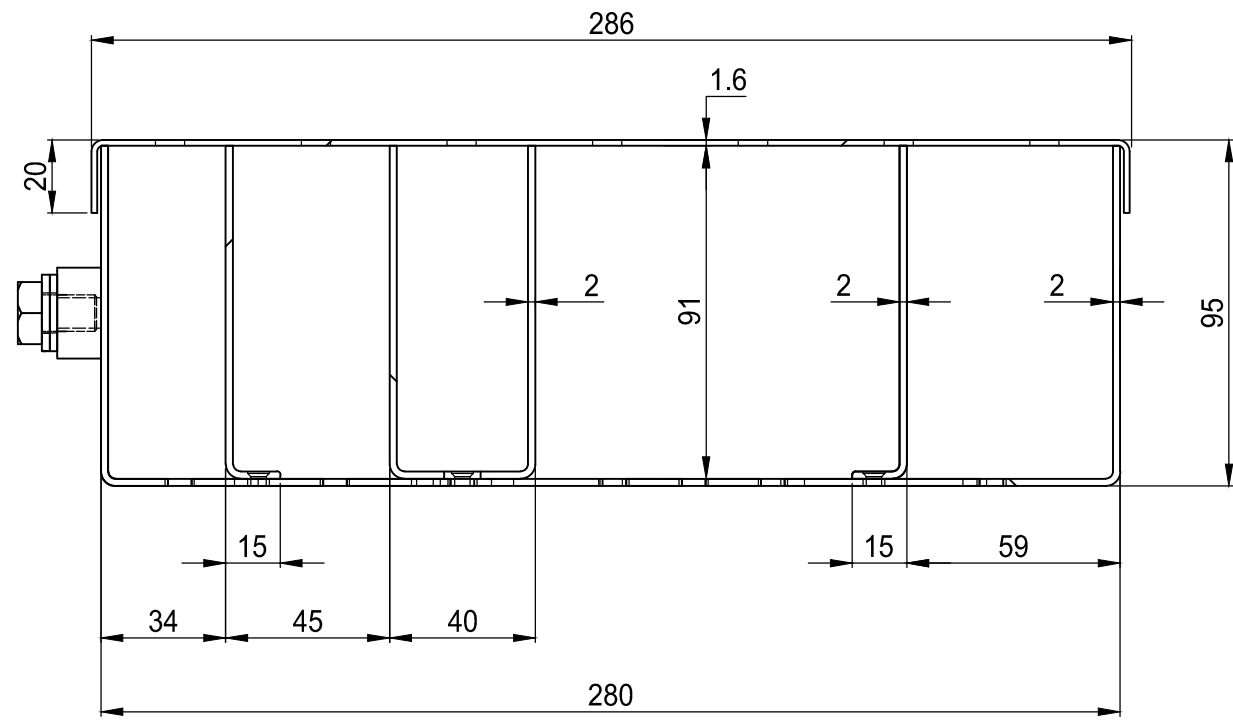
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GRADE No.	N03	N04	N05	N06	N07	N08	N09	N10	N11	N12	N13	N14	N15	N16	N17	N18	N19	N20	N21
VALUE	30	25	20	15	10	5	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002	0.001	0.0005	0.0002	0.0001	
SYMBOL																			

SURFACE ROUGHNESS



SECTION-AA



SECTION-BB

DTC CONTROL CABLE TRAY

- NOTE:
1. VENDOR TO SUPPLY TRAY ASSEMBLY AS A KIT CONSISTING OF ITEMS 1 TO 21.
 2. ITEM 1 TO 9 TO BE SUPPLIED AS SUB ASSEMBLIES & ITEM 10 TO 21 AS LOOSE ITEMS.
 3. APPROX. WEIGHT OF ITEMS 1 TO 9 (ALUMINUM ITEMS) IS 84KGS & ITEMS 10 TO 13 (SS ITEMS) IS 50KG.
 4. REFER PTS DOC FPIIC/TD/570 FOR TECHNICAL SPECIFICATIONS.

21	100		SS SPRING WASHER, B6	SS- Grade A2 70
20	100		PUNCHED WASHER A6	SS- Grade A2 70
19	100		M6 NYLOK NUT	SS- Grade A2 70
18	100		BUTTON HEAD SCREW-M6x20	SS- Grade A2 70
17	80		SS SPRING WASHER, B8	SS- Grade A2 70
16	80		PUNCHED WASHER A8	SS- Grade A2 70
15	80		M8 LOCK NUT	SS- Grade A2 70
14	80		M8 NUT	SS- Grade A2 70
13	80	843-21106	T-BOLT M8	AISI 304
12	10	843-21104	MOUNTING CLAMP-2	AISI 304
11	30	843-21103	MOUNTING CLAMP-1	AISI 304
10	10	843-21102	JOINING CLAMP	AISI 304
9	1	843-21008-09	END DROP BOX ASSY-NDE	
8	1	843-21008-08	END DROP BOX ASSY-DE	
7	1	843-21008-07	END DROP BOX ASSY-DE	
6	1	843-21008-06	CABLE TRAY ASSY-6 (DTC-CC)	
5	1	843-21008-05	CABLE TRAY ASSY-5 (DTC-CC)	
4	1	843-21008-04	CABLE TRAY ASSY-4 (DTC-CC)	
3	1	843-21008-03	CABLE TRAY ASSY-3 (DTC-CC)	
2	1	843-21008-02	CABLE TRAY ASSY-2 (DTC-CC)	
1	1	843-21008-01	CABLE TRAY ASSY-1 (DTC-CC)	

SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE	COMPANY STD./IS	Wt. (Kg)
					MATERIAL	
			PRODUCT	B28 HIGH SPEED TRAIN PROJECT		
			REF. ORG.			
			MATERIAL			
			HEAT TREAT.	APPD	HGS	03.12.2025
			SURFACE TREAT.	REVD	SNH	03.12.2025
			TITLE	CHKD	KIRAN	03.12.2025
				DRWN	JAGADISH	02.12.2025
			SCALE	1:20	SHEET	1 OF 1
			ORG No.			
ALT No.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	ALT

UF CONTROL CABLE TRAY KIT-DTC

843-21008

3		2						1			
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
		TOLERANCE	+0.1	+0.2	+0.3	+0.5	+0.8	+1.2	+2	+3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227											
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 202 (PT-1) (MEDIUM)								QUALITY OF WELD JOINTS REF. RD. 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD. IS. 1012.C								STATUS: PROTO			
WELDING SHALL BE CARRIED OUT AS PER IS- 9595-96											

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GRADE No. N10
VALUE 30
SYMBOL

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