



Southern Railway

Office of senior section engineer (Bridges)
Construction Ernakulam
Date: 10/11/2025

To whomsoever it may concern

Name of Project: Proposed Construction of ROB -27 as in 1 x 36000 mm effective Span Composite Girder At CH 226501.20 M and ROB -30 as in 1x 35000 mm effective span composite girder at CH 227246.50 M between Trivandrum Central and Neyattinkara Station.

Reference: Invoice number-569 (10-12-2024)

Quantity of Bearing : 8 Nos.

This is to certify that M/S Hevea Rubber Technologies Private Limited has supplied 8 nos of POT PTFE Bearings for the above Mentioned Railway Project in the month of December 2024 vide invoice No. 569(10-12-2024) . The bearings have been checked and the material has been found satisfactory.

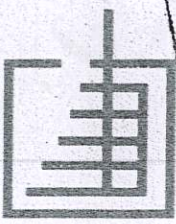
No Complaint from the department or from Site Engineers regarding Quality has been reported. The ROB 27 has been opened for traffic.

Name of Manufacturer: Hevea Rubber Technologies Private Limited
Name of Contractor : Mulammootil Constructions

Thanks and Regards

PRABITH Digitally signed
by PRABITH J
J PRASAD PRASAD
SSE/Br/CN/ERS


HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



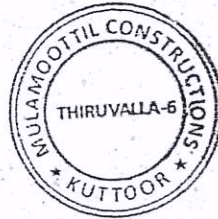
MULAMOOTTIL CONSTRUCTIONS

Engineers and Contractors

25-01-2025

TO WHOM SO EVER IT MAY CONCERN

This is to certified that M/s. Hevea Rubber Technologies Pvt. Ltd, 21 Development Plot, YMA Road, Poovanthuruthu P.O, Kottayam – 686004 has supplied POT – PTFE Bearing, Expansion Joint and Elastomeric Bearing to vide Railway Projects we are regularly working with M/s. Hevea Rubber Technologies Pvt. Ltd since 10 years and the material has been found satisfactory. No complaint from the Department or from Site Engineers regarding Quality.



For Mulamoottil Constructions

Managing Partner

HEVEA RUBBER TECHNOLOGIES (P) LTD.
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Kuttoor P.O,
Thiruvalla-689106
04692615485
mulamoottilconstructions@gmail.com

MULAMOOTTIL CONSTRUCTIONS

Engineers and Contractors

18/09/2024

To,

The Managing Director,
Hevea Rubber Technologies Pvt. Ltd.
Kottayam.

Sir,

Sub: Your Quotation Ref No: EBB/24-25/04 Dated 07-08-2024 for manufacturing & supply of Pot Bearings & Pin Bearings for Bridge No.30.

Work Name: Doubling of track between Thiruvananthapuram and Kanyakumari stations. Proposed reconstruction of ROB 27 as 1x36000 mm effective span composite girder at CH:226501.20m and ROB 30 as 1 x 35000 mm effective span composite girder at CH:227246.50 m between Trivandrum Central & Neyyatinkara stations.

We are pleased to place the order for manufacturing & supply of Pot Bearings & Pin Bearings for Bridge No.30 against your quotation Ref No: EBB/24-25/04 Dated 07-08-2024. So please be kind to take necessary arrangements to deliver the materials at the earliest.

Our billing address is as follows.


**Mulamoottil Constructions,
Kuttoor P.O,
Thiruvalla.
Pathanamthitta (Dt.),
Kerala,
Pin – 689106.**

GST: 32AACFM1892J1ZA

Thanking You

Yours Faithfully,

For Mulamoottil Construction


Managing Partner

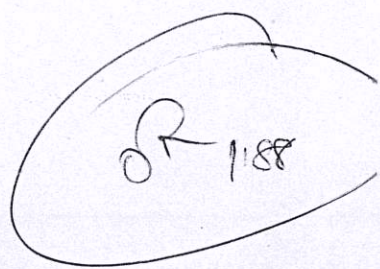

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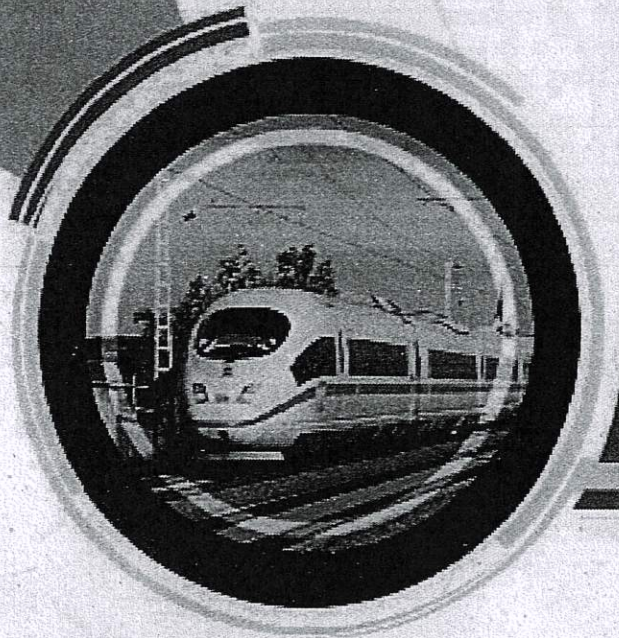
Kuttoor P.O,

Thiruvalla~689106

04692615485

mulamoottilconstructions@gmail.com


OR 1/188



Hevea Rubber
TECHNOLOGIES
INDUSTRIAL RUBBER PRODUCTS

HRT

Hevea Rubber Technologies (P) Ltd.

Office : 21, YMA road, Poovanthurathu PO, Kottayam 686012, Kerala.

Works : 21, YMA road, Poovanthurathu PO, Kottayam 686012, Kerala

Test Report For POT/PTFE Bearings

Client Name : Southern Railway

Contractor : Mulamootil Constructions

Authority Engineer : Dy.Chief Engineer / CE /CN//TVC, Sothern Railway

Reference Specifications : IRC 83 Part 3 : 2018

attested

Hevea Rubber Technologies Pvt. Ltd.

21, YMA Road, Poovanthurathu PO,

Kottayam 686012, Kerala



CERTIFICATION

Report No.	683/2783
Span	36.0m
Drawing No.	RDSO/B-11758/6R1
Quantity	08 Nos
Project	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at CH 227246.50m between Trivandrum central & Neyyankara stations.
Client	Southern Railway
Authority Engineer	Dy.Chief Engineer / CE /CN//TVC, Sothern Railway
EPC Contractor	Mulamootil Constructions
Manufacturer	Hevea Rubber Technologies Pvt. Ltd
Date of Manufacturing	2024-2025

Sl No.	Drawing No	Bearing No.	Type of Bearing
1	RDSO/B-11758/6R1	1	Fixed Pot bearing
2	RDSO/B-11758/6R1	2	Fixed Pot bearing
3	RDSO/B-11758/6R1	1	Transverse Guided Bearing
4	RDSO/B-11758/6R1	2	Transverse Guided Bearing
6	RDSO/B-11758/6R1	1	Longitudinal Guided Bearing
7	RDSO/B-11758/6R1	2	Longitudinal Guided Bearing
8	RDSO/B-11758/6R1	1	Free Pot Bearing
9	RDSO/B-11758/6R1	2	Free Pot Bearing

Item	POT/PTFE Bearings	
Bearing Details	Work Order No.	
	Qty	Project Location
POT/PTFE	08 Nos	Between Trivandrum central & Neyyankara stations.

All the relevant tests on the POT Bearings were conducted as per IRC 83 Part 3 Hevea Rubber Technologies Pvt Ltd here by issue that all the standards have been adhered to and the bearings have been cleared by quality team. Hevea Rubber technologies Pvt Ltd. Hereby guarantee the product for a period of 15 years with regards to its performance except in the case of any unnatural events such as cyclones, earthquakes and other such acts of God.

Test Carried out By

[Signature]
Kuljan Kurien
Managing Director

Test Conducted by

[Signature]
Jacob Kurien
Quality Manager

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CLIENT INSPECTION REPORT



PHYSICAL/VISUAL DIMENSION CHECK OF POT-CUM-PTFE BEARINGS

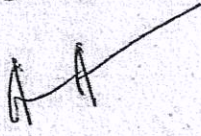

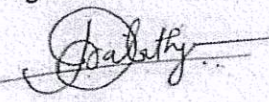
Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central &Neyyantinkara stations.
Type of Bearing	Fixed Pot Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested Pot No.	02
Date of Testing	28-08-2024

Sr no.	Description	Drawing Dimensions(mm)	Tolerance	Dimension Observed
1	Pot Bottom			
	a) overall thickness	62	+/-1	62.1
	b) overall dia	650	+/- 5	650.5
	c) c/c hole	550	+/-1	550.1
	d)thickness of flange	18	+/-1	18.4
	e) depth of pot	32	+/-1	32.2
	f) internal dia of pot	300	+/-1	300.2
	g) outside dia of pot	430	+/-1	430
	h)hole dia	30	+/-1	30.4
2	Top cover			
	a) overall dia	705	+/-5	705.5
	b) hole C/C	615	+/- 1	615.4
	c) Piston dia	298	+/- 1	298.01
	d) Piston thickness	20	+/- 1	20.01
	e) thickness of flange	41	+/- 1	41.02
	f) hole dia	30	+/- 1	30.05
3	Elastomer			
	a) inner dia	260	+/- 1	260.01
	b) outer dia	300	+/- 1	300.02
	c)thickness of large dia	16	+/- 1	16.5
	d)overall thickness	20	+/- 1	20.5
4	Brass seal ring			
	a) inner dia	185	+/- 1	185.02
	b) outer dia	225	+/- 1	225.02

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21, YMA Road, Poovanthurathu P.O.
Kottayam 686012



c)thickness	2	+/- 1	2
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Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between
Type of Bearing	Fixed Pot Bearings (F1) 1771.79 kN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Vertical Load

Design Vertical Load – 1771.79 KN=180.6MT Test Load on Bearing = 1.5 X 180.6= 270.9 MT Dia of JAAK 3 press – 500 mm	Type of jack :500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
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Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Reading	Remarks
1	270.9	138.8	4.42,4.67	Fixed Pot Bearing applied maximum Vertical Load 270.9 and to maintained 30 Mins.
2	After 30Min Dial Guage Reading	138.8	4.42,4.66	
3	Under sustained loading 270.9 MT deformation of elastomer pad is 0.00<0.5MM.		Load Starting Time	12.00 PM
4	Bearing components checked & visual inspection after testing are found to be ok		Load End Time	12.30 PM

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies 	Juby M Mathew Managing Partner Mulamoottil Constructions 	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR

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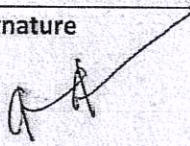
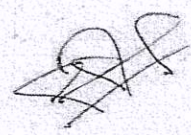
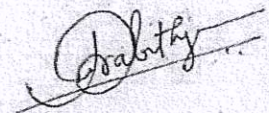



INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Fixed Pot Bearings (F1) 1771.79 kN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Rotation Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
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Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Remarks
1	180.6	92	Bearing components checked & visual inspection after testing are found OK.

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasanan S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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INSPECTION REPORT

Report No.	689/2783
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Type of Bearing	Fixed Pot Bearings (F1) 1771.79 kN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Rotation Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
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Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Remarks
1	180.6	92	Bearing components checked & visual inspection after testing are found OK.

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature

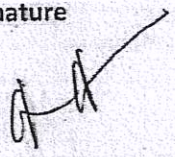

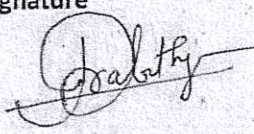
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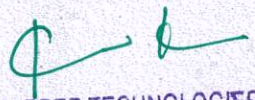


ELASTOMER HARDNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Fixed Pot Bearings (F1) 1771.79 kN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Elastomer Hardness Test As per IRC-83-2018 (Part-III)

Type	Req Hardness	Observed Hardness
Sample 1	50 IRHD	52
Sample 2	50 IRHD	52

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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PHYSICAL/VISUAL DIMENSION CHECK OF POT-CUM-PTFE BEARINGS

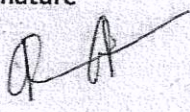
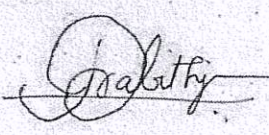
Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Longitudinal Guided Pot Bearings (F2) 1771.79KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024

Sr no.	Description	Drawing Dimensions(mm)	Tolerance	Dimension Observed
1	Pot Bottom			
	a) overall thickness	62	+/-1	62
	b) overall dia	650	+/- 5	650.1
	c) c/c hole	550	+/-1	550.1
	d) thickness of flange	18	+/-1	18.1
	e) depth of pot	32	+/-1	32.1
	f) internal dia of pot	300	+/-1	300.1
	g) outside dia of pot	430	+/-1	430
	h) hole dia	30	+/-1	30.2
	Piston		+/-1	
	a) top length	449	+/- 1	449.1
	b) width	449	+/- 1	449
	c) piston dia	298	+/- 1	298
	d) ptfе slot	10	+/- 1	10
	e) depth	2	+/- 1	2
	f) thickness of piston	20	+/- 1	20.1
	g) overall thickness	32	+/- 1	32
	h) top flange thickness	12	+/- 1	12
2	PTFE			
	a) dia of PTFE	240	+/-1	240.1
	b) ptfе thickness	4.5	+/- 1	4.5
3	Stainless steel			
	a) length	333	+/- 1	333
	b) width	333	+/- 1	333.1
	c) thickness	6	+/- 1	6
4	Elastomer			
	a) Inner dia	260	+/- 1	261

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	b) Outer dia	300	+/- 1	301
	c) Thickness of large dia	16	+/- 1	16.1
	d) Overall thickness	20	+/- 1	20.2
5	Brass			
	a) inner dia	185	+/- 1	185.1
	b) outer dia	225	+/- 1	225.2
	c) thickness	2	+/- 1	2
6	Top plate			
	a) length	705	+/- 1	705.1
	b) c/c bolt	615	+/- 1	615.1
	c) guide length	705	+/- 1	705
	d) guide thick	20	+/- 1	505.1
	e) guide width	25	+/- 1	12.1
	f) pitch Pitch	205	+/- 1	205
	g) edge distance	45	+/- 1	45
	h) top flange thick	16	+/- 1	16
	i) overall thick	41	+/- 1	41
7	Stainless Steel strip			
	a) length	505	+/- 1	505
	b) breadth	12	+/- 1	12.1
	c) thickness	3	+/- 1	3

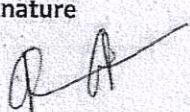
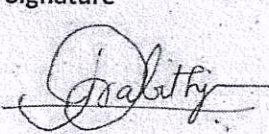
Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasanan S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature	Signature	Signature 



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21, YMA Road, Poovanthurathu P.O.
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	b) Outer dia	300	+/- 1	301
	c) Thickness of large dia	16	+/- 1	16.1
	d) Overall thickness	20	+/- 1	20.2
5	Brass			
	a) inner dia	185	+/- 1	185.1
	b) outer dia	225	+/- 1	225.2
	c) thickness	2	+/- 1	2
6	Top plate			
	a) length	705	+/- 1	705.1
	b) c/c bolt	615	+/- 1	615.1
	c) guide length	705	+/- 1	705
	d) guide thick	20	+/- 1	505.1
	e) guide width	25	+/- 1	12.1
	f) pitch Pitch	205	+/- 1	205
	g) edge distance	45	+/- 1	45
	h) top flange thick	16	+/- 1	16
	i) overall thick	41	+/- 1	41
7	Stainless Steel strip			
	a) length	505	+/- 1	505
	b) breadth	12	+/- 1	12.1
	c) thickness	3	+/- 1	3

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature	Signature	Signature 


HEVEA RUBBER TECHNOLOGIES (P) LTD.
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 POOVANTHURATHU P.O.
 KOTTAYAM-686 012, KERALA



INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Longitudinal Guided Pot Bearings (F2) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-8-2024
Type of Test	Friction Load Test As per IRC-83-2018 (Part-III)

Type of Jack: 100 MT No of Jack: 1 No	Type of jack :600 MT No of jacks – 1 nos
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Sl.no	Vertical Load (MT)	Applied Ver. Load (MT)	Applied Hor. Load(MT)	Remarks
1	Design Vertical Load – 1771.79 KN = 180.6MT	180.6	1.9	Co-Efficient of friction observed is (APP.HR.L/2XV) = 0.000145 Is less than 0.03 as per IRC-83-2018 (Part –III)

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature

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 21 DEVELOPMENT PLOT YMA ROAD
 POOVANTHURUTHU P.O.
 KOTTAYAM-686012, KERALA



INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between
Type of Bearing	Longitudinal Guided Pot Bearings (F2) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Rotation Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Dia of JAAK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
--	--

Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Remarks
1	180.6	92	Bearing components checked & visual inspection after testing are found OK.

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature

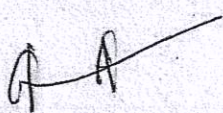


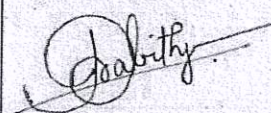
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PAINT THICKNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Longitudinal Guided Pot Bearings (F2) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-8-2024
Type of Test	Paint Thickness Test As per IRC-83-2018 (Part-III)

Type	Type of Bearing	Actual Thickness	Observed Thickness
Sample 1	Longitudinal Guided Bearing	160 Microns	190
Sample 2	Longitudinal Guided Bearing	160 Microns	195

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature 

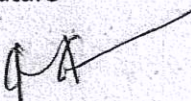

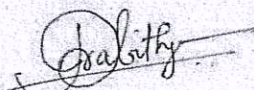

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ELASTOMER HARDNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Longitudinal Guided Pot Bearings (F2) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Elastomer Hardness Test As per IRC-83-2018 (Part-III)

Type	Req Hardness	Observed Hardness
Sample 1	50 IRHD	52
Sample 2	50 IRHD	51

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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PHYSICAL/VISUAL DIMENSION CHECK OF POT-CUM-PTFE BEARINGS

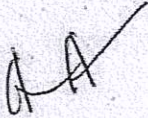
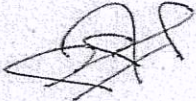
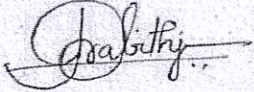
Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between
Type of Bearing	Transverse Pot Bearings (F3) 1771.79KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	1
Date of Testing	28-8-2024

Sr no.	Description	Drawing Dimensions(mm)	Tolerance	Dimension Observed
1	Pot Bottom			
	a) overall thickness	62	+/-1	62.3
	b) overall dia	650	+/- 5	650.5
	c) c/c hole	550	+/-1	550
	d) thickness of flange	18	+/-1	18.2
	e) depth of pot	32	+/-1	32
	f) internal dia of pot	300	+/-1	300
	g) outside dia of pot	430	+/-1	430
	h) hole dia	30	+/-1	30.2
	Piston			
	a) top length	449	+/-1	449
	b) width	449	+/-1	449
	c) piston dia	298	+/-1	298.2
	d) ptfе slot	10	+/-1	10
	e) depth	2	+/-1	2
	f) thickness of piston	20	+/-1	20.1
	g) overall thickness	32	+/-1	32.1
	h) top flange thickness	12	+/-1	12
2	PTFE			
	a) dia of PTFE	240	+/-1	240.1
	b) ptfе thickness	4.5	+/- 1	4.5
3	steel			
	a) length	333	+/- 1	333
	b) width	333	+/- 1	333
	c) thickness	6	+/- 1	6
4	Elastomer			
	a) Inner dia	260	+/- 1	260.1
	b) Outer dia	300	+/- 1	300

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	c) Thickness of large dia	16	+/- 1	16
	d) Overall thickness	20	+/- 1	20
5	Brass			
	a) inner dia	185	+/- 1	185.1
	b) outer dia	225	+/- 1	225.1
	c) thickness	2	+/- 1	2
6	Top plate			
	a) length	705	+/- 1	705
	b) c/c bolt	615	+/- 1	615
	c) guid length	705	+/- 1	705.1
	d) guide thick	20	+/- 1	50
	e) guide width depth	25	+/- 1	12
	f) pitch Pitch	205	+/- 1	205.1
	g) edge distance	45	+/- 1	45
	h) top flange thick	16	+/- 1	16.1
	i) overall thick	41	+/- 1	41.1
7	Stainless Steel strip			
	a) length	333	+/- 1	333
	b) breadth	333	+/- 1	333.1
	c) thickness	6	+/- 1	6

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasanan S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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 21 DEVELOPMENT PLOT YMA ROAD
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INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Transverse Pot Bearings (F3) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	1
Date of Testing	28-08-2024
Type of Test	Vertical Load Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN= 180.6 MT Test Load on Bearing = 1.5 X 180.6 = 270.9 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
--	--

Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Reading	Remarks
1	270.9	138.8	7.15,7.50	Fixed Pot Bearing applied maximum Vertical Load 270.9 and to maintained 30 Mins.
2	After 30Min Dial Guage Reading	138.8	7.16,7.50	
3	Under sustained loading 270.9 MT deformation of elastomer pad is 0.00<0.5MM.		Load Starting Time	12.55 PM
4	Bearing components checked & visual inspection after testing are found to be ok		Load End Time	1.25 PM

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasanan S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature

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KOTTAYAM - 686 012, KERALA



INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Transverse Pot Bearings (F3) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Date of Testing	28-08-2024
Type of Test	Rotation Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
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Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Remarks
5	180.6	92	Bearing components checked & visual inspection after testing are found OK.

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasanan S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature

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INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between
Type of Bearing	Transverse Pot Bearings (F3) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	1
Date of Testing	28-08-2024
Type of Test	Friction Load Test As per IRC-83-2018 (Part-III)

Type of Jack: 100 MT No of Jack: 1 No	Type of jack :600 MT No of jacks – 1 Nos
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Sl.no	Vertical Load (MT)	Applied Ver. Load (MT)	Applied Hor. Load(MT)	Remarks
1	Design Vertical Load – 1771.79 KN = 180.6MT	180.6	3.1	Co-Efficient of friction observed is (APP.HR.L/2XV) = 0.008 Is less than 0.03 as per IRC-83-2018 (Part –III)

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kuriën Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature

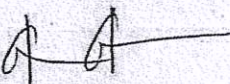
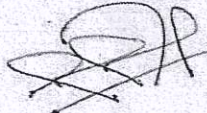
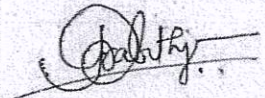
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PAINT THICKNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Transverse Pot Bearings (F3) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	1
Date of Testing	28-08-2024
Type of Test	Paint Thickness Test As per IRC-83-2018 (Part-III)

Type	Type of Bearing	Actual Thickness	Observed Thickness
Sample 1	Transverse Guided Bearing	160 Microns	210
Sample 2	Transverse Guided Bearing	160 Microns	211

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasen S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 

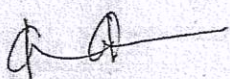
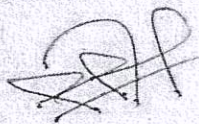
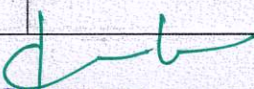
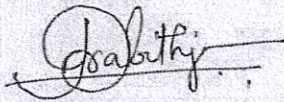

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ELASTOMER HARDNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Transverse Pot Bearings (F3) 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2Nos
Tested pot no	1
Date of Testing	28-08-2024
Type of Test	Elastomer Hardness Test As per IRC-83-2018 (Part-III)

Type	Req Hardness	Observed Hardness
Sample 1	50 IRHD	52
Sample 2	50 IRHD	51

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature 



PHYSICAL/VISUAL DIMENSION CHECK OF POT-CUM-PTFE BEARINGS

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024

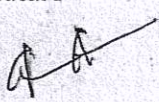
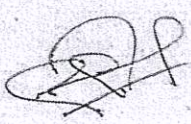
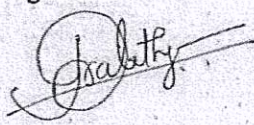
Sr no.	Description	Drawing Dimensions(mm)	Tolerance	Dimension Observed
1	Pot Bottom			
	a) overall thickness	62	+/-1	62.2
	b) overall dia	650	+/- 5	650.5
	c) c/c hole	550	+/-1	550.1
	d) thickness of flange	18	+/-1	18
	e) depth of pot	32	+/-1	32
	f) internal dia of pot	300	+/-1	300
	g) outside dia of pot	430	+/-1	430
	h) hole dia	30	+/-1	30
	Piston		+/-1	
	a) top length	449	+/- 1	449
	b) width	449	+/- 1	449.1
	c) piston dia	298	+/- 1	298.2
	d) ptfе slot	10	+/- 1	10
	e) depth	2	+/- 1	2
	f) thickness of piston	20	+/- 1	20
	g) overall thickness	32	+/- 1	32.2
	h) top flange thickness	12	+/- 1	12
2	PTFE			
	a) dia of PTFE	240	+/-1	240.1
	b) ptfе thickness	4.5	+/- 1	4.5
3	steel			
	a) length	333	+/- 1	333
	b) width	333	+/- 1	333.1



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	c) thickness	6	+/- 1	6
4	Elastomer			
	a) Inner dia	260	+/- 1	260
	b) Outer dia	300	+/- 1	300
	c) Thickness of large dia	16	+/- 1	16
	d) Overall thickness	20	+/- 1	20.1
5	Brass			
	a) inner dia	185	+/- 1	185
	b) outer dia	225	+/- 1	225.1
	c) thickness	2	+/- 1	2
6	Top plate			
	a) length	705	+/- 1	705.1
	b) c/c bolt	615	+/- 1	615.1
	c) edge distance	45	+/- 1	45
	d) top flange thick	16	+/- 1	16
	e) pitch	205		

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


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Kottayam 686012



INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Vertical Load Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Test Load on Bearing = 1.5 X 180.6 = 270.9 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
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Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Reading	Remarks
1	270.9	138.8	4.80,6.04	Fixed Pot Bearing applied maximum Vertical Load 270.9 and to maintained 30 Mins.
2	After 30Min Dial Guage Reading	138.8	4.80,6.04	
3	Under sustained loading 270.9 MT deformation of elastomer pad is 0.00<0.5MM.		Load Starting Time	1.00 PM
4	Bearing components checked & visual inspection after testing are found to be ok		Load End Time	1.30 PM

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature

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INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Rotation Test As per IRC-83-2018 (Part-III)

Design Vertical Load – 1771.79 KN=180.6 MT Dia of JACK 3 press – 500 mm	Type of jack: 500 MT No of jacks – 1 Nos Piston Dia – 500 mm (Area= 1963 cm ²)
--	--

Sl.no	Vertical Load (MT)	Pressure Gauge Reading	Remarks
5	180.6	92	Bearing components checked & visual inspection after testing are found OK.

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature

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INSPECTION REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Friction Load Test As per IRC-83-2018 (Part-III)

Type of Jack: 100 MT No of Jack: 1 No	Type of jack :600 MT No of jacks – 1 Nos
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Sl.no	Vertical Load (MT)	Applied Ver. Load (MT)	Applied Hor. Load(MT)	Remarks
1	Design Vertical Load – 1771.79 KN = 180.6 MT	180.6	2.1	Co-Efficient of friction observed is (APP.HR.L/2XV) = 0.0058 Is less than 0.03 as per IRC-83-2018 (Part –III)

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature 	Signature

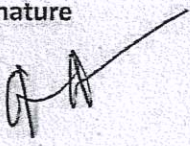

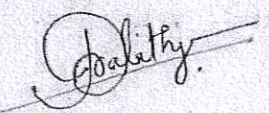
HEVEA RUBBER TECHNOLOGIES (P) LTD,
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O,
KOTTAYAM-686 012, KERALA

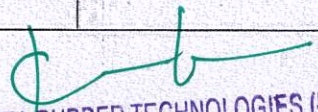


PAINT THICKNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Paint Thickness Test As per IRC-83-2018 (Part-III)

Type	Type of Bearing	Actual Thickness	Observed Thickness
Sample 1	Free Bearing	160 Microns	215
Sample 2	Free Bearing	160 Microns	214

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 

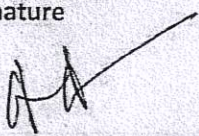
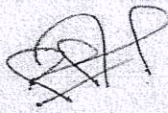
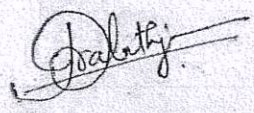

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21 DEVELOPMENT PLOT YMA ROAD
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KOTTAYAM-686 012, KERALA



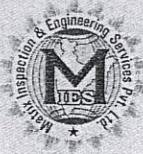
ELASTOMER HARDNESS TEST REPORT

Report No.	689/2783
Project Name	Proposed reconstruction of ROB27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at ch 227246.50m between Trivandrum central & Neyyantinkara stations.
Type of Bearing	Free Bearings 1771.79 KN
Drwg No.	RDSO/B-11758/6R1
Quantity Offered	2 Nos
Tested pot no	2
Date of Testing	28-08-2024
Type of Test	Elastomer Hardness Test As per IRC-83-2018 (Part-III)

Type	Req Hardness	Observed Hardness
Sample 1	50 IRHD	52
Sample 2	50 IRHD	50

Tested By	Witnessed By	Witnessed By	Witnessed By
Kurian Kurien Managing Director Hevea Rubber Technologies	Juby M Mathew Managing Partner Mulamoottil Constructions	Jayasenana S AXEN/II/CN/TVC	Prabith J Prasad SSE/Br/CN/ERS Construction/SR
Signature 	Signature 	Signature	Signature 


HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
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Matrix

Inspection & Engineering Services Pvt. Ltd.

AN ISO 9001 : 2015 CERTIFIED COMPANY

CERTIFICATION OF PROFICIENCY

(As per American Society for Non - Destructive Testing)

Cert. No. **UT/254-2/2017**



This is to certify

Mr. KURIAN KURIEN

sponsored by

SELF

has demonstrated his ability successfully in both written and practical examinations in accordance with ASNT Recommended Practice Document no. SNT-TC-1A : 2024 Edition and our Written Practice No. MIES/QP, Rev#08, in the following method and level as detailed below.

Method : **Ultrasonic Testing**

WORK EXPERIENCE: **8 Years**

Level : **II**

VISION EXAMINATION

Training Hours : **80 Hours**

Near Vision Acuity : **J2**

Qualification : **B.Tech**

Colour Vision : **Normal**

STATEMENT OF MARKS

Description	Marks Obtained (%)	Minimum Passing Marks (%)	Results
General	85.00	70.00	Pass
Specific	83.00	70.00	
Practical	84.00	80.00	
Composite Grade (%)	84.00	80.00	

This Certificate is issued on

Continuous Satisfactory Performance.

Issue Date : **07.03.2017**

Institute : **Matrix Inspection & Engg Services, Hosur**

Date of Certification : **05.03.2022**

Expiry of Certification : **04.03.2027**

Renewable as per the requirement of SNT-TC-1A.



For Matrix Inspection & Engineering Services



Course Director



Examiner's Signature

Plot No.3, Near Anand Electronics, Krishnagiri Main Road, HOSUR - 635 109.
Mob. 97860 05171 | 72 | 73 | 75 E-mail : matrixinspection@gmail.com www.matrixinspection.com

HEVEA RUBBER TECHNOLOGIES (P) LTD.
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POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



Metal Lab



No. 5, Boopathy Street, Virugambakkam, Chennai - 600 092.

Ph: 044-4204 7244 / 044-4207 7677 | Cell: 73580 73577 / 73580 27788 / 90422 24893

E-mail: twggroupchennai@gmail.com | Web: www.metallab.in / www.twgindia.com

TC-14634

An ISO 9001:2015 Certified Organization

ULTRASONIC TESTING REPORT

ULR No. : TC14634250000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 10/03/2025

KOTTAYAM, KERALA

Test Completed: 10/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Extent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01 5mm Dia	10.00 mm 20.00 mm 30.00 mm	80% 60% 50%	48 dB + 6 dB	58 dB

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Neman stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished Before Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
01.	FIXED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed Acceptable
02.	FIXED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	

*** End of Report ***

Page 01 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

Tested By:

D. Sababathy
ASNT LEVEL II UT, MPT, DPT, RT

Company Seal



For METAL LAB

Reviewed & Approved By - Authorized Signatory

J. NAVEEN
ASNT LEVEL II UT, MPT, DPT, RT
ISNT LEVEL II UT, MPT, DPT, RT

HEVEA RUBBER TECHNOLOGIES (P) LTD.

21 DEVELOPMENT PLOT YMA ROAD

POOVANTHURUTHU P.O.

KOTTAYAM-686 012 KERALA



Metal Lab



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 E-mail: twggroupchennai@gmail.com | Web: www.metallab.in / www.twgindia.com

TC-14634

ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 10/03/2025

KOTTAYAM, KERALA

Test Completed: 10/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 A

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Extent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01	10.00 mm	80%	48 dB + 6 dB	58 dB
						20.00 mm	60%		
					5mm Dia	30.00 mm	50%		

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished Before Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
01.	TRANSVERSE GUIDED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed Acceptable
02.	TRANSVERSE GUIDED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	
03.	TRANSVERSE GUIDED POT BEARING SLIDING PLATE	2 Nos	-	-	-	-	-	-	

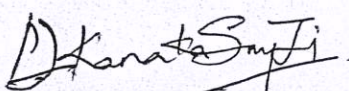

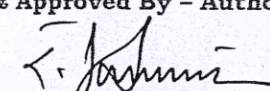
*** End of Report ***

Page 02 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

<p>Tested By:</p>  <p>D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT</p>	<p>Company Seal</p> 	<p>For METAL LAB</p> <p>Reviewed & Approved By - Authorized Signatory</p>  <p>J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT ISNT LEVEL II UT, MPT, DPT, RT</p>
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HEVEA RUBBER TECHNOLOGIES PVT. LTD.
 21 DEVELOPMENT PLOT YMA ROAD,
 POOVANTHURUTHU P.O.,
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TC-14634



Metal Lab

No. 5, Boopathy Street, Virugambakkam, Chennai - 600 092.

Ph: 044-4204 7244 / 044-4207 7677 | Cell: 73580 73577 / 73580 27788 / 90422 24893

E-mail: twggroupchennai@gmail.com | Web: www.metallab.in / www.twgindia.com



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ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 10/03/2025

KOTTAYAM, KERALA

Test Completed: 10/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 B

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME SEC V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Percent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01	10.00 mm	80%	48 dB + 6 dB	58 dB
						20.00 mm	60%		
					5mm Dia	30.00 mm	50%		

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished Before Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
01.	LONGITUDINAL GUIDED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed
02.	LONGITUDINAL GUIDED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	
03.	LONGITUDINAL GUIDED POT BEARING SLIDING PLATE	2 Nos	-	-	-	-	-	-	

*** End of Report ***

Page 03 of 08

* Results related to the item tested only.

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Tested By: D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT	Company Seal 	For METAL LAB Reviewed & Approved By - Authorized Signatory J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT ISNT LEVEL II UT, MPT, DPT, RT
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HEVEA RUBBER TECHNOLOGIES (P) LTD
 21 DEVELOPMENT PLOT YMA ROAD
 POOVANTHURUTHU P.O
 KOTTAYAM



TC-14634



Metal Lab

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ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 10/03/2025

KOTTAYAM, KERALA

Test Completed: 10/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 C

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Percent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01 5mm Dia	10.00 mm 20.00 mm 30.00 mm	80% 60% 50%	48 dB + 6 dB	58 dB

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished Before Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
02.	FREE POT BEARING POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed
	FREE POT BEARING POT BOTTOM	2 Nos	-	-	-	-	-	-	
03.	FREE POT BEARING SLIDING PLATE	2 Nos	-	-	-	-	-	-	Acceptable

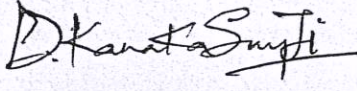

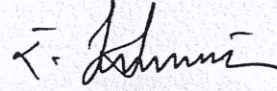
*** End of Report ***

Page 04 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

<p>Tested By:</p>  <p>D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT</p>	<p>Company Seal</p> 	<p>For METAL LAB</p> <p>Reviewed & Approved By - Authorized Signatory</p>  <p>J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT</p>
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HEVEA RUBBER TECHNOLOGIES PVT LTD
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Metal Lab



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 E-mail: twggroupchennai@gmail.com | Web: www.metallab.in / www.twgindia.com

ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 22/03/2025

KOTTAYAM, KERALA

Test Completed: 22/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 D

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Extent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01 5mm Dia	10.00 mm 20.00 mm 30.00 mm	80% 60% 50%	48 dB + 6 dB	58 dB

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished After Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From 0mm			Remarks
						Start	End	Total	
02.	FIXED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed Acceptable
	FIXED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	

*** End of Report ***

Page 01 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

Tested By: D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT	Company Seal 	For METAL LAB Reviewed & Approved By - Authorized Signatory J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT ISNT LEVEL II UT, MPT, DPT, RT
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HEVEA RUBBER TECHNOLOGIES (P) LTD.
 21 DEVELOPMENT PLOT YMA ROAD
 POOVANATHURUTHU P.O.
 KOTTAYAM, KERALA



TC-14634



Metal Lab

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ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 22/03/2025

KOTTAYAM, KERALA

Test Completed: 22/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 E

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIW V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Percent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01	10.00 mm	80%	48 dB + 6 dB	58 dB
						20.00 mm	60%		
					5mm Dia	30.00 mm	50%		

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished After Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From 0mm			Remarks
						Start	End	Total	
01.	TRANSVERSE GUIDED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed
02.	TRANSVERSE GUIDED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	
03.	TRANSVERSE GUIDED POT BEARING SLIDING PLATE	2 Nos	-	-	-	-	-	-	

*** End of Report ***

Page 02 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

<p>Tested By:</p> <p>D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT</p>	<p>Company Seal</p>	<p>For METAL LAB</p> <p>Reviewed & Approved By - Authorized Signatory</p> <p>J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT ASNT LEVEL II UT, MPT, DPT, RT</p>
--	----------------------------	--

HEVEA RUBBER TECHNOLOGIES PVT. LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



TC-14634



Metal Lab

No. 5, Boopathy Street, Virugambakkam, Chennai - 600 092.

Ph: 044-4204 7244 / 044-4207 7677 | Cell: 73580 73577 / 73580 27788 / 90422 24893
E-mail: twggroupchennai@gmail.com | Web: www.metallab.in / www.twgindia.com



An ISO 9001:2015 Certified Organization

ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 22/03/2025

KOTTAYAM, KERALA

Test Completed: 22/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 F

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIV V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME SEC V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Percent of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01	10.00 mm	80%	48 dB + 6 dB	58 dB
						20.00 mm	60%		
					5mm Dia	30.00 mm	50%		

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder. Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished After Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
01.	LONGITUDINAL GUIDED POT BEARING - POT COVER	2 Nos	-	-	-	-	-	-	No Recordable Indications Noticed
02.	LONGITUDINAL GUIDED POT BEARING - POT BOTTOM	2 Nos	-	-	-	-	-	-	
03.	LONGITUDINAL GUIDED POT BEARING SLIDING PLATE	2 Nos	-	-	-	-	-	-	

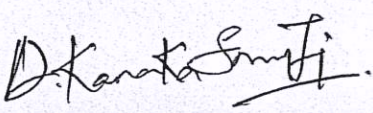

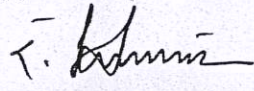
*** End of Report ***

Page 03 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

Tested By:  D. Sababathy ASNT LEVEL II UT, MPT, DPT, RT	Company Seal 	For METAL LAB Reviewed & Approved By - Authorized Signatory  J. NAVEEN ASNT LEVEL II UT, MPT, DPT, RT ISNT LEVEL II UT, MPT, DPT, RT
---	--	---

HEVEA RUBBER TECHNOLOGIES (PVT) LTD
21 DEVELOPMENT PLOT YMA ROAD

POOVANTHURUTHU P.O.
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Metal Lab



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ULTRASONIC TESTING REPORT

ULR No. : TC146342500000199F

Report Date: 24/04/2025

Issued To : M/s. HEVEA RUBBER TECHNOLOGIES PVT. Ltd.

Test Commenced: 22/03/2025

KOTTAYAM, KERALA

Test Completed: 22/03/2025

Client: Southern Railway

Work Site: At Customer's Site

Contractor: Mulamootil Constructions

Customer Ref: Letter Date: 08/03/2025

Our Ref: WON/2025/4277 G

TEST PARAMETERS

Equipment	: Einstein II TFT	Equipment Sl. No.	: E4493 1215
Calibration Blocks	: IIV V1, V2 Block	Equipment Calibration Due	: 20/08/2025
Procedure Ref	: ASME Sec V - SA-609	Acceptance Criteria	: ASME Sec V - SA-609
Cable Type & Length	: Lemo to mini Lemo/ 2mts	Couplant	: Oil
Point of Examination	: 100% Scanning	Reference Block Standard	: ASTM E-164
Personnel Identity	: SNT/TC/1A/Level II	Sizing Technique	: 6dB Drop Method
Search Unit Serial No.	: MBW 60 N4, MMS 4 N	Examination Technique	: Pulse Echo Contact

Probe Type	Probe Size (mm)	Probe Freq.	Probe Angle	Wave Mode	Ref Block FBH Size	DAC Beam Path (mm)	Echo Height	Ref. Gain DAC (dB+TLC)	Scanning Sensitivity
Normal	10mm	2 MHz	0°	Longitudinal	ML-DAA-01	10.00 mm	80%	48 dB +	58 dB
						20.00 mm	60%	6 dB	
					5mm Dia	30.00 mm	50%		

TEST RESULTS

Project Details: Doubling of track between TVC-NCJ-ROB no:30At KM 227200-300 Exg 2x12200+1x6100 span girder.
 Proposed 1x35000 effective span composite girder superstructure between Trivandrum and Nemam stations.

Material: Cast Steel

Surface Condition: Cleaned

Stage of UT: Finished After Load Test

Sl. No.	Description of Job	Qty	Range (mm)	Nature of Indication	Echo Height	Defect Length From Omm			Remarks
						Start	End	Total	
01.	FREE POT BEARING	2 Nos	-	-	-	-	-	-	No. Recordable Indications Noticed Acceptable
	POT COVER								
02.	FREE POT BEARING	2 Nos	-	-	-	-	-	-	
	POT BOTTOM								
03.	FREE POT BEARING	2 Nos	-	-	-	-	-	-	
	SLIDING PLATE								

*** End of Report ***

Page 04 of 08

* Results related to the item tested only.

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* Control No.: FM/NDT/UT - Issue-02/Rev-01

Tested By:

D. Sababathy
ASNT LEVEL II UT, MPT, DPT, RT

Company Seal



For METAL LAB

Reviewed & Approved By - Authorized Signatory

J. NAVEEN
ASNT LEVEL II UT, MPT, DPT, RT
ISNT LEVEL II UT, MPT, DPT, RT

HEVEA RUBBER TECHNOLOGIES (P) LTD.
 21 DEVELOPMENT PLOT YMA ROAD
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TC-6572

Test Report

ULR - TC657224000004295F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No. MAEON/0524/1091
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	Hevea Sample	Customer	Senior Section Engineer
Project	Proposed reconstruction of ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttill Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Slab	Test Start Date	23-05-2024
Quantity	1 No	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Heat Aging : 100°C,72hrs			
a)	Change in Hardness Shore A	%	ISO 188: 2023	+1.6

- Note: 1. Test samples are received in good condition.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the testing laboratory.
4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Work Order : 15947 B

Authorised by

D.Sekar, LAB CHIEF
MAEON Laboratories



*****End of Report*****

F/TR/7.8 Rev No: 01 RevDt: 05-05-2020

HEVEA RUBBER TECHNOLOGIES (P) LTD.
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TC-6572

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Laboratory Complying To ISO/IEC 17025 Laboratory Management System



Test Report

ULR - TC657224000004289F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1085
Date : 30-05-2024.

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	TRB-1	Customer	Senior Section Engineer
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Sub	Pot Bearing Elastomer Test - Letter Dated 15-07-2023 from Office of Senior Section Engineer, Bridge/ Construction, S.R, Ernakulam		
Ref	P Rangaraju Constructions	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	22-05-2024
Quantity	3 Nos	Date of Completion	23-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2 °C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Elongation at Break	%	ISO 37: 2017	504.3

- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

D. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 A



*****End of Report*****

F/TR/7.8 Rev No: 01 RevDt: 05-05-2020

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21 DEVELOPMENT PLOT YMA ROAD
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Test Report

ULR - TC65722400004291F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1087
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	TRB-1	Customer	Senior Section Engineer
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eGCLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Sub	Pot Bearing Elastomer Test - Letter Dated 15-07-2023 from Office of Senior Section Engineer, Bridge/Construction, S.R, Ernakulam		
Ref	P Rangaraju Constructions	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	23-05-2024
Quantity	3 Nos	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23 ± 2°C, 50 ± 5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Heat Aging : 100°C, 72hrs			
a)	Change in Elongation at Break	%	ISO 188: 2023	-4.99

- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

B. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 A



End of Report
HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
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Test Report

ULR - TC657224000004288F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1084
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	TRB-1	Customer	Senior Section Engineer
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Sub	Pot Bearing Elastomer Test - Letter Dated 15-07-2023 from Office of Senior Section Engineer, Bridge/Construction, S.R, Ernakulam		
Ref	P Rangaraju Constructions	Date of Receipt	17-05-2024
Type	Slab	Test Start Date	22-05-2024
Quantity	1 No	Date of Completion	23-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Hardness Shore A	-	ISO 48-4: 2018	50.4

- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
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 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Work Order : 15947 A

Authorised by

D.Sekar, LAB CHIEF
MAEON Laboratories



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Test Report

ULR - TC657224000004290F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1086

Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	TRB-1	Customer	Senior Section Engineer
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Sub	Pot Bearing Elastomer Test - Letter Dated 15-07-2023 from Office of Senior Section Engineer, Bridge/ Construction, S.R, Ernakulam		
Ref	P Rangaraju Constructions	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	23-05-2024
Quantity	1 No	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2 °C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Heat Aging : 100°C,72hrs			
a)	Change in Hardness Shore A	-	ISO 188: 2023	+2

- Note: 1. Test samples are received in good condition.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the testing laboratory.
4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Work Order : 15947 A

Authorised by

Sekar, LAB CHIEF
MAEON Laboratories



HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



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Test Report

ULR - TC657224000003553F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O,
Kottayam - 686 012, Kerala

Test Report No MAEON/0524/224

Date 08-05-2024

Contact Person: Mr.Jacob Kurien

Page 1 of 1

Name of the sample	TRB	Date of Receipt	25-04-2024
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Type	Slab	Test Start Date	29-04-2024
Quantity	3 Nos	Date of Completion	30-04-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition 23±2°C, 50±5% RH

S.No	Test Parameter	Unit	Test Method	Test Result
1	Tensile Strength	MPa	ISO 37: 2017	17.08

- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by

K.S. Sabaris
Manager Testing

Work Order 15694

Authorised by

D Sekar, LAB CHIEF
MAEON Laboratories



HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
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Test Report

ULR - TC657224000003556F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686 012, Kerala

Test Report No MAEON/0524/227
Date 08-05-2024

Contact Person: Mr.Jacob Kurien

Page 1 of 1

Name of the sample	TRB	Date of Receipt	25-04-2024
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Type	Slab	Test Start Date	30-04-2024
Quantity	3 Nos	Date of Completion	04-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition 23 ± 2°C 50 ± 5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1 Heat Aging : 100°C, 70hours				
a)	Change in Tensile Strength	%	ISO 188: 2023	-1.46

Note: 1. Test samples are received in good condition.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the testing laboratory.
4. This test report is only for the sample tested as supplied by the customer.

Verified by

K.S. Sabaris
Manager Testing

Work Order 15094

Authorised by

D. Sekar, LAB CHIEF
MAEON Laboratories

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



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Test Report

ULR - TC657224000003558F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,

21, Development Plot, Y.M.A Road,

Poovanthuruthu P.O.

Kottayam - 686 012, Kerala

Test Report No MAEON/0524/229

Date 08-05-2024

Contact Person: Mr. Jacob Kurien

Name of the sample	TRB	Date of Receipt	25-04-2024
Project	Construction of proposed ROB in lieu of existing LC No: 566 at KM 191-500 in between Chirayinkeezh & Murukkapuzha Station and Proposed ROB in lie of eXGLC No. 547 at KM.159/800-159/900 in between Kollam and Mayyanad Sections.		
Type	Slab	Test Start Date	30-04-2024
Quantity	3 Nos	Date of Completion	04-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition 23 ± 2 °C 50 ± 5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Ozone Resistance : Concentration : 100pphm. Temperature : 40°C. Strain : 30%. Duration : 96hrs Condition : Static	Visual	ISO 1431 (PART - 1) Procedure A: 2022	No crack observed in 96hrs

Work Order : 15694

Page 1 of 2

HEVEA RUBBER TECHNOLOGIES (P) LTD
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA





Maeon Laboratories

14, Lakshmikanthammal 1st Street, Rajiv Nagar, Vanagaram, Chennai 600077.

- 044 2649 4689
- 99406 67389
- maeonlabs@gmail.com
- 90420 55689
- testing@maeonlabs.com



NABL ACCREDITED LABORATORY

Laboratory Complying To ISO/IEC 17025 Laboratory Management System



Test Report

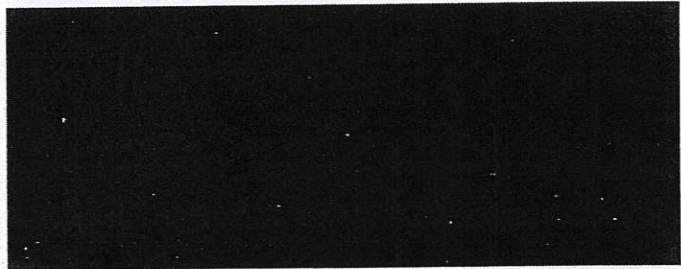
ULR - TC657224000003558F

Test Report No : MAEON/0524/229

Name of the sample : TRB

Ozone Resistance

Before Test :




After Test :

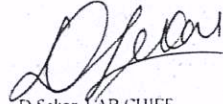


- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by


 S. Subaris
 Manager Testing

Authorised by


 D Sekar, LAB CHIEF
 MAEON Laboratories

Work Order : 15694

Page 2 of 2


HEVEA RUBBER TECHNOLOGIES (P)
 21 DEVELOPMENT PLOT YMA ROAD
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*****End of Report*****



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TC-6572

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Test Report

ULR - TC65722400004300F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1096
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

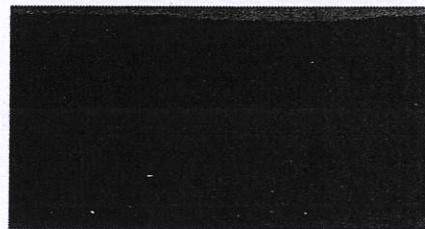
Page 1 of 1

Name of the sample	Hevea Sample TRB1	Customer	Senior Section Engineer
Project	Proposed ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyattinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttil Constructors
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Slab	Test Start Date	23-05-2024
Quantity	1 No	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2 °C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Ozone Resistance : Concentration : 100pphm, Temperature : 40°C, Strain : 30%, Duration : 96hrs Condition : Static	Visual	ISO 1431 Part 1: 2022	No Crack Observed in 96 hrs

Before Test :



After Test :



- Note:
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 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Work Order : 15947 C



Authorised by

S. Sekar, LAB CHIEF
MAEON Laboratories

*****End of Report*****

F/TR/7.8 Rev No: 01 RevDt: 05-05-2020

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



Maeon Laboratories

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Test Report

ULR - TC657224000004298F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No. MAEON/0524/1094
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	Hevea Sample TRB1	Customer	Senior Section Engineer
Project	Proposed ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttill Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	22-05-2024
Quantity	3 Nos	Date of Completion	23-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Elongation at Break	%	ISO 37: 2017	487.1

- Note: 1. Test samples are received in good condition.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the testing laboratory.
4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

D. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 C

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM - 686 012, KERALA

*****End of Report*****



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Test Report

ULR - TC657224000004299F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,

21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1095
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	Hevea Sample TRB1	Customer	Senior Section Engineer
Project	Proposed ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttill Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	23-05-2024
Quantity	3 Nos	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Heat Aging : 100°C,72hrs			
a)	Change in Elongation at Break	%	ISO 188: 2023	-6.06

- Note:
1. Test samples are received in good condition.
 2. Test Method: As agreed with the customer.
 3. This report shall not be reproduced except in full without the approval of the testing laboratory.
 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

O.Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 C

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



*****End of Report*****



Maeon Laboratories

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testing@maeonlabs.com



TC-6572

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Laboratory
Management System



Test Report

ULR - TC657224000004293F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1089
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	Hevea Sample	Customer	Senior Section Engineer
Project	Proposed reconstruction of ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttill Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	22-05-2024
Quantity	3 Nos	Date of Completion	23-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Tensile Strength	MPa	ISO 37: 2017	16.6

- Note:
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 2. Test Method: As agreed with the customer.
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 4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

D. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 B

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



*****End of Report*****



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TC-6572

Test Report

ULR - TC65722-4000004296F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1092
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1

Name of the sample	Hevea Sample	Customer	Senior Section Engineer
Project	Proposed reconstruction of ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttil Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Dumbell	Test Start Date	23-05-2024
Quantity	3 Nos	Date of Completion	27-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2°C, 50±5% R.H

S.No	Test Parameter	Unit	Test Method	Test Result
1	Heat Aging : 100°C,72hrs			
a)	Change in Tensile Strength	%	ISO 188: 2023	+8.20

- Note: 1. Test samples are received in good condition.
2. Test Method: As agreed with the customer.
3. This report shall not be reproduced except in full without the approval of the testing laboratory.
4. This test report is only for the sample tested as supplied by the customer.

Verified by :

K.S. Sabaris
Manager Testing

Authorised by

P. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 B

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



*****End of Report*****



Maeon
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testing@maeonlabs.com



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Management System



Test Report

ULR - TC657224000004292F

Issued to : M/s Hevea Rubber Technologies Pvt Ltd.,
21, Development Plot, Y.M.A Road,
Poovanthuruthu P.O.,
Kottayam - 686012.

Test Report No : MAEON/0524/1088
Date : 30-05-2024

Contact Person: Mr. Jacob Kurien

Page 1 of 1


Name of the sample	Hevea Sample	Customer	Senior Section Engineer
Project	Proposed reconstruction of ROB 27 as 1x36000mm effective span composite girder at CH 226501.20m and ROB 30 as 1x35000mm effective span composite girder at Ch. 227246.50m between Trivandrum Central & Neyyatinkara stations		
Sub	Pot Bearing Elastomer Test	Ref	Contractor Mulamuttill Constructions
Ref	Client Southern Railway	Date of Receipt	17-05-2024
Type	Slab	Test Start Date	22-05-2024
Quantity	1 No	Date of Completion	23-05-2024
Discipline	Mechanical Testing	Group	Rubber and Rubber Products

Environmental Condition : 23±2 °C, 50±5% R.H

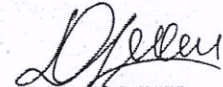
S.No	Test Parameter	Unit	Test Method	Test Result
1	Hardness Shore A	-	ISO 48-4: 2018	50.4

- Note:
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Verified by :


K.S. Sabaris
Manager Testing

Authorised by


D. Sekar, LAB CHIEF
MAEON Laboratories

Work Order : 15947 B

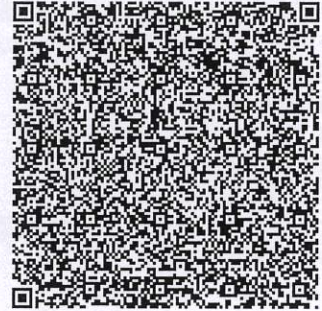

HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA



*****End of Report*****

Tax Invoice

e-Invoice



IRN : 5d97f7ecc164dba0d77583a881305909cf401a2eb90021f-25c886a4e345d1fc8
 Ack No. : 152420087285440
 Ack Date : 10-Dec-24

HEVEA RUBBER TECHNOLOGIES PVT LTD Plot 21, YMA Road, Poovanthuruthu Kottayam - 686 012 PH:0481-2342081 GSTIN/UID: 32AAACH6787J1ZB State Name : Kerala, Code : 32 CIN: U25199KL1995PTC009130 E-Mail : hevearubbertechnologies@gmail.com	Invoice No.	e-Way Bill No.	Dated
	569	511743638888	10-Dec-24
Mulamoottil Constructions DELIVERY AT Trivandrum, Vellayani GSTIN/UID : 32AACFM1892J1ZA State Name : Kerala, Code : 32	Delivery Note	Mode/Terms of Payment	
	Reference No. & Date.	Other References	
Consignee (Ship to) Mulamoottil Constructions DELIVERY AT Trivandrum, Vellayani GSTIN/UID : 32AACFM1892J1ZA State Name : Kerala, Code : 32	Buyer's Order No.	Dated	
	dt 14.03.2024	31-Mar-24	
Buyer (Bill to) Mulamoottil Constructions Kuttur P.O, Thiruvalla Pathanamthitta District, GSTIN/UID : 32AACFM1892J1ZA State Name : Kerala, Code : 32	Dispatch Doc No.	Delivery Note Date	
	Hrt/250		
	Dispatched through	Destination	
	KL26C6688	Vellayani.Trivandrum	
	Bill of Lading/LR-RR No.	Motor Vehicle No.	
		KL26C6688	
	Terms of Delivery		

SI No.	Description of Goods	HSN/SAC	Quantity	Rate	per	Amount
1	Bridge Components Bearing PFXB-FIXED IN ALL DIRECTIONS	73089090	2 Nos.	92,523.70	Nos.	1,85,047.40
2	Bridge Components Bearing PGB-T-GUIDED IN ONE DIRECTION	73089090	2 Nos.	82,891.57	Nos.	1,65,783.14
3	Bridge Components Bearing PGB-T-GUIDED IN ONE DIRECTION	73089090	2 Nos.	82,891.57	Nos.	1,65,783.14
4	Bridge Components Bearing PFRB-FREE IN ALL DIRECTION	73089090	2 Nos.	83,197.66	Nos.	1,66,395.32
						6,83,009.00
					9 %	61,470.81
					9 %	61,470.81

continued to page number 2

This is a Computer Generated Invoice

HEVEA RUBBER TECHNOLOGIES (PVT.) LTD.
 21 DEVELOPMENT PLOT YMA ROAD
 POOVANTHURUTHU P.O.
 KOTTAYAM-686 012, KERALA

Name of the bidder/JV partner: **M/s. Mulamoottil Constructions**

Annual Contractual turnover data for the previous 3/4 years (Contractual payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees equivalent
2022-23	222235110		
2021-22	179286559		
2020-21	138895793		
Average Annual Contractual turnover for last 3 years			180139154

Average Annual Contractual turnover for last 3 years

1. The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

For **MULAMOOTTIL CONSTRUCTIONS**

SEAL AND SIGNATURE OF **Managing Partner**

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor's reports. _____

(Signature of Chartered Accountant)

Name of CA: **For GEORGE & SHAJAN
CHARTERED ACCOUNTANTS
(FIR: 0009065)**

Registration No: _____ (Seal)

**CHERRY P. KURIAN (Partner)
(M. No: 201948)**



**HEVEA RUBBER TECHNOLOGIES (P) LTD.
21 DEVELOPMENT PLOT YMA ROAD
POOVANTHURUTHU P.O.
KOTTAYAM-686 012, KERALA**