

केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं  
प्रौद्योगिकी संस्थान (सिपेट)

( पूर्व में केन्द्रीय प्लास्टिक इंजीनियरिंग एवं तकनीकी संस्थान )

मुख्यालय, पीडीआई सेल

रसायन एवं पेट्रो रसायन विभाग,

रसायन एवं उर्वरक मंत्रालय, भारत सरकार,

टीवीके: औद्योगिक इस्टेट, गुन्डी, चेन्नई - 600 032

दूरभाष : 044-29813708 (Direct) /044-22254780 (Extn-502)

ई-मेल : pdiho@cipet.gov.in



CENTRAL INSTITUTE OF PETROCHEMICALS  
ENGINEERING & TECHNOLOGY (CIPET)

(Formerly Central Institute of Plastics Engineering & Technology)

Head Office, PDI Cell

Department of Chemicals & Petrochemicals,

Ministry of Chemicals & Fertilizers, Govt. of India,

TVK Industrial Estate, Guindy, Chennai - 600 032

Phone : 044-29813708 (Direct) / 044-22254780 (Extn-502)

E-mail : pdiho@cipet.gov.in

CIPET/OF/7741

Name of the Inspecting Official: 1. Mr. Manoj Kumar Rajput 2. Dr. Diwesh B Meshram **WO Centre:** CIPET-Kochi  
Code No. : 901/1428 **Camp at:** M/S Rashmi Metaliks Ltd, Kharagpur

INSPECTION REPORT

1.	Report No: IB00423240501722	Date:- 28.08.2023
2.	Name of the Indenter / Consignee	The Executive Engineer Project, Division Kattappana,Vellaymkudy
3.	Indenter Order No. & Date and Extension (if any)	281/DB1/2023/Pr.D-KTPA-MTPZA Dated.20.07.2023 Ref.- Agreement No 34/2022-23/SE/PHC/MVPA Dt. 21.03.2023
4.	Details of the Contractor	Roopesh K Rajappan, Kandathinkara (H),Chilavu PO
5.	Name of the Supplier	Mercury Pipes and Valves LLP,Ernakulam-682035
6.	Supplier Order No. & Date (if any)	Ref No. LLP/2 Dt. 27.07.2023
7.	Name and address of the Manufacturer / Inspection site	M/s. Rashmi Metaliks Limited, vill: Gokulpur, P.O. Shyamraipur, Kharagpur, Dist. West Midnapore, West Bengal.
8.	Manufacturer / Supplier Inspection Call Letter No. & Date	SO/ 4439 Dt: 09/08/2023
9.	PDI Cell Assignment No. & Date	CIPET/H0/2023243610 Dt: 16.08.2023
10.	Date of inspection	Initiated on: 25.08.2023 Completed on: 28.08.2023
11.	Any other information	JJM-WSS to Santhanpara,Rajakumary(part) and Senapathy(part) Panchayat in Idukki /FHTC in Senapathy GP

DETAILS OF THE STORES

Sl. No.	Description of the Items	Quantity as per order	Quantity inspected earlier (Cumulative)	Quantity offered for inspection	Quantity Accepted	Quantity Rejected	Quantity Balance
Ductile iron spun Pipes with Socket & Spigot ends suitable for rubber gasket push on jointing as per IS- 8329-2000 with ISI Certification Marks with internal Cement Mortar Lining and external Zinc & Bituminous coating.							
1	DN 100 Class K-9	8519m	NIL	8519m (1548x5.5m+1x5.0m)	8519m (1548x5.5m+1x5.0m)	NIL	NIL
2	DN 250 Class K-9	10m	NIL	10m (2x5.0m)	10m (2x5.0m)	NIL	NIL
3	DN 300 Class K-9	10m	NIL	10m (2x5.0m)	10m (2x5.0m)	NIL	NIL
Remarks: All accepted items are stamped thus-							



1. Certified that the items as detailed above have been inspected and accepted. The accepted items may be dispatched to the consignee. The Inspection Document Nos. Ref. No. IB00423240501722/ (1to3) Dated 28.08.2023 are enclosed.
2. This inspection report is valid subjected to supply of the materials within 30 days at the consignee stores. Any Dispute/discrepancies/claims may be brought to the notice of the undersigned within 30 days from the date of issue of this report.

AUTHORIZED SIGNATORY  
(Dr. Diwesh B Meshram, 1428)  
डॉ. दिवेश बी मेश्राम / DR. DIWESH B MESHARAM  
कोड 1428 / CODE 1428

AUTHORIZED SIGNATORY  
(Mr. Manoj Kumar Rajput, 901)  
मनोज कुमार राजपूत / AUTHORISED SIGNATORY  
मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT  
कोड 901 / CODE 901

- CC: 1. The Executive Engineer Project, Division Kattappana,Vellaymkudy PO,-685515  
2. Mercury Pipes and Valves LLP,Ernakulam-682035  
3. M/s Rashmi Metaliks Ltd, vill: Gokulpur, P.O. Shyamraipur, Kharagpur,Dist: West Midnapore, West Bengal  
4. CIPET, Kochi

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टी.वी.के. औद्योगिक इस्टेट, गुन्दी, चेन्नई - 600 032

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CIPET/OF/7742

Name of the Inspecting Official: Mr. Manoj Kumar Rajput  
Code No. : 901

WO Centre: CIPET- Kochi  
Camp at: M/S Rashmi Metaliks Ltd, Kharagpur

INSPECTION DOCUMENT

Inspection Document No. IB00423240501722/ (1)

Dated:- 28.08.2023

Issued to M/s Rashmi Metaliks Limited, vill: Gokulpur, P.O. Shyamraipur, Kharagpur, Dist: West Midnapore, West Bengal.

Manufacturer / Supplier Inspection Call Letter No. & Date: SO/ 4439 Dt: 09/08/2023

Inspection Document as per IS: 8329: 2000 with amendment

PART - A: PARTICULARS OF STORES

- |                                       |   |
|---------------------------------------|---|
| a) Description of the items           | : Ductile Iron Pipes (Socket & Spigot ends with supply of rubber gasket push on jointing) |
| b) Grade/Variety/Type/Size/Class etc. | : 100 mm DN, Class K-9  |
| c) Declared Value, if any             | : NIL   |
| d) Quantity                           | : 8519m / (1548x5.5m+1x5.0m)  |
| e) Any Other information              | : Batch No. 17H, CML No.5533060   |

PART - B: SUPPLEMENTARY INFORMATIONS

Reference to sampling procedure: IS 11606 : 1986 (Random Sampling Method)

PART - C: RESULTS OF WITNESSED TESTS & REVIEW OF DOCUMENTS

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
1	13	DIMENSIONS			
		Length	Mm		
1.1	13.1 & 15.5	Effective length (L) (Socket Ended Pipe)			
		Minimum/Maximum	Mm	5400 / 5600	5496 / 5512
1.2	13.2 & Table 16 of Clause B-7	Minimum Bore of CML (Minimum)	Mm	87	Confirmed
1.3	13.3 & 15.4 Table 2	Min. Wall Thickness (e) (Minimum)	Mm	5.4	7.0
1.4	15.1.1 Table 7	External Diameter (DE)			
		Minimum/ Maximum	Mm	115.2/119.0	115.8/118.0
1.5	15.1.3	Ovality	%	Within Tolerance on DE	Confirmed
1.6	15.6	Deviation from Straight Line(maximum)	Mm	1.25XLength	Confirmed
1.7	Clause 16.2 & Annex. C-2.2	Bituminous Coating-Minimum	µm	50	105
1.8	Clause 16.2 & Annex. C-2.3	Bituminous Coating shall be smooth & tenacious and hard enough not to flow when exposed to a temp of 65°C but not so brittle at temp of 0°C as to chip off when scribed with a pen knife.			Confirmed
1.9	Table 15 of Clause B-5	Cement Mortar Lining (Minimum)	Mm	1.5	2.3
2	10	Mechanical Tests			
2.1		Minimum Tensile Strength (Minimum)	MPa	420	455
2.2	10.1.1	Minimum Elongation at Break Minimum)	%	10	13.60
2.3	10.2	Brinell Hardness Test	HB	230(Max.)	139

Review of Documents (if any)

Sl. No.	Clause No./QAP Sl. No.	Test Parameters / Documents	Certificate / Reports No. & Date	Certificate / Report Issued by.	Review / Remarks
1.	11.1	Hydrostatic pressure, 4.0 MPa for 10 seconds	Hydrostatic Testing Log Sheet & works test certificate of Hydrostatic test of M/s. Rashmi Metaliks Limited,		Reviewed & confirmed
2	16.2	Zinc mass deposition	Zinc mass deposition of works test certificate of M/s. Rashmi Metaliks Limited,		Reviewed & confirmed
3	8	Rubber Sealing Ring	Test Report No SBPL/RML/TC-842/195 Dt. 12.09.2022 M/s Shri Balaji Polytech Products Pvt. Ltd..		Reviewed & confirmed

PART - D: REMARKS

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- These witness results relate exclusively to the work ordered or the object (s) or the lot inspected.
- Lab. Environmental Condition during the witness of tests: Temp. (°C) - 25 ± 2.
- Calibration Status of Equipment are verified

अधिकृत हस्ताक्षर / AUTHORIZED SIGNATORY  
डॉ. दिवेश बी. मेश्रम / DR. DIWESH B. MESHARAM  
AUTHORIZED SIGNATORY  
(Dr. Diwesh B Meshram, 1428)

अधिकृत हस्ताक्षर / AUTHORIZED SIGNATORY  
श्री. मनोज कुमार राजपुत / MR. MANOJ KUMAR RAJPUT  
AUTHORIZED SIGNATORY  
श्री. मनोज कुमार राजपुत / MANOJ KUMAR RAJPUT

केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं  
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CIPET/OF/7742

Name of the Inspecting Official: Mr. Manoj Kumar Rajput

Code No. : 901

WO Centre: CIPET- Kochi

Camp at: M/S Rashmi Metaliks Ltd, Kharagpur

INSPECTION DOCUMENT

Inspection Document No. IB00423240501722/ (2)

Dated:- 28.08.2023

Issued to M/s Rashmi Metaliks Limited, vill: Gokulpur, P.O. Shyamraipur, Kharagpur, Dist: West Midnapore, West Bengal.

Manufacturer / Supplier Inspection Call Letter No. & Date: SO/ 4439 Dt: 09/08/2023

Inspection Document as per IS: 8329: 2000 with amendment

PART - A: PARTICULARS OF STORES

- |                                       |   |
|---------------------------------------|---|
| a) Description of the items           | : Ductile Iron Pipes (Socket & Spigot ends with supply of rubber gasket push on jointing) |
| b) Grade/Variety/Type/Size/Class etc. | : 250 mm DN, Class K-9.   |
| c) Declared Value, if any             | : NIL   |
| d) Quantity                           | : 10m / (2x5.0m)  |
| e) Any Other Information              | : Batch No. 13H, CML No.5533060   |

PART - B: SUPPLEMENTARY INFORMATIONS

Reference to sampling procedure: IS 11606 : 1986 (Random Sampling Method)

PART - C: RESULTS OF WITNESSED TESTS & REVIEW OF DOCUMENTS

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
1	13	<b>DIMENSIONS</b>			
1.1	13.1 & 15.5	Length	Mm		
		Effective length (L) (Socket Ended Pipe)			
		Minimum/Maximum	Mm	4900/5100	5003/5005
1.2	13.2 & Table 16 of Clause B-7	Minimum Bore of CML (Minimum)	Mm	237	Confirmed
1.3	13.3 & 15.4 Table 2	Min. Wall Thickness (e) (Minimum)	Mm	5.3	5.8
1.4	15.1.1 Table 7	External Diameter (DE)			
		Minimum/ Maximum	Mm	270.9/275.0	273.4
1.5	15.1.3	Ovality	%	1%	Confirmed
1.6	15.6	Deviation from Straight Line(maximum)	Mm	1.25xLength	Confirmed
1.7	Clause 16.2 & Annex. C-2.2	Bituminous Coating-Minimum	µm	50	103
1.8	Clause 16.2 & Annex. C-2.3	Bituminous Coating shall be smooth & tenacious and hard enough not to flow when exposed to a temp of 65°C but not so brittle at temp of 0°C as to chip off when scribed with a pen knife.			Confirmed
1.9	Table 15 of Clause B-5	Cement Mortar Lining (Minimum)	Mm	1.5	2.3
2	10	<b>Mechanical Tests</b>			
2.1	10.1.1	Minimum Tensile Strength (Minimum)	MPa	420	479
2.2		Minimum Elongation at Break (Minimum)	%	10	15.66
2.3	10.2	Brinell Hardness Test	HB	230(Max.)	158

Review of Documents (if any)

Sl. No.	Clause No./QAP Sl. No.	Test Parameters / Documents	Certificate / Reports No. & Date	Certificate / Report issued by,	Review / Remarks
1.	11.1	Hydrostatic pressure, 4.0 MPa for 10 seconds	Hydrostatic Testing Log Sheet & works test certificate of Hydrostatic test of M/s. Rashmi Metaliks Limited,		Reviewed & confirmed
2.	16.2	Zinc mass deposition	Zinc mass deposition of works test certificate of M/s. Rashmi Metaliks Limited,		Reviewed & confirmed
3.	8	Rubber Sealing Ring	Report No. SBPPL/RML/TC-842/197 Dated 12.09.2022 Shree Balaji Polytech Products Pvt. Ltd.		Reviewed & confirmed

PART - D: REMARKS

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- Calibration Status of Equipment are verified

अधिकृत  
AUTHORIZED SIGNATORY  
(Dr. Diwesh B Mishra, 142B)  
कोड 142B / CODE 142B

AUTHORIZED SIGNATORY  
(Mr. Manoj Kumar Rajput, 901)  
प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
मानोज कुमार राजपुत / MANOJ KUMAR RAJPUT

केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं  
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( पूर्व में केन्द्रीय प्लास्टिक इंजीनियरिंग एवं तकनीकी संस्थान )

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CIPET/OF/7742

Name of the Inspecting Official: Mr. Manoj Kumar Rajput  
Code No. : 901

WO Centre: CIPET- Kochi  
Camp at: M/S Rashmi Metaliks Ltd, Kharagpur

INSPECTION DOCUMENT

Inspection Document No. IB00423240501722/ (3)

Dated:- 28.08.2023

Issued to M/s Rashmi Metaliks Limited, vill: Gokulpur, P.O. Shyamraipur, Kharagpur, Dist: West Midnapore, West Bengal.

Manufacturer / Supplier Inspection Call Letter No. & Date: SO/ 4439 Dt: 09/08/2023

Inspection Document as per IS: 8329: 2000 with amendment

PART - A: PARTICULARS OF STORES

- |                                       |   |
|---------------------------------------|---|
| a) Description of the items           | : Ductile Iron Pipes (Socket & Spigot ends with supply of rubber gasket push on jointing) |
| b) Grade/Variety/Type/Size/Class etc. | : 300 mm DN, Class K-9.   |
| c) Declared Value, if any             | : NIL   |
| d) Quantity                           | : 10m / (2x5.0m)  |
| e) Any Other Information              | : Batch No. 19H, CM/L No. 5533060   |

PART - B: SUPPLEMENTARY INFORMATIONS

Reference to sampling procedure: IS 11806 : 1986 (Random Sampling Method)

PART - C: RESULTS OF WITNESSED TESTS & REVIEW OF DOCUMENTS

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
1	13	<b>DIMENSIONS</b>			
		Length	Mm		
1.1	13.1 & 15.5	Effective length (L) (Socket Ended Pipe)			
		Minimum/Maximum	Mm	4900/5100	5002/5008
1.2	13.2 & Table 16 of Clause B-7	Minimum Bore of CML (Minimum)	Mm	287	Confirmed
1.3	13.3 & 15.4 Table 2	Min. Wall Thickness (e) (Minimum)	Mm	5.6	6.1
1.4	15.1.1 Table 7	External Diameter (DE)			
		Minimum/ Maximum	Mm	322.7 / 327.0	324.5 / 324.9
1.5	15.1.3	Ovality	%	Shall not exceed 1%	Confirmed
1.6	15.6	Deviation from Straight Line(maximum)	Mm	1.25xLength	Confirmed
1.7	Clause 16.2 & Annex. C-2.2	Bituminous Coating-Minimum	µm	50	130
1.8	Clause 16.2 & Annex. C-2.3	Bituminous Coating shall be smooth & tenacious and hard enough not to flow when exposed to a temp of 65°C but not so brittle at temp of 0°C as to chip off when scribed with a pen knife.			Confirmed
1.9	Table 15 of Clause B-5	Cement Mortar Lining (Minimum)	Mm	1.5	4.0
2	10	<b>Mechanical Tests</b>			
2.1		Minimum Tensile Strength (Minimum)	MPa	420	489
2.2	10.1.1	Minimum Elongation at Break (Minimum)	%	10	16.57
2.3	10.2	Brinell Hardness Test	HB	230(Max.)	163

Review of Documents (If any)

Sl. No.	Clause No/QAP Sl. No	Test Parameters / Documents	Certificate / Reports No. & Date	Certificate / Report Issued by:	Review / Remarks
1.	11.1	Hydrostatic pressure, 4.0 MPa for 10 seconds	Hydrostatic Testing Log Sheet & works test certificate of Hydrostatic test of M/s. Rashmi Metaliks Limited		Reviewed & confirmed
2	16.2	Zinc mass deposition	Zinc mass deposition of works test certificate of M/s. Rashmi Metaliks Limited.		Reviewed & confirmed
3	8	Rubber Sealing Ring	Report No. SBPPL/RML/TC-897/266 Dated 09.11.2022 Shree Balaji Polytech Products Pvt. Ltd		Reviewed & confirmed

PART - D: REMARKS

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- Calibration Status of Equipment are verified

**AUTHORIZED SIGNATORY**  
(Dr. Diwesh B. Mishra, 1428)  
कोड 1428 / CODE 1428

**AUTHORIZED SIGNATORY**  
(Mr. Manoj Kumar Rajput, 901)  
प्रतिकूल अतिरिक्त / AUTHORIZED SIGNATORY  
मनोज कुमार राजपुत / MANOJ KUMAR RAJPUT

INSPECTION OFFER MEMO

Date: 25-08-2023

**Inspection agency** : CIPET  
**Name of work** : Jal Jeevan Mission(JJM)-WSS to Santhanpara,Rajakumary(part) and Senapathy(part) Panchayth in Idukki district Package II A-Supplying and Laying Distribution and Providing FHTCs in Senapathy G P- Pipeline work for pipe testing.

**Name of client** : Office Of The Executive Engineer  
**Address of client** : Project Division, Kattappana, Vellayamkudy P.O. Pin: 685515 Kerala Water Authority

**Client Letter No.** : 281/DB1/2023/Pr.D-KTPA-MTPZA  
**Dated** : 20.07.2023

**Name of contractor** : Sri.Roopesh K.Rajappan  
**Address of contractor** : Kandathinkara(H),Cheedavu.P.O Thodupuzha

**Contractor PO No.** : NIL  
**Dated** : NIL

**Name of Buyer** : M/s MERCURY PIPES AND VALVES LLP  
**Address of Buyer** : 40/4051A, C New 67 - 11322 and 69-11324 REVATHIKA COMPLEX, T.D ROAD, ERNAKULAM 682035

**Buyer PO No.** : LLP/2  
**Dated** : 27.07.2023

**Work order no.** : SO-2000004439  
**Dated** : 03.08.2023

**Place of Inspection** : RML, Kharagpur, WB

**Material** : Centrifugally cast (spun) Ductile iron pressure pipes for water Supply with socket and spigot ends, inside Cement motor lining and outside coated with Zinc with a finishing layer of Bituminous coating conforming to IS 8329-2000.

Size, mm	Class	Order Qty.,	Previous Passed Qty.	Qty. Offered,	Qty. in pcs.		Balance Qty.	Batch
		Mts	Mts	mts	(5.5 Mts. Length)	(5.0 Mts. Length)	In Mtrs.	No
DN 100	K 9	8519.0	0.0	8519.0	1548	1	0.0	17H
DN 250	K 9	10.0	0.0	10.0	0	2	0.0	13H
DN 300	K 9	10.0	0.0	10.0	0	2	0.0	19H

For Rashmi Metaliks Ltd.



Authorised Signatory  
Quality Assurance

प्रमाणित अधिकारी / AUTHORISED SIGNATORY  
मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT  
कोड 901 / CODE 901

प्रमाणित अधिकारी / AUTHORISED SIGNATORY  
डॉ. दिवेश बी. मेश्रम / DR. DIVESH B. MESHARAM  
कोड 1428 / CODE 1428

*Receipt*

SAMPLING PLAN

Date: 25-08-2023

**Inspection agency** : CIPET  
**Name of work** : Jal Jeevan Mission(JJM)-WSS to Santhanpara,Rajakumary(part) and Senapathy(part) Panchayth in Idukki district Package II A-Supplying and Laying Distribution and Providing FHTCs in Senapathy G P- Pipeline work for pipe testing.

**Name of client** : Office Of The Executive Engineer  
**Address of client** : Project Division, Kattappana, Vellayamkudy P.O. Pin: 685515 Kerala Water Authority

**Client Letter No.** : 281/DB1/2023/Pr.D-KTPA-MTPZA  
**Dated** : 20.07.2023

**Name of contractor** : Sri.Roopesh K.Rajappan  
**Address of contractor** : Kandathinkara(H),Cheedavu.P.O Thodupuzha

**Contractor PO No.** : NIL  
**Dated** : NIL

**Name of Buyer** : M/s MERCURY PIPES AND VALVES LLP  
**Address of Buyer** : 40/4051A, C New 67 - 11322 and 69-11324 REVATHIKA COMPLEX, T.D ROAD, ERNAKULAM 682035

**Buyer PO No.** : LLP/2  
**Dated** : 27.07.2023

**Work order no.** : SO-2000004439  
**Dated** : 03.08.2023

**Place of Inspection** : RML, Kharagpur, WB  
**Material** : Centrifugally cast (spun) Ductile iron pressure pipes for water Supply with socket and spigot ends, inside Cement motor lining and outside coated with Zinc with a finishing layer of Bituminous coating conforming to IS 8329-2000.

Size, mm	Class	Order Qty.,	Previous Passed Qty.,	Qty. Offered,	Qty. in pcs.		MECHANICAL SAMPLE	DIMENSION SAMPLE
		Mts	Mts	mts	(3.5 Mts. Length)	(5.0 Mts. Length)	In QTY	In QTY
DN 100	K 9	8519.0	0.0	8519.0	1548	1	8	100
DN 250	K 9	10.0	0.0	10.0	0	2	1	2
DN 300	K 9	10.0	0.0	10.0	0	2	1	2

For Rashmi Metaliks Ltd.



Authorised Signatory  
Quality Assurance

प्रधिकृत अधिकारी / AUTHORISED SIGNATORY  
मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT

कोड 301 / CODE 301

प्रधिकृत अधिकारी / AUTHORISED SIGNATORY  
डॉ. दिवेश बी. मेश्राम / DR. DIVESH B. MESHARAM  
कोड 1428 / CODE 1428

Accepted  
Manoj

## WORKS TEST CERTIFICATE

Date: 25-08-2023

W. T. C. No. : RML/DIP/23-24/1064

Name of work : Jal Jeevan Mission(JJM)-WSS to Santhanpara,Rajakumary(part) and Senapathy(part) Panchayth in Idukki district Package II A-Supplying and Laying Distribution and Providing FHTCs in Senapathy G P- Pipeline work for pipe testing,

Name of client : Office Of The Executive Engineer

Address of client : Project Division, Kattappana, Vellayamkudy P.O. Pin: 685515  
Kerala Water Authority

Client Letter No. : 281/DB1/2023/Pr.D-KTPA-MTPZA

Dated : 20.07.2023

Name of contractor : Sri.Roopesh K.Rajappan

Address of contractor : Kandathinkara(H),Cheedavu,P.O  
Thodupuzha

Contractor PO No. : NIL

Dated : NIL

Name of Buyer : M/s MERCURY PIPES AND VALVES LLP

Address of Buyer : 40/4051A, C New 67 - 11322 and 69-11324  
REVATHIKA COMPLEX, T.D ROAD, ERNAKULAM 682035

Buyer PO No. : LLP/2

Dated : 27.07.2023

Sales order No. : SO-2000004439

Dated : 03.08.2023

JIR reference no. : RML/DIP/DOMESTIC/CIPET/SO\_2000004439

Material : Centrifugally cast (spun) Ductile iron pressure pipes for water Supply with socket and spigot ends, inside Cement mortar lining and outside coated with Zinc with a finishing layer of Bituminous coating conforming to IS 8329-2000.

Quantity :

Size	Class	Batch No.	Qty. Offered,	Qty. in pcs.	
			mts	(5.5 Mts. Length)	(5.0 Mts. Length)
DN 100	K 9	17H	8519	1548	1
DN 250	K 9	13H	10	0	2
DN 300	K 9	19H	10	0	2

### INSPECTION & TESTING

Visual Check : All pipes were visually checked & found free from all types of surface defects and conforming to IS:8329:2000 & latest amendments.

Dimension check : External diameter, wall thickness, length, ovality and straightness are checked and found conforming to IS8329:2000 and latest amendments.

External zinc coating mass check : Coatings are checked for Zinc mass, results found conforming to IS:8329:2000 and latest amendments.

Mechanical test : UTS, % Elongation and BHN conducted on batch samples and the test results found conforming to IS8329:2000 and latest amendments.

Hydrostatic pressure test : 100% of the pipes are tested as per specification and observed no leakage/sweating. Conforming to IS8329:2000 and latest amendments.

Internal cement lining thickness : Linings are checked for internal cement mortar lining thickness, results found conforming to IS8329:2000 and latest amendments.

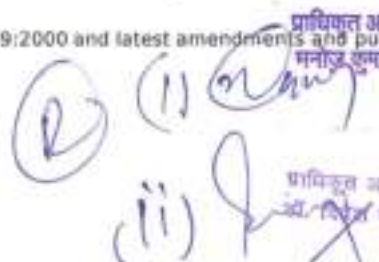
External bitumen coating thickness : Coatings are checked for external bitumen coating thickness, results found conforming to IS8329:2000 and latest amendments.

Markings : Markings are done as per IS8329:2000 and latest amendments and purchase order requirements.

For Rashmi Metaliks Ltd.



Authorised Signatory  
Quality Assurance

  
 प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
 मनीज कुमार राजपूत / MANOJ KUMAR RAJPUT  
 कोड 901 / CODE 901  
 प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
 डॉ. दिवेश बी. मेश्राम / DR. DIVESH B. MESHARAM  
 कोड 1428 / CODE 1428

**OBSERVATION REPORT**

Page 1 of 2

**JIR No.** : RML/DIP/DOMESTIC/CIPET/SO\_2000004439 Date: 28-08-2023

**Name of work** : Jal Jeevan Mission(JJM)-WSS to Santhanpara,Rajakumary(part) and Senapathy(part) Panchayth in Idukki district Package II A-Supplying and Laying Distribution and Providing FHTCs in Senapathy G P- Pipeline work for pipe testing.

**Name of client** : Office Of The Executive Engineer

**Address of client** : Project Division, Kattappana, Vellayamkudy P.O. Pin: 685515  
Kerala Water Authority

**Client Letter No.** : 281/DB1/2023/Pr.D-KTPA-MTPZA  
**Dated** : 20.07.2023

**Name of contractor** : Sri.Roopesh K.Rajappan

**Address of contracto** : Kandathinkara(H),Cheedavu.P.O  
Thodupuzha

**Contractor PO No.** : NIL  
**Dated** : NIL

**Name of Buyer** : M/s MERCURY PIPES AND VALVES LLP

**Address of Buyer** : 40/4051A, C New 67 - 11322 and 69-11324  
REVATHIKA COMPLEX, T.D ROAD, ERNAKULAM 682035

**Buyer PO No.** : LLP/2  
**Dated** : 27.07.2023

**Sales order No.** : SO-2000004439  
**Dated** : 03.08.2023

**Inspection agency** : CIPET

**Date of inspection** : 25-08-2023,26-08-2023,27-08-2023 & 28-08-2023

**Name of manufactur** : RASHMI METALIKS LIMITED

**Description of produ** : Centrifugally cast (spun) Ductile iron pressure pipes for water Supply with socket and spigot ends, Inside Cement motor lining and outside coated with Zinc with a finishing layer of Bituminous coating conforming to IS 8329-2000.

**Quantity** :

Size (DN)	Class	Batch No.	Ordered Quantity	Prev. Passed Quantity	Cleared Quantity	Balanced Quantity
			(mts.)	(mts.)	(mts.)	(mts.)
DN 100	K 9	17H	8519.00	0.00	8519.00	0.00
DN 250	K 9	13H	10.00	0.00	10.00	0.00
DN 300	K 9	19H	10.00	0.00	10.00	0.00



For, Rashmi Metalliks Ltd.

Authorised Signatory  
Quality Assurance

प्रधिकृत अधिकारी / AUTHORISED SIGNATORY  
For CIPET  
मानोज कुमार राजपुत / MANOJ KUMAR RAJPUT  
कोड 901 / CODE 901

(i)

प्रधिकृत अधिकारी / AUTHORISED SIGNATORY  
डॉ. दिवेश बी. मेश्रम / DR. DIVESH B MESHARAM  
कोड 1428 / CODE 1428

(ii)



## OBSERVATION REPORT

JIR-No.

RML/DIP/DOMESTIC/CIPET/SO\_2000004439

Date: 28-08-2023

The following tests were carried out on the pipes offered above :

SNo	Nature of Test	Requirements as per specification			Observation	
1	Visual Inspection	Free from surface or other defects. Small imperfections do not affect pipes serviceability, shall not be rejected.			Surface found Satisfactory	
2	Wall thickness	As per IS:8329:2000 and latest amendment.			Dimension was checked and found conforming to specification. Report enclosed <b>(Annexure II)</b>	
3	External Diameter	As per IS:8329:2000 and latest amendment.				
4	Length	5.5mts/5.0mts.				
5	Straightness	Within 1.25 X Length of the pipe				
6	Ovality	As per IS:8329:2000 and latest amendment.				
7	Tensile strength	Minimum 420MPa				
8	Elongation	Minimum 10%			Sample was checked and found Satisfactory. Report enclosed <b>(Annexure III)</b>	
9	Hardness	Should not exceed 230 BHN				
10	Rubber Gasket	As per IS 5382:2018			Sample Checked and found Satisfactory Report enclosed <b>(Annexure IV)</b>	
11	Zinc coating mass	As per IS:8329:2000 and latest amendment.			Manufacturers Internal test report - Reviewed and found satisfactory <b>(Annexure V)</b>	
12	Hydrostatic Pressure	Size/Class (DN)	Test pressure (Mpa)	Pressure Holding Time	Internal records have been reviewed found satisfactory. Further, a certificate has been obtained from the manufacturer that each & every pipe has been tested for hydrostatic test as per clauses no. "IS: 8329:2000" table no. 1 Clauses 4.6 & 11.1 <b>(Annexure VI)</b>	
		DN 80 to 300, K9	5.0	10 Seconds		
13	Cement mortar lining Thickness	As per IS:8329:2000 and latest amendment.			Pipes checked and found conforming to specification - Report enclosed <b>(Annexure II)</b>	
14	Bore dia after cement mortar lining	As per IS:8329:2000 and latest amendment.				
15	Bitumen Thickness	Mean thickness not less than 70µm with a local minimum of 50µm				
16	Marking	Requirements			Witnessed the following markings	
		Pipe				
		a)	Batch No.	Paint marking at socket face		
		b)	Manufacturers Name	RASHMI - AQUA - Stencilled on barrel		
		c)	Nominal Dia	DN Size - As-Cast Inside Socket &/ Paint Marked on Socket face, Spigot end		
		d)	Class reference	K9 - Paint marking at socket face		
		e)	Year of manufacture	2023 - Inside the socket		
		f)	Length of pipe	Paint marking at socket face & Spigot end		
		g)	BiS Marking	ISI Logo, License No., IS 8329:2000 Stencilled on Barrel		
		h)	Special Marking (if any)	NA		
Gasket						
i)	As per IS 5382:2018	DI, TYTON, Size, WATER, EPDM, BSEN 681-1, TY-2/5, WA/WC/80/50, IS 5382, IS 4633, Licence No.				
17	TPI Markings	All pipes are single rubber stamped				

For, Rashmi Metals Ltd.

Authorised Signatory  
Quality AssuranceFor, CIPET  
MANOJ KUMAR RAJPUT / MANOJ KUMAR RAJPUT  
901 / CODE 901

(i)

(ii)

Authorised Signatory  
DR. DIMESH MEHRA  
1428 / CODE 1428

**FDCELL PIPE HEAD OFFICE - CHENNAI**

**Specimen Sheet for IS - 8224:2000 (Fusub.01.01.01)**  
 GAST. P.O. No. & Date: 261/081/2023/W. D-KTFA-M792A, Date-30-07-2023  
 Contractor / Supplier P.O. No. & Details: D-2224-2000 (Fusub.01.01.01)  
 Contractor / Supplier: M/s. Mercury Pipes And Valves LLP  
 Qty. as per C / S P.O.: 1519.80 mtrs  
 Quantity offered (mtrspoc): 1519.80 mtrs & 1549 pcs  
 Qty. as per G.P.  
 No. of Samples Drawn: 100 pcs

Sample No.	Batch Number	C/No. 13.1.4 Length (mtr)	C/No. 13.1.3, 13.4 Wall Thickness (m)	C/No. 15.1.1 & C/No. 15.3.1 External Diameter (DE) (mm)	C/No. 15.1.2 Ovality (See C/No. 5.2.2)	C/No. 15.3.2 Tolerance on Ovality	C/No. 15.4 Deviation from a Straight	Blasted surface area per C.S.	C/No. 16.3 Annex B Coarse Nuptal Using (Table 15 & 16)			B-7. Surface Condition of the (mm)	B-8. Max. Length of Pipe ends (mm)	B-9. No. of Pipe ends (mm)			
									Min. 16.3.1	Max. 16.3.1	Min. 16.3.2						
1	17H	5502	6.3	6.1	6.3	5.6	116.7	161	107	167	171	3.4	3.1	3.4	2.8	7	Satisfactory
2	17H	5499	5.9	6.6	5.6	6.6	117.0	167	137	168	131	4.3	3.6	3.9	3.5	10	Satisfactory
3	17H	5505	6.6	6.4	6.0	5.9	117.0	166	134	110	134	2.9	3.7	4.3	3.9	8	Satisfactory
4	17H	5496	6.3	6.8	6.6	5.9	115.8	151	159	174	106	2.4	4.2	3.8	4.2	10	Satisfactory
5	17H	5506	6.3	6.2	6.7	6.3	117.0	130	128	128	118	3.2	3.0	2.4	2.9	9	Satisfactory
6	17H	5506	6.5	7.0	5.6	6.3	116.4	156	160	164	163	2.8	3.4	3.6	4.3	9	Satisfactory
7	17H	5502	6.5	6.4	5.9	7.0	117.7	129	116	176	164	2.5	3.1	2.6	4.3	10	Satisfactory
8	17H	5508	6.1	6.1	6.1	6.6	117.8	134	170	130	176	3.0	4.3	4.4	3.9	7	Satisfactory
9	17H	5507	6.6	6.3	6.4	5.8	117.5	171	163	116	115	3.0	2.5	3.7	3.3	9	Satisfactory
10	17H	5508	6.1	6.9	6.2	6.7	116.9	132	120	122	147	4.1	3.0	3.7	3.5	10	Satisfactory
11	17H	5510	6.4	6.9	5.4	6.0	117.8	124	148	170	159	4.1	3.1	2.6	4.2	8	Satisfactory
12	17H	5500	5.4	6.6	6.5	6.7	117.2	375	139	111	170	4.4	2.8	2.3	3.0	10	Satisfactory
13	17H	5502	5.8	5.8	6.1	5.9	117.3	148	136	153	176	3.2	2.0	3.8	4.2	10	Satisfactory
14	17H	5505	6.4	6.8	5.9	5.9	117.0	131	140	150	106	2.8	3.5	4.1	2.6	9	Satisfactory
15	17H	5510	6.6	5.6	5.8	6.9	117.5	170	152	124	136	2.8	3.8	3.0	3.2	10	Satisfactory
16	17H	5503	6.9	7.0	6.0	6.1	117.9	163	134	151	146	2.9	3.9	3.2	3.8	11	Satisfactory
17	17H	5501	6.3	5.8	6.5	6.5	116.4	137	161	131	131	3.6	3.2	4.1	4.3	8	Satisfactory
18	17H	5505	6.0	6.7	6.9	6.2	117.0	136	122	148	115	3.6	2.8	4.1	2.3	11	Satisfactory
19	17H	5512	5.8	5.6	5.5	6.5	117.0	152	115	132	178	2.8	3.7	3.4	2.9	10	Satisfactory
20	17H	5508	5.8	6.5	5.6	6.1	117.7	167	158	111	165	3.4	2.5	2.6	2.4	8	Satisfactory

Checked all gauge & found OK

Checked and found Satisfactory

Checked with template and found OK

Checked & found Within The Tolerance on DE



Authorised Signatory / AUTHORIZED SIGNATORY  
 श्री. मनोज कुमार / DR. MANOJ KUMAR RAJPUT  
 कोड 901 / CODE 901

Authorised Signatory / AUTHORIZED SIGNATORY  
 श्री. दिवेश मेस्रम / DR. DIVESH B. MESHRAM  
 कोड 1428 / CODE 1428

**EQ3 CELL - CIPET HEAD OFFICE - CHEMICAL**

Observation Sheet No. IL-8338-2058 (2nd-3rd J08113)

Genl. P.O. No. & Date: 261/0811/2023/SP, D-CTPA/HTPZA, Date-20-07-2023  
 Inspector / Cognizee: The Executive Engineer Project Division  
 Size / Designation: 500 KB

Contractor / Supplier P.O. No. & Date: SL/12, Daba-27-07-2023  
 Contractor / Supplier: M/s Mercury Pipes And Valves LLP  
 Qty. as per C / S P.O.: 8519.00 mtrs

Qty. as per C.P

Quantity offered (mtrspcs): 8519.00 mtrs & 1549 pcs  
 No. of Samples Drawn: 100 pcs

Date of inspection started: 20-08-2023  
 Date of inspection Completed: 20-08-2023

Sample No	Batch Number	Cl No. 13.1 & 13.2 Length (mtr)	Cl No. 13.3, 15.4 WMR Thickness (t)		Cl No. 15.1.1 & Cl No. 15.2 / 15.3.1 External Diameter (DE) (Table-7)	Cl No. 15.1.3 Quality (See Cl No. 3.22)	Cl No. 15.3.3 Tolerance on Quality (Table 8)	Cl No. 15.4 Deviation from a Straight Line	Boreness		Cl No. 16.3 Annex-B Corrosive Media Living (Table 15 & 16)	B-7. Surface condition of the hardened	Bore (B-2) Min. & B-7 max.							
			Max. 0.2 mm	Min. 0.7 mm					Min. 1.500	Max. 1.500										
21	17H	5497	6.3	5.8	6.8	5.8	116.0	NA	NA	153	109	157	165	3.0	3.3	3.2	4.1	0	Satisfactory	Checked with gauge & found OK
22	17H	5497	6.3	5.5	6.6	6.7	117.1	NA	NA	135	109	104	125	4.1	3.8	3.4	2.3	1.0	Satisfactory	Checked and found Satisfactory
23	17H	5503	5.9	5.8	5.5	6.6	117.3	NA	NA	131	117	125	135	3.1	4.2	3.1	3.1	9	Satisfactory	
24	17H	5502	5.7	6.0	6.1	6.9	116.2	NA	NA	170	138	124	166	4.0	3.7	4.2	4.0	10	Satisfactory	
25	17H	5507	6.9	6.8	6.7	6.7	117.9	NA	NA	140	118	104	145	3.8	2.3	4.1	2.7	9	Satisfactory	
26	17H	5510	6.8	6.3	5.9	6.6	117.0	NA	NA	176	159	145	130	3.2	3.0	3.6	3.4	10	Satisfactory	
27	17H	5497	5.6	5.6	5.5	5.9	115.8	NA	NA	144	123	126	160	2.3	3.1	2.6	3.6	8	Satisfactory	
28	17H	5508	6.8	6.8	5.9	6.9	117.2	NA	NA	145	135	170	167	4.0	3.7	2.7	4.3	9	Satisfactory	
29	17H	5501	6.6	5.7	6.5	6.1	117.2	NA	NA	145	134	171	107	3.8	2.4	3.2	3.4	9	Satisfactory	
30	17H	5498	6.1	5.9	5.8	6.4	116.2	NA	NA	115	132	128	107	2.8	4.2	3.7	3.1	9	Satisfactory	
31	17H	5497	6.6	6.1	6.1	6.3	116.7	NA	NA	104	167	143	163	2.7	4.2	3.4	2.7	9	Satisfactory	
32	17H	5499	6.5	6.4	6.4	6.0	116.2	NA	NA	125	140	177	147	3.6	3.7	2.9	4.1	9	Satisfactory	
33	17H	5505	6.5	6.0	6.4	5.8	117.2	NA	NA	129	178	142	108	3.3	2.8	3.7	4.4	10	Satisfactory	
34	17H	5497	6.0	6.8	5.4	6.5	117.6	NA	NA	175	173	133	167	3.5	4.1	3.1	3.7	9	Satisfactory	
35	17H	5512	6.4	6.9	6.4	6.2	117.4	NA	NA	172	150	119	120	2.7	2.9	3.2	3.1	8	Satisfactory	
36	17H	5496	6.4	6.5	6.3	6.5	117.4	NA	NA	112	134	132	124	4.2	2.7	4.3	2.4	8	Satisfactory	
37	17H	5506	6.0	6.5	6.5	6.5	117.6	NA	NA	152	150	167	124	4.2	2.5	2.8	2.5	9	Satisfactory	
38	17H	5508	5.8	6.3	6.4	5.5	116.1	NA	NA	163	163	111	104	2.7	3.5	3.2	3.6	9	Satisfactory	
39	17H	5502	6.4	6.9	5.8	5.5	116.2	NA	NA	133	120	127	137	4.4	4.3	2.6	3.4	10	Satisfactory	
40	17H	5507	6.0	6.2	6.7	5.5	115.9	NA	NA	122	120	179	171	3.4	3.6	2.6	2.9	10	Satisfactory	



Authorised Signatory / AUTHORIZED SIGNATORY  
 मनीष कुमार राजपुत / MANOJ KUMAR RAJPUT  
 WTS 501 / CODE 901

Authorised Signatory / AUTHORIZED SIGNATORY  
 डॉ. रवींद्र शर्मा / DR. DWESH B MESHRAM  
 WTS 1429 / CODE 1429



Govt. P.O. No. & Date: 281/DB/2023(P), D-KTPA-MTPZA, Date-28-07-2023  
 Identifier / Consignee: The Executive Engineer Project Division  
 Site / Designation: 100 K3  
 Date of inspection started: 25-09-2023  
 Date of inspection Completed: 28-09-2023

Contractor / Supplier: P.O. No. & Date: 27-04-2023  
 Contractor / Supplier: M/S. Mercury Pipes And Valves LLP  
 Qty. as per C / S P.O.: 8519.00 mtrs  
 Quantity offered (mtrs): 8519.00 mtrs & 1549 pcs  
 No. of Samples Drawn: 100 pcs

Cl No. 15.1.1 & Cl. No. 15.2 / 15.2.1  
 Extremal Diameter (DE) (Table-7)  
 Min: 115.8 mm  
 Max: 116.0 mm

Sample No	Batch Number	Cl No. 13.1 & 13.5 Length (mtr)	Cl No. 13.1, 13.4 Wall Thickness (t)	Cl No. 15.1.1 & Cl. No. 15.2 / 15.2.1 Extremal Diameter (DE) (Table-7)	Cl No. 15.1.3 Quality (See Cl. No. 1.32)	Cl No. 15.1.6 Deviation from a Straight Line	Cl No. 15.1.3.2 Tolerance on Quality (Table II)	Cl No. 15.1.6 Deviation from a Straight Line	Cl No. 15.1.3, External Protection, Joints - Cl. C-3.2, Thickness of Bituminous Coating			Bituminous coating thickness as per Cl.3	B-5: Max. Length of Chamfer at Pipe ends (50mm)	B-7: Surface condition of the hardened	Remarks (B-7) Max. 87 mm		
									Min: 500	Min: 500	Min: 500						
61	17H	5508	5.7	116.0	NA	NA	NA	123	123	163	153	4.1	2.5	2.8	7	Satisfactory	Checked with gauge & found OK
62	17H	5503	6.4	115.8	NA	NA	NA	164	138	129	145	2.9	4.2	3.3	10	Satisfactory	
63	17H	5508	6.7	115.9	NA	NA	NA	165	173	146	134	3.2	3.7	3.5	8	Satisfactory	
64	17H	5501	6.7	116.0	NA	NA	NA	145	117	174	145	3.1	2.6	4.1	7	Satisfactory	
65	17H	5506	6.6	115.9	NA	NA	NA	170	137	175	155	3.0	2.8	3.1	8	Satisfactory	
66	17H	5499	6.5	116.0	NA	NA	NA	169	157	177	126	3.6	4.2	3.6	9	Satisfactory	
67	17H	5508	5.5	116.0	NA	NA	NA	162	153	122	167	4.2	3.1	3.6	10	Satisfactory	
68	17H	5508	6.6	116.0	NA	NA	NA	176	130	139	151	2.9	2.6	4.4	9	Satisfactory	
69	17H	5510	3.7	115.9	NA	NA	NA	125	105	136	148	4.1	4.3	3.5	7	Satisfactory	
70	17H	5500	6.0	115.8	NA	NA	NA	142	159	105	147	3.3	2.4	4.2	8	Satisfactory	
71	17H	5506	6.1	115.8	NA	NA	NA	170	157	115	132	2.9	3.3	4.2	10	Satisfactory	
72	17H	5500	5.5	115.9	NA	NA	NA	173	167	170	118	3.2	2.7	3.9	8	Satisfactory	
73	17H	5501	5.7	116.0	NA	NA	NA	125	131	173	105	2.9	3.0	4.3	8	Satisfactory	
74	17H	5502	6.7	116.0	NA	NA	NA	159	153	126	167	4.2	4.3	3.0	10	Satisfactory	
75	17H	5505	6.4	115.9	NA	NA	NA	145	173	122	105	4.4	2.3	3.2	8	Satisfactory	
76	17H	5501	6.6	115.9	NA	NA	NA	120	170	115	153	4.3	4.4	3.5	10	Satisfactory	
77	17H	5503	6.0	116.0	NA	NA	NA	109	176	145	126	3.2	4.3	4.1	9	Satisfactory	
78	17H	5506	6.5	115.8	NA	NA	NA	125	149	120	130	4.3	3.1	4.2	10	Satisfactory	
79	17H	5498	5.6	116.0	NA	NA	NA	108	159	135	171	4.1	3.7	3.0	9	Satisfactory	
80	17H	5497	7.0	116.0	NA	NA	NA	117	171	145	172	2.7	2.4	3.6	9	Satisfactory	



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 श्री / DR. DIVESH B MESHRAM  
 श्री 1428 / CODE 1428

श्री 301 / CODE 901

Govt. P.O. No. & Date: 1002 Date-20.11.2022

Inventor / Consignee: The Engineer in-Chief, Rural Water Supply & Sanitation, Odisha,

Site / Designation: 100 43

Date of inspection started: 06.01.2022

Date of inspection completed: 06.01.2022

Contractor / Supplier P.O. No. & Date: MEL/2170/Rural Water Piped Supply - Sundargarh/31/02/22, Date: 07.12.2021

Contractor / Supplier: M/s Megha Engineering & Infrastructures Ltd.

Qty. as per C/S P.O.: 15998.3mtrs

Quantity offered (mtrspc): 9999.00 mtrs & 1818 pcs

No. of Samples Drawn: 100 pcs

Sample No.	Batch Number	CI No. 13.1 & 15.5 Length (mtr)	CI No. 13.3, 15.4 Wall Thickness (t)		CI No. 13.1 & CI No. 15.2 / 15.3.1 Bolts (mm) (Table 7)	CI No. 15.1.3 Quality (See CI No. 3.22)	CI No. 15.1.3.1 Tolerances on Quality (Table 8)	CI No. 15.1.6 Deviation from a Straight Line	CI No. 16.2, External Protection, Annex - C, 3.2, Thickness of Bituminous Coating		Blotting absorbance per C2.3 @ 65 °C & 0 °C	CI No. 16.3 Annex B Cement Mortar Lining (Table 13 & 14)		B-S Max. Length of Chips inside (mm)	B-S Surface condition of the hardened substrate	See Para 3.7				
			Specified 6.0 mm Min. 4.3 mm	Actual					Min. 0.50	Max. 0.50		Thickness of the (mm) (Table 13)	Thickness 3.0 mm Min. 2.3 mm							
81	17H	5496	7.0	6.9	6.0	6.7	116.0	NA	NA	177	138	177	157	3.2	2.7	2.5	3.0	9	Satisfactory	Checked wt gauge & found OK
82	17H	5505	6.5	6.6	6.4	6.8	115.9	NA	NA	145	126	177	123	2.7	4.1	3.7	4.2	10	Satisfactory	
83	17H	5504	5.6	5.7	5.9	5.5	116.0	NA	NA	108	109	142	127	3.9	4.0	3.7	3.2	10	Satisfactory	
84	17H	5504	6.8	5.4	6.3	6.7	115.9	NA	NA	140	137	136	144	4.2	3.6	3.6	4.0	10	Satisfactory	
85	17H	5408	6.8	6.5	5.9	6.3	115.9	NA	NA	146	170	119	176	2.7	3.2	3.2	4.2	10	Satisfactory	
86	17H	5510	6.9	6.8	6.5	6.8	115.9	NA	NA	104	119	119	121	3.5	2.7	3.4	2.8	8	Satisfactory	
87	17H	5499	6.3	6.1	6.2	6.8	115.9	NA	NA	156	163	160	144	4.1	3.5	3.5	2.5	7	Satisfactory	
88	17H	5502	5.8	5.8	6.5	6.3	115.9	NA	NA	151	146	130	163	4.3	2.9	2.7	4.3	8	Satisfactory	
89	17H	5506	6.1	5.5	6.9	6.1	115.9	NA	NA	157	173	168	152	4.4	3.9	3.7	4.3	7	Satisfactory	
90	17H	5511	6.8	5.7	5.8	6.7	115.9	NA	NA	138	145	111	126	3.6	4.2	4.3	3.7	8	Satisfactory	
91	17H	5508	5.7	6.9	6.2	6.4	116.0	NA	NA	110	128	114	138	3.8	3.8	3.0	3.7	9	Satisfactory	
92	17H	5508	6.5	5.5	6.6	6.6	116.0	NA	NA	120	116	125	150	3.3	2.3	3.3	3.9	10	Satisfactory	
93	17H	5506	5.6	6.1	6.2	5.5	115.9	NA	NA	164	110	125	138	2.5	4.4	3.9	3.4	8	Satisfactory	
94	17H	5503	6.0	5.5	6.3	5.9	115.8	NA	NA	159	177	179	171	3.8	3.6	2.5	3.7	11	Satisfactory	
95	17H	5500	5.9	5.6	6.3	5.8	115.9	NA	NA	154	121	139	175	3.5	2.8	3.7	4.4	9	Satisfactory	
96	17H	5496	6.8	6.3	5.8	6.1	115.9	NA	NA	163	132	147	140	3.6	4.1	4.0	3.7	10	Satisfactory	
97	17H	5505	6.7	5.8	6.2	6.7	115.8	NA	NA	170	139	130	147	2.9	3.5	3.2	2.3	8	Satisfactory	
98	17H	5507	6.7	6.7	5.7	6.3	116.0	NA	NA	134	137	165	116	2.9	2.9	3.7	2.6	9	Satisfactory	
99	17H	5509	6.0	6.7	6.2	6.8	115.8	NA	NA	134	170	114	134	4.2	3.0	2.8	3.4	8	Satisfactory	
100	17H	5502	6.1	5.8	6.8	6.8	115.9	NA	NA	173	111	126	126	3.9	4.2	2.6	3.2	9	Satisfactory	



राशि मेटालिक्स / AUTHORISED SIGNATORY  
 श्री. मनोज कुमार राजपुत  
 806 9001 / CODE 901

राशि मेटालिक्स / AUTHORISED SIGNATORY  
 श्री. दिनेश कुमार / DR. DWESH B MESHRAM  
 806 1428 / CODE 1428







**RASHMI METALIKS LIMITED**

**DI PIPE PLANT**

Specification : IS 8329  
Tensile Strength : 420 Mpa Min  
Elongation : 10% Min  
Hardness : 230 BHN. Max

Date : 27.08.2022

**MECHANICAL TEST REPORT**

Customer Name : M/S Mexcwy Pipes and Valves LLP

Sl. No.	DN & Class	Batch No.	Gauge Dia (mm)	Gauge Length		Change in length (L2-L1) mm	% of Elongation	Peak Load KN	Tensile Strength Mpa	Hardness BHN	Res
				Initial (L1) mm	Final (L2) mm						
1	100K9	17H	3.54	17.50	20.80	3.30	18.86	5.06	514	156	OK
2	"	17H	3.50	17.50	20.64	3.14	17.94	4.51	468	164	"
3	"	17H	2.32	12.50	14.86	2.36	18.88	2.13	503	160	"
4	"	17H	2.30	12.50	15.00	2.50	20.00	2.27	546	139	"
5	"	17H	2.34	12.50	14.86	2.36	18.88	2.06	479	143	"
6	"	17H	2.60	12.50	14.20	1.70	13.60	2.79	525	152	"
7	"	17H	2.42	12.50	14.34	1.84	14.72	2.09	455	141	"
8	"	17H	2.52	12.50	14.66	2.16	17.28	2.31	463	153	"
9	250K9	13H	3.40	17.50	20.24	2.74	15.66	4.35	479	158	"
10	300K9	19H	3.60	17.50	20.40	2.90	16.57	4.98	489	163	"
11											
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प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT  
कोड 901 / CODE 901

प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
डॉ. दिवेश बिश्राम / DR. DIWESH BISHRAM  
कोड 1428 / CODE 1428



*(Handwritten signature)*

*(Handwritten signature)*

Witnessed by

Annexure - V

OBSERVATION REPORT

ZINC COATING MASS REPORT

Joint inspection report : RML/DIV/DOMESTIC/CIPET/50\_2000004439  
 Inspection agency : CIPET  
 Coupon Material : Plastic token  
 Coupon Size : 500 X 50mm  
 Area (A) : 0.025m<sup>2</sup>  
 Correction factor (C) : 1.15  
 Requirement: Average Deposit - 130 g/m<sup>2</sup>

Date: 28-08-2023

S.No	Size	Class	Zinc coating (batch No.)	Weight of coupon		Mass of Zinc Deposited On Coupon (M2-M1)gms	Mass of Zinc Deposited on coupon /sq mtr =(M2-M1) g/m <sup>2</sup> A	Mass of zinc Deposited on plate(2) =(M2-M1) g/m <sup>2</sup> A	Conclusion		Remarks
				Before Coating	After Coating				Min	Max	
				M1(gms)	M2(gms)						
1	DN 100	K 9	17H	11.25	14.37	3.12	124.72	143.43	143.43	144.59	OK
				11.04	14.18	3.14	125.73	144.59			
2	DN 250	K 9	13H	11.20	14.28	3.08	123.39	141.90	140.41	141.90	
				11.21	14.26	3.05	122.10	140.41			
3	DN 300	K 9	19H	11.20	14.35	3.15	125.91	144.80	144.27	144.80	
				11.25	14.39	3.14	125.45	144.27			

Conclusion : Inspection done as per IS8319:2000 and latest amendment and found satisfactory.

For, Rashmi Metaliks Ltd.  
  
 Authorised Signatory  
 Quality Assurance

  
 प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
 मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT  
 कोड 901 / CODE 901

प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
 डॉ. दिवेश बी. मेश्राम / DR. DIVESH B. MESHARAM  
 कोड 1428 / CODE 1428

FOR CIPET

**Annexure - VI**

Internal inspection report

Hydrostatic Test Declaration

This is to certify that centrifugally cast (Spun) Tyton joint Ductile iron spun pipe, Class K9 as per IS: 8329:2000 detailed below have been manufactured by Rashmi Metaliks Limited, at our Kharagpur works and 100% pipes have been hydrostatically tested and no leakage or sweating were observed.

Hydrostatic Test pressure as  
per IS:8329:2000

:

Size/Class (DN)	Test pressure (Mpa)
DN 80 to 300, K9	5.0

Holding time for hydrostatic test

:

10 sec

S.No	Size	Class	Batch No.	Quantity	Remarks
				(nos.)	
1	DN 100	K 9	17H	1549	OK
3	DN 250	K 9	13H	2	OK
4	DN 300	K 9	19H	2	OK

**Conclusion** : Inspection done as per IS8329:2000 and latest amendment and found satisfactory.

For, Rashmi Metaliks Ltd.

Authorised Signatory  
Quality Assuranceप्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
मनोज कुमार राजपूत / MANOJ KUMAR RAJPUT  
कोड 901 / CODE 901प्राधिकृत अधिकारी / AUTHORISED SIGNATORY  
डॉ. दिवेश बी. मेश्रम / DR. DIWESH B. MESHARAM  
कोड 1428 / CODE 1428

**GUARANTEE CERTIFICATE**

**CERTIFICATE NO.** : **RML/DIP/23-24/1064** Date: 28-08-2023  
Inspection call letter no : RML/DIP/DOMESTIC/CIPET/SO\_2000004439  
Name of work : Jal Jeevan Mission(JJM)-WSS to Santhanpara,Rajakumary(part) and Senapathy(part)  
Panchayth in Idukki district Package II A-Supplying and Laying Distribution and  
Name of client : Office Of The Executive Engineer  
Address of client : Project Division, Kattappana, Vellayamkudy P.O. Pin: 685515  
Thodupuzha  
Client Letter No. : 281/DB1/2023/Pr.D-KTPA-MTPZA  
Dated : 20.07.2023  
Name of contractor : Sri.Roopesh K.Rajappan  
Address of contractor : Kandathinkara(H),Cheedavu.P.O  
Thodupuzha  
Contractor PO No. : NIL  
Dated : NIL  
Name of Buyer : M/s MERCURY PIPES AND VALVES LLP  
Address of Buyer : 40/4051A, C New 67 - 11322 and 69-11324  
REVATHIKA COMPLEX, T.D ROAD, ERNAKULAM 682035  
Buyer PO No. : LLP/2  
Dated : 27.07.2023  
Sales order No. : SO-2000004439  
Dated : 03.08.2023  
Materials : Centrifugally cast (spun) Ductile iron pressure pipes for water Supply with socket  
and spigot ends, inside Cement motor lining and outside coated with Zinc with a finishing  
layer of Bituminous coating conforming to IS 8329-2000.

Size	Class	Batch No.	Length (nos.)		Total, Nos.	Total Qty., mts.
			5.5 mts	5.0 mts		
DN 100	K 9	17H	1548	1	1549	8519.0
DN 250	K 9	13H	0	2	2	10.0
DN 300	K 9	19H	0	2	2	10.0

We hereby guarantee that all the materials as detailed above conforms to specification and purchase order condition and guaranteed for a period of 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier against any manufacturing defects.

For, Rashmi Metaliks Ltd.



\_\_\_\_\_  
Authorised Signatory  
Quality Assurance