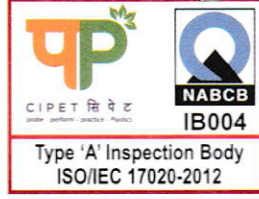
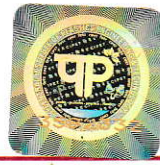


# केंद्रीय पेट्रोकेमिकल्स इंजीनियरिंग एवं तकनीकी संस्थान (सिपेट)

(पूर्व में केंद्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)

मुख्यालय. पो.डो.आई सेल्  
रसायन एवं पेट्रोसायन विभाग,  
रसायन एवं उर्वरक मंत्रालय, भारत सरकार  
टी.वी.के. इंडस्ट्रियल एस्टेट, गिण्टी, चेन्नई -600 032.  
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ई-मेल : pdicipet@gmail.com



# 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  
T.V.K. Industrial Estate, Guindy, Chennai - 600 032.  
Phone : +91-44-2225 4781 / 22254 779 / 6462 9018  
E-mail : pdicipet@gmail.com

Name of the Inspecting Official: A.Velladurai

W.O. Centre: Kochi

Code No.: 897

Camp at: M/s Electrosteel Castings Limited, Rachaguneri, Srikalahasthi, Chittoor - 517641, A.P

## INSPECTION REPORT

1.	IB00422230501276	Date: 28.09.2022
2.	Name of the Indenter / Consignee with address	The Superintending Engineer, Kerala Water Authority (KWA), Public Health Circle, High Road, Thrissur, Kerala. ✓
3.	Indenter Order No. & Date and Extension (if any)	(i) KWA/PHC/TSR/D1/2771/2020-21 dated 16.04.2021 (ii) KWA/PHC/TSR/D1/2771/2020 dated 30.12.2020 (iii) KWA/HO/SP-440/2017/TPI(I) dated 02.07.2020 of MD. KWA, Jalabhavan TVM
4.	Details of the Consignee	The Executive Engineer, KWA, PH Division, Irinjalakuda, Kerala
5.	Name of the Supplier / Contractor	Sri. T Muhammad Ali, Thadathil House, Kanayam Post, Shornur, Kerala
6.	Supplier Order No. & Date (if any)	P.O amendment dated 29.07.2022 for TMALI/109/2020-21 dated 19.12.2020
7.	Name and address of the Manufacturer / Inspection site	M/s Electrosteel Castings Limited, Rachaguneri Village, Srikalahasthi, Chittoor - 517641, Andhra Pradesh
8.	Manufacturer / Supplier Inspection Call Letter No. & Date	ECL-KL-301-09/22 dated 21.09.2022
9.	PDI Cell Assignment No. & Date	CIPET/HO/2022233771 dated 23.09.2022
10.	Date of inspection	Initiated on: 28.09.2022 Completed on: 28.09.2022
11.	Name of the Work	JJM - Nattika Grama Panchayath - Providing FHTCs to Rural Households, Retrofitting and Augmentation of existing Water Supply schemes.
12.	Any other information	BIS License No. CM/L- 6245464

## 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 350mm Class K9	942 Mtrs	Nil	940.5 Mtrs	940.5 Mtrs (171 Nos X 5.5 Mtrs)	NIL	1.5 Mtrs.
2.	DN 450mm Class K9	123 Mtrs	Nil	121 Mtrs	121 Mtrs (22 Nos X 5.5 Mtrs)	NIL	2 Mtrs.

Remarks: All accepted items are stamped thus-

CIPET/ CHN/ 897/22-23 / 009M

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. **IB00422230501276 / 1 & 2** dated **28.09.2022** is enclosed.
2. Any Dispute/discrepancies/claims may be brought to the notice of the undersigned within 30 days from the date of issue of this report.

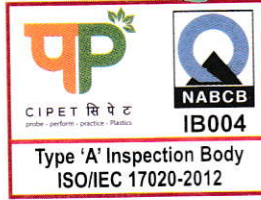
  
AUTHORIZED SIGNATORY  
(A.Velladurai -897)

- CC: 1. The Executive Engineer, KWA, PH Division, Irinjalakuda, Kerala.  
2. Sri. T Muhammad Ali, Thadathil House, Kanayam Post, Shornur, Kerala.  
3. M/s Electrosteel Castings Limited, Rachaguneri Village, Srikalahasthi, Chittoor - 517641 Andhra Pradesh  
4. CIPET : IPT - Kochi



# केंद्रीय पेट्रोकेमिकल्स इंजीनियरिंग एवं तकनीकी संस्थान (सिपेट)

(पूर्व में केंद्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)  
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Name of the Inspecting Official: A.Velladurai  
Code No.: 897

Camp at: M/s Electrosteel Castings Limited, Rachagunneri, Srikalahasthi, Chittoor - 517641, A.P

W.O. Centre: Kochi

### INSPECTION DOCUMENT

Inspection Document No: IB00422230501276 / 1

Dated: 28.09.2022

Issued to: M/s Electrosteel Castings Limited, Rachagunneri Village, Srikalahasthi, Chittoor - 517641, Andhra Pradesh

Manufacturer / Supplier Inspection Call Letter No. & Date: ECL-KL-301-09/22 dt 21.09.2022

Test Report as per IS 8329:2000 (Latest 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. : DN 350 mm / Class K9  
c) Declared Value, if any : Nil  
d) Quantity : 940.5Mtrs. (171 Nos. X 5.5 mtrs)  
e) Any Other Information : Batch Nos. 211 & 221

#### 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
<b>DIMENSIONS :</b>					
1	13				
1.1	13.1 & 15.5	Effective length (L) (Socket Ended Pipe) (Minimum / Maximum)	mm	5400 / 5600	5529 / 5503
1.2	3.3 & 15.4 Table 2	Min. Wall Thickness (e)	mm	6.1	7.0
1.3	15.1.1 Table 7	External Diameter (DE) (Minimum / Maximum)	mm	374.60 / 379.00	375.20 / 378.50
1.4	15.1.3	Ovality	%	Within the DE Limit	Satisfactory
1.4	Table 8 & 15.3.2	Tolerance on Ovality	mm	1.75	N/A
1.5	15.6	Deviation from Straight Line (Maximum)	mm	≤ 1.25 X L	< 1.25 X L
<b>External Protection :</b>					
1.6	16.2				
	Annex. A & C	Zinc Coating Average Mass (Minimum)	g/m <sup>2</sup>	130	134
	Annex. C 2.2	Bituminous Coating (Minimum)	μm	50	86
1.7	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.			Satisfactory
<b>Internal Linings :</b>					
1.8	16.3				
	Table 15 & B-5	Cement Mortar Lining (Minimum)	mm	3	4.0
	B-5	Chamfer Length of CML (Maximum)	mm	50	< 50
	Table 16 & B-7	Minimum Bore of CML	mm	335	338
<b>Mechanical Tests :</b>					
2	10				
2.1	10.1.1	Minimum Tensile Strength	MPa	420	478.44
2.2	10.1.1	Minimum Elongation at Break	%	10	12.17
2.3	10.2	Brinell Hardness Test	HB	230 (Max.)	191

#### 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	Declaration on "Works Certificate for DI Pipes" for Hydrostatic Test by M/s Electrosteel Castings Ltd., Srikalahasthi.		Reviewed and Found Satisfactory
2	16.2	Zinc mass deposition	"Zinc Coating Report" of M/s Electrosteel Castings Ltd., Srikalahasthi		Reviewed and Found Satisfactory
3	8	Rubber Sealing Ring	(i) Test Report No: WRM/ECL-SP/TRG/22-23 Dt: 17.07.2022 by M/s Waheguru Rubber Manufacturing Co.(P) Ltd.- Kolkatta (ii) Test Report No: 220717 / 1.7 Dt: 17.07.2022 by M/s Prabhat Elastomers Pvt. Ltd.- Mumbai		Reviewed and Found Satisfactory

#### PART - D: REMARKS :

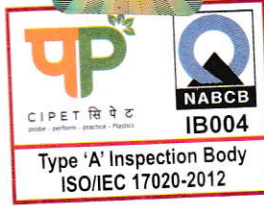
- This Inspection document shall not be reproduced except in full without the written approval of the PDI Cell at CIPET Head Office, Chennai.
- These witness results relate exclusively to the work ordered or the object (s) or the lot inspected.
- Lab. Environmental Condition during the witness of tests: Temp. (°C): 24 ± 2.
- Calibration status of equipment / Instruments are verified.

  
**AUTHORIZED SIGNATORY**  
 (A.Velladurai -897)



# केंद्रीय पेट्रोकेमिकल्स इंजीनियरिंग एवं तकनीकी संस्थान (सिपेट)

(पूर्व में केंद्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)  
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E-mail : pdicipet@gmail.com

Name of the Inspecting Official: A.Velladurai  
Code No.: 897

W.O. Centre: Kochi

Camp at: M/s Electrosteel Castings Limited, Rachagunneri, Srikalahasthi, Chittoor - 517641, A.P

## INSPECTION DOCUMENT

Inspection Document No: IB0042230501276 / 2

Dated: 28.09.2022

Issued to: M/s Electrosteel Castings Limited, Rachagunneri Village, Srikalahasthi, Chittoor - 517641, Andhra Pradesh

Manufacturer / Supplier Inspection Call Letter No. & Date: ECL-KL-301-09/22 dated 21.09.2022

Test Report as per IS 8329:2000 (Latest 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.: DN 450 mm / Class K9  
c) Declared Value, if any : Nil  
d) Quantity : 121 Mtrs. (22 Nos. X 5.5 mtrs)  
e) Any Other Information : Batch Nos. 23I

### 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
<b>DIMENSIONS :</b>					
1	13				
1.1	13.1 & 15.5	Effective length (L) (Socket Ended Pipe) (Minimum / Maximum)	mm	5400 / 5600	5504 / 5518
1.2	3.3 & 15.4 Table 2	Min: Wall Thickness (e)	mm	6.9	7.9
1.3	15.1.1 Table 7	External Diameter (DE) (Minimum / Maximum)	mm	476.40 / 481.00	477.20 / 479.10
1.4	15.1.3	Ovality	%	Within the DE Limit	Satisfactory
	Table 8 & 15.3.2	Tolerance on Ovality	mm	1.75	N/A
1.5	15.6	Deviation from Straight Line (Maximum)	mm	≤ 1.25 X L	< 1.25 X L
<b>External Protection :</b>					
1.6	Annex. A & C	Zinc Coating Average Mass (Minimum)	g/m <sup>2</sup>	130	134
	Annex. C 2.2	Bituminous Coating (Minimum)	µm	50	85
1.7	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.			Satisfactory
<b>Internal Linings :</b>					
1.8	16.3 Table 15 & B-5	Cement Mortar Lining (Minimum)	mm	3.0	4.0
	B-5	Chamfer Length of CML (Maximum)	mm	50	< 50
	Table 16 & B-7	Minimum Bore of CML	mm	435	439
<b>Mechanical Tests :</b>					
2	10				
2.1	10.1.1	Minimum Tensile Strength	MPa	420	478.85
2.2		Minimum Elongation at Break	%	10	14.64
2.3	10.2	Brinell Hardness Test	HB	230 (Max.)	188

### 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	Declaration on "Works Certificate for DI Pipes" for Hydrostatic Test by M/s Electrosteel Castings Ltd., Srikalahasthi.		Reviewed and Found Satisfactory
2.	16.2	Zinc mass deposition	"Zinc Coating Report" of M/s Electrosteel Castings Ltd., Srikalahasthi.		Reviewed and Found Satisfactory
3.	8	Rubber Sealing Ring	(i) Test Report No: WRM/ECL-SP/TRG/22-23 Dt: 17.07.2022 by M/s Waheguru Rubber Manufacturing Co.(P) Ltd.- Kolkatta (ii) Test Report No: 220717 / 1.7 Dt: 17.07.2022 by M/s Prabhat Elastomers Pvt. Ltd.- Mumbai		Reviewed and Found Satisfactory

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