

केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं
प्रौद्योगिकी संस्थान (सिपेट)

(पूर्व में केन्द्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)

मुख्यालय, पीडीआई सेल

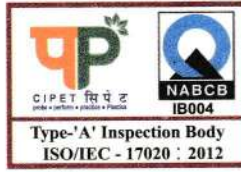
रसायन एवं पेट्रो रसायन विभाग,

रसायन एवं उर्वरक मंत्रालय, भारत सरकार,

टीवीके. औद्योगिक इस्टेट, गिंडी, 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

Name of the Inspecting Official: Dr. R. Joseph Bensingh
Code No. : 758

WO Centre: CIPET, Kochi

Camp at: M/s Kejriwal Castings Ltd., Durgapur

INSPECTION REPORT

1.	Unique Identification Code & Date (Report / Work Order No.)	: IB00422230502416 & 13.01.2023
2.	Name of the Indenter / Consignee with detailed address	: Office of The Executive Engineer, P.H. Division, Kerala Water Authority, Irinjalakuda-680121
3.	Department W.O / P.O No.	: D6 - 2354/2022 , Date : 24.11.2022
4.	Details of the Consignee	: The Assistant Executive Engineer, WSP Sub Division, KWA, Chalakudy
5.	Name of the Supplier / Contractor	: M/s Parambi Constructions, Koratti south , P.O. Thrissur, Dist -Kerala, Pin - 680308
6.	Supplier / Contractor P.O. No.	: Nil , Date : 25.11.2022
7.	Name and address of the Manufacturer / Inspection site	: M/s Kejriwal Castings Ltd., Bamunara Industrial Estate, Durgapur - 713212
8.	Manufacturer / Supplier Inspection Call Letter No. & Date	: • KCL/CIPET/SK-090/22-23, Dated: 07.01.2023. • D6-2354/2022, Dated: 24.11.2022
9.	PDI Cell Assignment No. & Date	: CIPET/HO/ 2022236498, Dtd.: 10.01.2023
10.	Date of inspection	: Initiated on: 13.01.2023 Completed on: 13.01.2023
11.	Any other information	: Name of the Project: JJM 2021-22- Meloor Gama Panchayath (Phase-II) - Providing FHTCs to Rural households by Augmentation of existing water supply schemes.

DETAILS OF THE STORES

Sl. No.	Description of the items	Quantity as per order (in Mts.)	Quantity inspected earlier (Cumulative) (in Mts.)	Quantity offered for Inspection (in Mts.)	Quantity Accepted (in Mts.)	Quantity Rejected (in Mts.)	Quantity Balance (in Mts.)
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 250 Class K-9	1745.0	0.0	1745.0 (310 Nos. X 5.5 Mts. & 08 Nos. X 5.0 Mts.)	1745.0 (310 Nos. X 5.5 Mts. & 08 Nos. X 5.0 Mts.)	0.0	0.0
2.	DN 300 Class K-9	774.0	0.0	774.0 (138 Nos. X 5.5 Mts. & 03 Nos. X 5.0 Mts.)	774.0 (138 Nos. X 5.5 Mts. & 03 Nos. X 5.0 Mts.)	0.0	0.0
3.	DN 400 Class K-9	460.0	0.0	460.0 (80 Nos. X 5.5 Mts. & 04 Nos. X 5.0 Mts.)	460.0 (80 Nos. X 5.5 Mts. & 04 Nos. X 5.0 Mts.)	0.0	0.0

Remarks: All accepted items are stamped thus-



- 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. IB00422230502416 / 1, 2, 3, Dated 13.01.2023** are enclosed.
- Any Dispute/discrepancies/claims may be brought to the notice of the undersigned within 30 days from the date of issue of this report.

AUTHORISED SIGNATORY
(R. Joseph Bensingh)

- CC: 1. The Assistant Executive Engineer, WSP Sub Division, KWA, Chalakudy
2. M/s Parambi Constructions, Koratti south, P.O. Thrissur, Dist -Kerala, Pin - 680308
3. M/s Kejriwal Castings Ltd., Bamunara Industrial Estate, Durgapur - 713212
4. CIPET, Kochi



केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं
प्रौद्योगिकी संस्थान (सिपेट)

(पूर्व में केन्द्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)

मुख्यालय, पीडीआई सेल

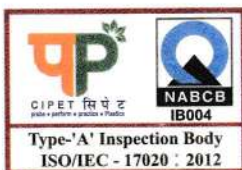
रसायन एवं पेट्रो रसायन विभाग,

रसायन एवं उर्वरक मंत्रालय, भारत सरकार,

टीवीके. औद्योगिक इस्टेट, गिंडी, 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

Name of the Inspecting Official: Dr. R. Joseph Bensingh

Code No. : 758

WO Centre: CIPET, Kochi

Camp at: M/s Kejriwal Castings Ltd., Durgapur

INSPECTION DOCUMENT

Inspection Document No. & Date : IB00422230502416 / 1 & 13.01.2023
Issued to : M/s Kejriwal Castings Ltd., Bamunara Industrial Estate, Durgapur - 713212
Manufacturer / Supplier Inspection Call : KCL/CIPET/SK-090/22-23 Dated: 07.01.2023.
Letter No. & Date : As per IS: 8329: 2000 with latest amendments
Inspection Document

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 250 mm, Class K-9
c) Declared Value, if any : Nil
d) Quantity : 1745.0 Mts. (5.5 Mts. x 310 Nos. & 5.0 Mts. x 08 Nos.)
e) Any Other Information : Batch Nos.: 29M

PART - B: SUPPLEMENTARY INFORMATIONS

Sampling procedura : Random Sampling Method as per IS 11606: 1986

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

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
DIMENSIONS					
1	13	Effective Length (Socket Ended Pipe): Min. / Max.	mm	4900 / 5600	4993 / 5521
1.1	13.1 & 15.5				
1.2	13.2 & Table 16 (B-7)	Minimum Bore of CML	mm	237	Complies
1.2	13.3 & 15.4 Table 2	Min. Wall Thickness (e)	mm	5.3	5.7
1.3	15.1.1 Table 7	External Diameter (DE) – Min. / Max.	mm	270.9 / 275.0	271.30 / 273.80
1.4	15.1.3	Ovality on DE	%	Should not exceed 1%	Complies
1.5	15.3.2 & Table 8	Tolerance on Ovality	mm	≤1.0	Complies
1.6	15.6	Deviation from Straight Line (max.)	mm	≤ 1.25 X L	Complies
1.7	16.2 & Annex. C 2.2	Bituminous Coating Thickness – Min. / Mean	µm	50 / 70	79 / 127
1.8	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 penknife.			Complies
1.9	16.3, Table 15 & Annex. B-7	Cement Mortar Lining (Minimum)	mm	1.5	2.34
Mechanical Tests					
2	10	Minimum Tensile Strength	MPa	420	487
2.1	10.1.1	Minimum Elongation at Break	%	10	14.11
2.2	10.2	Brinell Hardness (Max.)	HB	230	182
2.3					
DOCUMENTS REVIEWED					
Sl. No.	Clause No.	Test Parameters	Details of Documents		Observations
1	11.1	Minimum Hydrostatic pressure- 5.0 MPa for 10 seconds	Declaration of Hydrostatic Test Report issued by M/s Kejriwal Castings Ltd., Durgapur.		Complies
2	16.2	Zinc coating mass (Ave. >130 g/m ² / Min. 110 g/m ²)	Zinc Coating Mass Report issued by M/s Kejriwal Castings Ltd., Durgapur		Complies
3	8	Rubber Sealing Ring	Test Reports issued by Rubber Sealing Ring Manufacturer:: Test Report Nos.: (i) CEPL/171/22-23 Dt: 09.12.2022 (Batch No.: 2211) by M/s Chandranchal Efforts Pvt. Ltd. (ii) APPL/KCL/521& APPL/KCL/521A Dt: 13.10.2022 (Batch No.: 06D22TO30I22) by M/s Andhra Polymers Pvt. Ltd.		Complies

PART - D: REMARKS

- This Inspection document shall not be reproduced 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.



(Signature)
AUTHORISED SIGNATORY
(R. Joseph Bensingh)

केन्द्रीय पेट्रोसायन अभियांत्रिकी एवं
प्रौद्योगिकी संस्थान (सिपेट)

(पूर्व में केन्द्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)

मुख्यालय, पीडीआई सेल

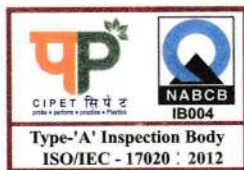
रसायन एवं पेट्रो रसायन विभाग,

रसायन एवं उर्वरक मंत्रालय, भारत सरकार,

टीवीके औद्योगिक इस्टेट, गिंडी, 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

Name of the Inspecting Official: Dr. R. Joseph Bensingh

Code No. : 758

WO Centre: CIPET, Kochi

Camp at: M/s Kejriwal Castings Ltd., Durgapur

INSPECTION DOCUMENT

Inspection Document No. & Date : IB00422230502416 / 2 & 13.01.2023
Issued to : M/s Kejriwal Castings Ltd., Bamunara Industrial Estate, Durgapur - 713212
Manufacturer / Supplier Inspection Call : KCL/CIPET/SK-090/22-23 Dated: 07.01.2023.
Letter No. & Date :
Inspection Document : As per IS: 8329: 2000 with latest amendments

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 300 mm, Class K-9
c) Declared Value, if any : Nil
d) Quantity : 774.0 Mts. (5.5 Mts. x 138 Nos. & 5.0 Mts. x 03 Nos.)
e) Any Other Information : Batch Nos.: 04M

PART - B: SUPPLEMENTARY INFORMATIONS

Sampling procedure : Random Sampling Method as per IS 11606: 1986

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

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
DIMENSIONS					
1	13	Effective Length (Socket Ended Pipe): Min. / Max.	mm	4900 / 5600	4994 / 5518
1.1	13.1 & 15.5	Minimum Bore of CML	mm	287	Complies
1.2	13.2 & Table 16 (B-7)	Min. Wall Thickness (e)	mm	5.6	6.2
1.2	13.3 & 15.4 Table 2	External Diameter (DE) - Min. / Max.	mm	322.7 / 327.0	323.10 / 325.30
1.3	15.1.1 Table 7	Ovality on DE	%	Should not exceed 1%	Complies
1.4	15.1.3	Tolerance on Ovality	mm	≤1.0	Complies
1.5	15.3.2 & Table 8	Deviation from Straight Line (max.)	mm	≤ 1.25 X L (≤ 6.8)	Complies
1.6	15.6	Bituminous Coating Thickness - Min. / Mean	µm	50 / 70	83 / 133
1.7	16.2 & Annex. C 2.2	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 penknife.			Complies
1.8	16.2 & Annex. C-2.3	Cement Mortar Lining (Minimum)	mm	1.5	2.11
1.9	16.3, Table 15 & Annex. B-7				
Mechanical Tests					
2	10	Minimum Tensile Strength	MPa	420	470
2.1	10.1.1	Minimum Elongation at Break	%	10	13.31
2.2		Brinell Hardness (Max.)	HB	230	185
2.3	10.2				
DOCUMENTS REVIEWED					
SI. No.	Clause No.	Test Parameters	Details of Documents		Observations
1	11.1	Minimum Hydrostatic pressure- 5.0 MPa for 10 seconds	Declaration of Hydrostatic Test Report issued by M/s Kejriwal Castings Ltd., Durgapur.		Complies
2	16.2	Zinc coating mass (Ave. >130 g/m ² / Min. 110 g/m ²)	Zinc Coating Mass Report issued by M/s Kejriwal Castings Ltd., Durgapur		Complies
3	8	Rubber Sealing Ring	Test Reports issued by Rubber Sealing Ring Manufacturer: Test Report Nos.: (i) APPL/KCL/522& APPL/KCL/522A Dt: 13.10.2022 (Batch No.: 02H22TO12J22) by M/s Andhra Polymers Pvt. Ltd.		Complies

PART - D: REMARKS

- This Inspection document shall not be reproduced 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.



(Signature)
AUTHORISED SIGNATORY
(R. Joseph Bensingh)

कन्द्रीय पेट्रोसायन अभियांत्रिकी एवं
प्रौद्योगिकी संस्थान (सिपेट)

(पूर्व में केन्द्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान)

मुख्यालय, पीडीआई सेल

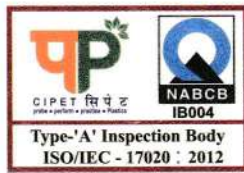
रसायन एवं पेट्रो रसायन विभाग,

रसायन एवं उर्वरक मंत्रालय, भारत सरकार,

टीवीके औद्योगिक इस्टेट, गिंडी, 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

Name of the Inspecting Official: Dr. R. Joseph Bensingh
Code No. : 758

WO Centre: CIPET, Kochi
Camp at: M/s Kejriwal Castings Ltd., Durgapur

INSPECTION DOCUMENT

Inspection Document No. & Date Issued to : IB004222305012416 / 3 & 13.01.2023
Manufacturer / Supplier Inspection Call Letter No. & Date : M/s Kejriwal Castings Ltd., Bamunara Industrial Estate, Durgapur - 713212
Inspection Document : KCL/CIPET/SK-090/22-23 Dated: 07.01.2023.
: As per IS: 8329: 2000 with latest amendments

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 400 mm, Class K-9
c) Declared Value, if any : Nil
d) Quantity : 460.0 Mts. (5.5 Mts. x 80 Nos. & 5.0 Mts. x 04 Nos.)
e) Any Other Information : Batch Nos.: 08M

PART - B: SUPPLEMENTARY INFORMATIONS

Sampling procedure : Random Sampling Method as per IS 11606: 1986

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

Sl. No.	Clause No.	Tests Witnessed	Unit	Specified Requirements	Observed Results
DIMENSIONS					
1	13	Effective Length (Socket Ended Pipe): Min. / Max.	mm	4900 / 5600	4992 / 5519
1.1	13.1 & 15.5	Minimum Bore of CML	mm	385	Complies
1.2	13.2 & Table 16 (B-7)	Min. Wall Thickness (e)	mm	6.4	7.1
1.2	13.3 & 15.4 Table 2	External Diameter (DE) - Min. / Max.	mm	425.5 / 430.0	425.80 / 428.90
1.3	15.1.1 Table 7	Ovality on DE	%	Should not exceed 1%	Complies
1.4	15.1.3	Tolerance on Ovality	mm	≤ 1.75	Complies
1.5	15.3.2 & Table 8	Deviation from Straight Line (max.)	mm	≤ 1.25 X L (≤ 6.8)	Complies
1.6	15.6	Bituminous Coating Thickness - Min. / Mean	µm	50 / 70	81 / 141
1.7	16.2 & Annex. C 2.2	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 penknife.			Complies
1.8	16.2 & Annex. C-2.3	Cement Mortar Lining (Minimum)	mm	3.0	3.17
1.9	16.3, Table 15 & Annex. B-7	Mechanical Tests			
2	10	Minimum Tensile Strength	MPa	420	510
2.1	10.1.1	Minimum Elongation at Break	%	10	12.86
2.2	10.1.1	Brinell Hardness (Max.)	HB	230	174
2.3	10.2				
DOCUMENTS REVIEWED					
Sl. No.	Clause No.	Test Parameters	Details of Documents		Observations
1	11.1	Minimum Hydrostatic pressure- 4.0 MPa for 10 seconds	Declaration of Hydrostatic Test Report issued by M/s Kejriwal Castings Ltd., Durgapur.		Complies
2	16.2	Zinc coating mass (Ave. >130 g/m ² / Min. 110 g/m ²)	Zinc Coating Mass Report issued by M/s Kejriwal Castings Ltd., Durgapur		Complies
3	8	Rubber Sealing Ring	Test Reports issued by Rubber Sealing Ring Manufacturer:: Test Report Nos.: (i) APPL/KCU/524& APPL/KCL/524A Dt: 13.10.2022 (Batch No.: 20D22T009J22) by M/s Andhra Polymers Pvt. Ltd.		Complies

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.



AUTHORISED SIGNATORY
(R. Joseph Bensingh)