

Technical Catalogue



**UNIVERSAL
INDUSTRIES**



South Asia
ISO 9001 : 2015
Certificate No. 99 100 22850

Pre-insulated pipes for industrial applications

FACTORY MADE PRE INSULATED PIPES



Why Pre Insulated Pipes?

Pre-insulated piping systems provide operators and owners With many advantages, over traditional field-applied insulation solutions.

- Greater thermal efficiency,
- Excellent mechanical performance,
- Lower installation costs,
- High quality factory applied materials result in significantly lower total installed and life-cycle costs.

As a result, there has been increased use of pre-insulated piping systems in various industries, such as oil & gas, district energy, environmental, and industrial. These advantages and along with having an expertly designed pre-insulated pipe system, are why you should specify **UNIVERSAL INDUSTRIES MAKE**



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INDUSTRIES™**

FACTORY MADE PRE INSULATED PIPES

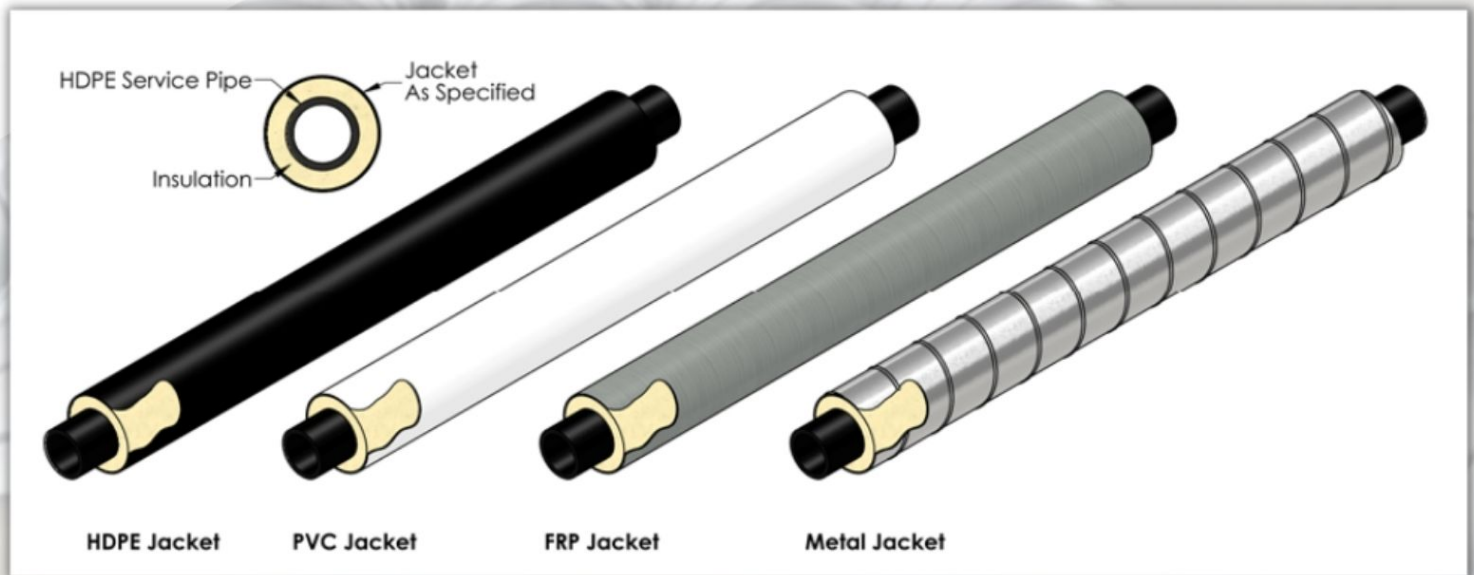
Features of Pre Insulated Pipes

- Operating temperatures from -320 °F (-196 °C) up to 250 °F (121 °C)
- Typical compressive strengths up to 90 psi (620 kPa) to prevent damage during construction and operation.
- Higher compressive strengths are available
- Typical thermal conductivity down to 0.16 Btu in/hr·ft²·°F (0.023 W/m·°C)
- Versatile system fabricated in various thicknesses and densities to meet the overall heat transfer design parameters

Whar are Pre-Insulated Pipes ?

A Metered dose of poly urethane foam (PUF) is injected in the factory, in the angular space between MS pipe (Chilled water pipe) and the outer jacket. The PUF expands and, upon setting, forms a homogenous insulation around the carrier pipe. the combination of pipe, insulation and jacket together is called Pre-Insulated pile.

FACTORY MADE PRE INSULATED PIPES



Specifications :

1) Insulation

Material : Polyurethane Foam

Thickness : 25mm onwards to suit application

Density : Standard 36 kg/m³. Other densities on specific request.

2) **Fluid Temp. Range** : -20°C to 120°C

3) **Sizes** : For MS Pipes 19mm onwards

4) **Pre-Insulated Pipe Length** : 6m

5) Outer Jacket

Metallic : GI / AL / Stainless Steel

Non-Metallic : HDPE / PVC

FACTORY MADE PRE INSULATED PIPES

Field Jointing Methods :

3 STAGE WELDING OF MS PIPES



GI Cladding Work Activity



Puff Chemical Injunction Activity



HDPE Sheet Soldering Work Activity







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ISO 9001 : 2015

CPWD APPROVED PRE INSULATED PIPES

 भारत सरकार GOVERNMENT OF INDIA Central Public Works Department e-mail: krcwema1:ppsc@cpwd.gov.in		 OFFICE OF THE EXECUTIVE ENGINEER & SENIOR MANAGER (ELECTRICAL) PALAKKAD PROJECT ZONE, IIT CAMPUS KANJIKODE WEST, PALAKKAD - 678 623 Date: 23/02/2022
सर्वकार अधिकाय और सार्वजनिक उपकरण विभाग (भारत)		कार्यालय निदेशक और सीनियर मैनेजर (विद्युत) पालक्काद प्रोजेक्ट जोन, आई आईटी कैंपस कान्जिकोड वेस्ट, पालक्काद - 678 623
No.33(S)/E/EE&SM(E)-I/PPZ/2022/ 16		Date: 23/02/2022


To
The Project Manager,
 M/s Shapoorji Pallonji and Company Private Limited,
 C/o IIT Palakkad Permanent Campus,
 Melampuzha Road Near Gramalakshmi Mudralayam,
 Pudukkottai Village, Kanjikkode West
 Palakkad, Kerala-678 623.

Name of the Work: Construction of Permanent Campus for Indian Institute of Technology Palakkad Phase I A (Package I) at Pudukkottai Village, Kanjikkode West, District Palakkad, Kerala.
Ag. No. G2/CE&ED/EE&SM(C)-I/PPZ/2019-20.

Subject: Submission of Technical Data Sheets of Copper pipe for HVAC, Pre insulated spiral ducts & Pre insulated chilled water pipes-For approval-Reg.
Ref 1: SPC/Letter No. SPCPL/CHN/IT-PRD-IA/CPWD/2020-21/648 Dt: 19/02/2022
Ref 2: SPC/Letter No. SPCPL/CHN/IT-PRD-IA/CPWD/2020-21/651 Dt: 21/02/2022

Sir,
 With reference to above subject, the details of following items are scrutinized and hereby approved for the work at IIT Palakkad Project subject to agreement conditions.

Sl. No	ITEM DESCRIPTION	APPROVED MARK(S)
1	Copper pipe for HVAC-VRF & Split AC	Omega, Uniflow Copper Tubes
2	Pre insulated spiral ducts	M/s Universal Industries
3	Pre insulated chilled water pipes	M/s Universal Industries

Yours Faithfully

 (Manu Varkey)
 Executive Engineer & Senior Manager (E) - I

Copy to :-
 1. The Executive Engineer & SM(C)-I, PPZ, CPWD, Palakkad.
 2. The Executive Engineer & SM(C)-II, PPZ, CPWD, Palakkad.
 3. All AEs/Es, O/o EE & SM(E)-I, PPZ, CPWD, Palakkad.

Executive Engineer & Senior Manager (E) - I
 Page 1 of 1.

CIPET TEST CERTIFICATE

विश्व : हीरोटूटू और पारितकर टेक्नोलॉजी
 CIPET - INSTITUTE OF PLASTICS TECHNOLOGY
 (Ministry of Chemicals & Fertilizers, Govt. of India)
 11th Floor, 4th Stage, 1st Mile, Hosur, Chennai - 600 032
 Tel: 01-44-2225470/4, Fax: 01-44-2225472
 E-mail: cipet@cipet.ac.in, www.cipet.ac.in

परिक्षण रिपोर्ट / TEST REPORT

रिपोर्ट नं / REPORT NO. : 69320
 दिनांक / Date : 11-05-2022

Test Duration: 27-04-2022 To 11-05-2022

S.No.	Test Name	Test Method / Standard	Unit	Test Value Obtained
1	Compression strength at 10% deformation	IS: 11239 Part 11	MPa	0.162
2	Density	IS: 11239 Part 12	kg/m ³	48.0

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AUTHORIZED SIGNATORY

ZERTIFIKAT • CERTIFICATE • CERTIFICADO • CERTIFICAT

CERTIFICATE

The Certification Body of TÜV SÜD South Asia Private Limited certifies that



Universal Industries
 DP-58, 1st Main Road, SIDCO Industrial Estate, Kattur, Thirumullaivoyal, Chennai - 600062, Tamil Nadu, India

has implemented Quality Management System in accordance with ISO 9001:2015 for the scope of

Manufacture and Supply of HVAC Ducts, Grilles & Diffusers, Pre Insulated Pipes & Accessories

The certificate is valid from 2022-12-12 until 2025-12-11
 Subject to successful completion of annual periodic audits

The present status of the certificate can be obtained through TÜV SÜD website by entering below QR code and by entering the certificate number on the site. Further details on monitoring the status & scope of the certificate may be found on the website <https://www.tuv.com>

Certificate Registration No. 99 100 22850
 Date of initial certification: 2022-12-12
 Issue Date: 2022-12-12 Rev. 00





TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD India • Sales Office • Address: 4th Floor, 40072 • Hyderabad • India • TÜV

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