# **CERTIFICATE OF CALIBRATION**

ISSUED BY GULF CALIBRATION & TECHNICAL SERVICES

Certificate Number: GCTS/20171315-05 Date of Issue: 30/11/2017



# **GULF CALIBRATION & TECHNICAL SERVICES**

An ISO 17025: 2005 Accredited & ISO 9001:2008 Certified Lab

P.O. Box 1197, P.C. 130, Muscat, Sultanate of Oman Tel.: +968 24504206, 24504924 Fax: +968 24502635 E-mail: info@gulfcalibration.com, Web: www.gulfcalibration.com

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APPROVED SIGNATORY

Sabu Thankachan

Customer Name & Address EUROTHERM PP-R PIPES & FITTINGS

PO Box:1401,PC:211

SULTANATE OF OMAN

Date Received

November 29, 2017

Verification Date

November 30, 2017

Verified By

Kamal

## DETAILS OF UNIT UNDER TEST

Description	PPR Pipe
Manufacturer	EUROTHERM
Model No	PP-R25X4.2MM
Sample Provided by	EUROTHERM PP-R PIPES & FITTINGS
Sample No	05
Nominal Size	25 mm

### **ENVIRONMENTAL CONDITIONS DURING VERIFICATION**

Temperature & Humidity  $21 \pm 2$  °C & 50  $\pm$  15 % RH

### DETAILS OF REFERENCE EQUIPMENTS USED FOR VERIFICATION

Description	Digital Caliper
Manufacturer	MITUTOYO
Serial No. & Certificate No.	08623675 & A201759
Traceability	NPL,UK

VERIFICATION METHOD: DIN 8077:2008-09

## VERIFICATION RESULTS

	Actual Measured Value (mm)				Average	Tolerance
Dimension of	Trail 1	Trail 2	Trail 3	Trail 4	( mm)	Limit (mm)
Outer Diameter	25.02	25.12	25.20	25.26	25.15	25 + 0.3
Wall Thickness	4.50	4.38	4.44	4.52	4.46	4.2 + 0.7

Uncertainty of Measurement=0.01 mm

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence approximately 95% CERTIFIED

GCTS/CERT-164/Rev.00

\*\*END OF CERTIFICATE\*\*

# **CERTIFICATE OF CALIBRATION**

ISSUED BY GULF CALIBRATION & TECHNICAL SERVICES

Certificate Number: GCTS/20171315-04 Date of Issue: 30/11/2017



## GULF CALIBRATION & TECHNICAL SERVICES

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APPROVED SIGNATORY

Sabu Thankachan

PO Box:1401,PC:211

SULTANATE OF OMAN

Date Received

November 29, 2017

Verification Date

November 30, 2017

Verified By

Kamal

# **DETAILS OF UNIT UNDER TEST**

Description	PPR Pipe
Manufacturer	EUROTHERM
Model No	PP-R32X5.4MM
Sample No	04
Sample Provided by	EUROTHERM PP-R PIPES & FITTINGS
Nominal Size	32 mm

## **ENVIRONMENTAL CONDITIONS DURING VERIFICATION**

Temperature & Humidity 21 ± 2 °C & 50 ± 15 % RH

## DETAILS OF REFERENCE EQUIPMENTS USED FOR VERIFICATION

Description	Digital Caliper
Manufacturer	MITUTOYO
Serial No. & Certificate No.	08623675 & A201759
Traceability	NPL,UK

VERIFICATION METHOD: DIN 8077:2008-09

### VERIFICATION RESULTS

Dimension of	Actual Measured Value (mm)				Average	Tolerance
	Trail 1	Trail 2	Trail 3	Trail 4	( mm)	Limit (mm)
Outer Diameter	32.14	32.25	32.40	32.16	32.24	32 + 0.3
Wall Thickness	5.65	5.85	5.54	5.42	5.62	5.4 + 0.8

Uncertainty of Measurement=0.01 mm

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence approximately 95%

\*\*END OF CERTIFICATE\*

GCTS/CERT-164/Rev.00

# **CERTIFICATE OF CALIBRATION**

ISSUED BY GULF CALIBRATION & TECHNICAL SERVICES

Certificate Number : GCTS/20171315-02 Date of Issue: 30/11/2017



## GULF CALIBRATION & TECHNICAL SERVICES

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APPROVED SIGNATORY

**EUROTHERM PP-R PIPES & FITTINGS** Customer Name& Address

PO Box:1401.PC:211

SULTANATE OF OMAN

Date Received

November 29, 2017

Verification Date

November 30, 2017

Verified By

Kamal

## **DETAILS OF UNIT UNDER TEST**

Description	PPR Pipe
Manufacturer	EUROTHERM
Model No	PP-R50X8.4 MM
Sample No	02
Sample Provided by	EUROTHERM PP-R PIPES & FITTINGS
Nominal Size	50 mm

#### **ENVIRONMENTAL CONDITIONS DURING VERIFICATION**

Temperature & Humidity 21 ± 2 °C & 50 ± 15 % RH

### DETAILS OF REFERENCE EQUIPMENTS USED FOR VERIFICATION

Description	Digital Caliper
Manufacturer	MITUTOYO
Serial No. & Certificate No.	08623675 & A201759
Traceability	NPL,UK

VERIFICATION METHOD: DIN 8077:2008-09

#### VERIFICATION RESULTS

	Actual Measured Value (mm)				Average	Tolerance
Dimension of	Trail 1	Trail 2	Trail 3	Trail 4	( mm)	Limit (mm)
Outer Diameter	50.47	50.40	50.42	50.33	50.41	50 + 0.5
Wall Thickness	8.73	8.48	8.51	8.54	8.57	8.3 + 1.1

Uncertainty of Measurement=0.01 mm

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2

providing a level of confidence approximately 95%

\*\*END OF CERTIFICATE\*\*

GCTS/CERT-164/Rev.00