

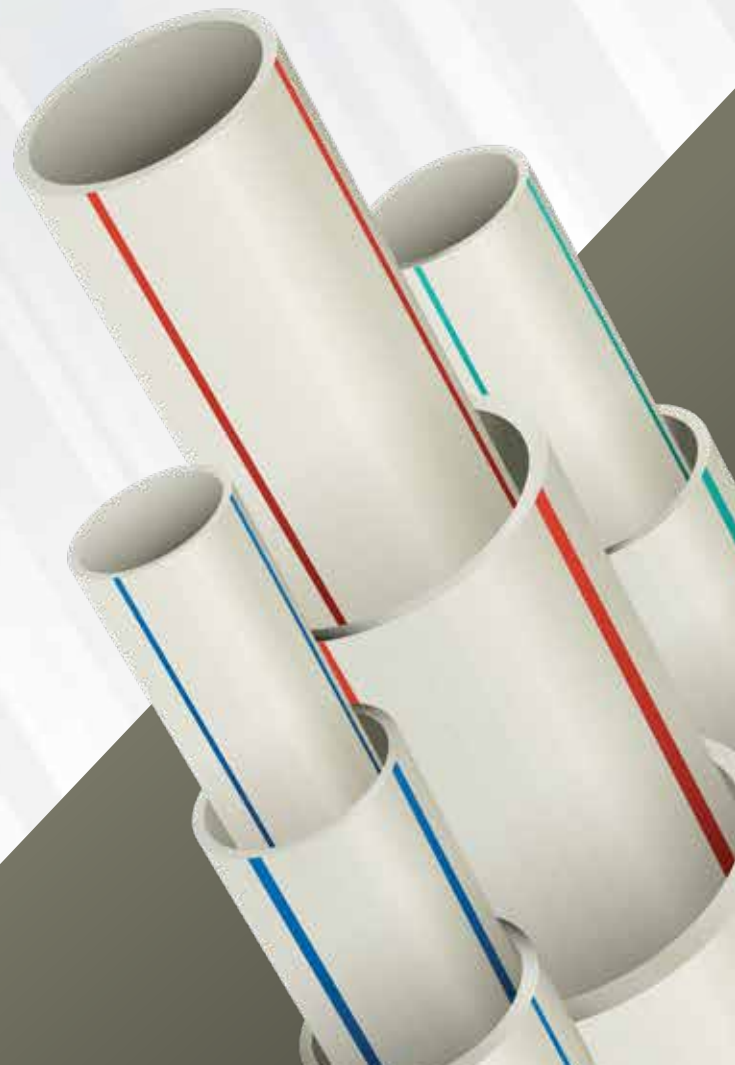
AZEETA®

Complete Thermoplastic Piping System

PP-R

Hot & Cold Water Plumbing System

MS 2286, ISO 15874, DIN 8077/8078



Your Complete Thermoplastic
Piping System Solution

Listed by

SPAN



Why Choose

AZEE7A®

We pride ourselves in taking part into the success stories of our customers since 1997, with our high-level services and attention to detail in assisting our customers. On top of that, our standard of service aims to exceed customer's expectation. We offer competitive prices, responsive and professional customer service, on time delivery and excellent product quality to all our customers to write the long lasting success stories together.



Established in 1997

Our long history of 25 years in the market has given us the advantage of having vast experience in manufacturing and serving the thermoplastic piping system customers.

Compliant with regulatory requirements

Our product are approved by SIRIM and SPAN to ensure compliance with regulatory body guidelines and standard.

Professional Technical Support

Our vast experience and understanding in every aspect of the product enables us to respond to all enquiry from chemical compatibility to general advice on product placement in the project.

Dedicated Sales and Marketing Team

There is no best time to contact our dedicated sales and marketing team, when there is a question, we will provide an answer!

Hands-On Training

Our systematic installation training covers from demonstration, hands-on training to supervising on site installation procedure to ensure post installation job quality always meet the expectations.

PP-R Hot & Cold Water Plumbing System

Polypropylene Random Copolymer (PP-R) is a proven material to be used in domestic pressure piping systems for hot and cold water. This is due to its ability to withstand high internal pressure which can prolong its service life even at elevated temperature.

Features

- Class 2 for hot water supply @ 70°C
- Designed to Last 50 years
- Non-Toxic - Tested to BS6920 / MS1583
- Noise Reduction
- No Corrosion
- No Scaling
- Minimal Maintenance
- Low Pressure Losses
- Low Thermal Conductivity
- Easy, Fast and Reliable Installation
- Save Space
- Long Service Life at Elevated Temperature up to 70°C

Manufacturing Standard

Azeeta PP-R Hot & Cold Water pipes and fittings are manufactured in accordance with the following standard:

Pipe MS 2286 / ISO 15874 / DIN 8077/8078 | **Fitting** MS 2286 / ISO 15874

Summary Pipe and Fitting Testing Requirement

*Appearance, color, dimension and marking comply to the above standard.

Characteristic	Sample Type	Standard Test Requirement		Test Method	Test Result
Hydrostatic Test at 95°C	Pipe	Period Hoop Stress	22 hours 4.3MPa	ISO 1167	No failure during test period
Longitudinal Reversion	Pipe	Test Temp Period	135°C en ≤ 8mm 8mm < en ≤ 16mm en > 16mm	Method B of ISO 2505 (oven test)	≤ 2%
Impact Resistance	Pipe	Test Temp No Test Piece	0°C 10	ISO 9854	≤ 10%
Resistance to internal pressure at 20°C	Fittings	Period Hoop Stress	1h 16MPa	ISO 1167	No failure during test period

Pipe Dimension Table

Nominal Size (mm)	Outer Diameter (mm)		PN14 @ 20°C Pd4 @ 70°C (SDR11, S5.0)		PN22 @ 20°C Pd6 @ 70°C (SDR7.4, S3.2)		PN28 @ 20°C Pd8 @ 70°C (SDR6, S2.5)	
			Wall Thickness (mm)		Wall Thickness (mm)		Wall Thickness (mm)	
	Min	Max	Min	Max	Min	Max	Min	Max
20	20.0	20.3	1.9	2.2	2.8	3.2	3.4	3.9
25	25.0	25.3	2.3	2.7	3.5	4.0	4.2	4.8
32	32.0	32.3	2.9	3.3	4.4	5.0	5.4	6.1
40	40.0	40.4	3.7	4.2	5.5	6.2	6.7	7.5
50	50.0	50.5	4.6	5.2	6.9	7.7	8.3	9.3
63	63.0	63.6	5.8	6.5	8.6	9.6	10.5	11.7
75	75.0	75.7	6.8	7.6	10.3	11.5	12.5	13.9
90	90.0	90.9	8.2	9.2	12.3	13.7	15.0	16.7
110	110.0	111.0	10.0	11.2	15.1	16.8	18.3	20.3
160	160.0	161.5	14.6	16.2	21.9	24.2	26.6	29.4

*Pipes intended to be joined together by fusion shall have minimum wall thickness of 2.0mm

Product List

PP-R Hot & Cold Water Fittings & Tools



SOCKET

Code	Size
12-ESP-020	20
12-ESP-025	25
12-ESP-032	32
12-ESP-040	40
12-ESP-050	50
12-ESP-063	63
12-ESP-075	75
12-ESP-090	90
12-ESP-110	110
12-ESP-160	160



EQUAL TEE

Code	Size
12-ETP-020	20
12-ETP-025	25
12-ETP-032	32
12-ETP-040	40
12-ETP-050	50
12-ETP-063	63
12-ETP-075	75
12-ETP-090	90
12-ETP-110	110
12-ETP-160	160



ELBOW 90°

Code	Size
12-EEP-020	20
12-EEP-025	25
12-EEP-032	32
12-EEP-040	40
12-EEP-050	50
12-EEP-063	63
12-EEP-075	75
12-EEP-090	90
12-EEP-110	110
12-EEP-160	160



ELBOW 45°

Code	Size
12-E45-020	20
12-E45-025	25
12-E45-032	32
12-E45-040	40
12-E45-050	50
12-E45-063	63
12-E45-075	75
12-E45-090	90
12-E45-110	110
12-E45-160	160



FEMALE THREADED ELBOW

Code	Size
12-FTE-20x1/2"	20-1/2"
12-FTE-20x3/4"	20-3/4"
12-FTE-25x1/2"	25-1/2"
12-FTE-25x3/4"	25-3/4"
12-FTE-32x3/4"	32-3/4"
12-FTE-32x1"	32-1"



MALE THREADED ELBOW

Code	Size
12-MTE-20x1/2"	20-1/2"
12-MTE-20x3/4"	20-3/4"
12-MTE-25x1/2"	25-1/2"
12-MTE-25x3/4"	25-3/4"
12-MTE-32x3/4"	32-3/4"
12-MTE-32x1"	32-1"



FEMALE THREADED ADAPTOR

Code	Size
12-FTA-20x1/2"	20-1/2"
12-FTA-20x3/4"	20-3/4"
12-FTA-25x1/2"	25-1/2"
12-FTA-25x3/4"	25-3/4"
12-FTA-32x3/4"	32-3/4"
12-FTA-32x1"	32-1"
12-FTA-40x1 1/4"	40-1 1/4"
12-FTA-50x1 1/2"	50-1 1/2"
12-FTA-63-2"	63-2"



MALE THREADED ADAPTOR

Code	Size
12-MTA-20x1/2"	20-1/2"
12-MTA-20x3/4"	20-3/4"
12-MTA-25x1/2"	25-1/2"
12-MTA-25x3/4"	25-3/4"
12-MTA-32x3/4"	32-3/4"
12-MTA-32x1"	32-1"
12-MTA-40x1 1/4"	40-1 1/4"
12-MTA-50x1 1/2"	50-1 1/2"
12-MTA-63-2"	63-2"



FEMALE THREADED TEE

Code	Size
12-FTT-20x1/2"	20-1/2"
12-FTT-25x1/2"	25-1/2"
12-FTT-25x3/4"	25-3/4"
12-FTT-32x3/4"	32-3/4"
12-FTT-32x1"	32-1"



MALE THREADED TEE

Code	Size
12-MTT-20x1/2"	20-1/2"
12-MTT-25x1/2"	25-1/2"
12-MTT-25x3/4"	25-3/4"
12-MTT-32x3/4"	32-3/4"
12-MTT-32x1"	32-1"



MALE THREADED UNION

Code	Size
12-MTU-20x1/2"	20-1/2"
12-MTU-25x3/4"	25-3/4"
12-MTU-32x1"	32-1"
12-MTU-40x1 1/4"	40-1 1/4"
12-MTU-50x1 1/2"	50-1 1/2"
12-MTU-63-2"	63-2"



UNION SOCKET

Code	Size
12-UNS-020	20
12-UNS-025	25
12-UNS-032	32

**REDUCING TEE**

Code	Size
12-RTP-025020	25x20
12-RTP-032020	32x20
12-RTP-032025	32x25
12-RTP-040020	40x20
12-RTP-040025	40x25
12-RTP-040032	40x32
12-RTP-050020	50x20
12-RTP-050025	50x25
12-RTP-050032	50x32
12-RTP-050040	50x40
12-RTP-063025	63x25
12-RTP-063032	63x32
12-RTP-063040	63x40
12-RTP-063050	63x50
12-RTP-075025	75x25
12-RTP-075032	75x32
12-RTP-075040	75x40
12-RTP-075050	75x50
12-RTP-075063	75x63
12-RTP-090032	90x32
12-RTP-090040	90x40
12-RTP-090050	90x50
12-RTP-090063	90x63
12-RTP-090075	90x75
12-RTP-110050	110x50
12-RTP-110063	110x63
12-RTP-110075	110x75
12-RTP-110090	110x90

**REDUCING SOCKET**

Code	Size
12-RSP-025020	25x20
12-RSP-032020	32x20
12-RSP-032025	32x25
12-RSP-040020	40x20
12-RSP-040025	40x25
12-RSP-040032	40x32
12-RSP-050020	50x20
12-RSP-050025	50x25
12-RSP-050032	50x32
12-RSP-050040	50x40
12-RSP-063020	63x20
12-RSP-063025	63x25
12-RSP-063032	63x32
12-RSP-063040	63x40
12-RSP-063050	63x50
12-RSP-075032	75x32
12-RSP-075040	75x40
12-RSP-075050	75x50
12-RSP-075063	75x63
12-RSP-090050	90x50
12-RSP-090063	90x63
12-RSP-090075	90x75
12-RSP-110050	110x50
12-RSP-110063	110x63
12-RSP-110075	110x75
12-RSP-110090	110x90
12-RSP-160110	160x110

**REDUCING BUSH**

Code	Size
12-RBP-025020	25x20
12-RBP-032020	32x20
12-RBP-032025	32x25
12-RBP-040020	40x20
12-RBP-040025	40x25
12-RBP-040032	40x32
12-RBP-050020	50x20
12-RBP-050025	50x25
12-RBP-050032	50x32
12-RBP-050040	50x40
12-RBP-063020	63x20
12-RBP-063032	63x32
12-RBP-063040	63x40
12-RBP-063050	63x50

**END CAP**

Code	Size
12-ECP-020	20
12-ECP-025	25
12-ECP-032	32
12-ECP-040	40
12-ECP-050	50
12-ECP-063	63
12-ECP-075	75
12-ECP-090	90
12-ECP-110	110
12-ECP-160	160

**WELDING REPAIR SOCKET TOOL**

Code	Size
12-WPS-007	7mm
12-WPS-011	11mm

**STUB END FLANGE**

Code	Size
12-SEF-040	40
12-SEF-050	50
12-SEF-063	63
12-SEF-075	75
12-SEF-090	90
12-SEF-110	110

**WELD IN SADDLE**

Code	Size
12-WIS-063032	63-32
12-WIS-075032	75-32
12-WIS-090032	90-32

**BENDING PIPE (FOR HOT WATER)**

Code	Size
12-BPH-020	20
12-BPH-025	25
12-BPH-032	32

**BENDING PIPE (FOR COLD WATER)**

Code	Size
12-BPC-020	20
12-BPC-025	25
12-BPC-032	32

**PPR FULL FACE FLANGE**

Code	Size
12-FFD-110	110
12-FFD-160	160

**ELECTROFUSION SOCKET**

Code	Size
12-EFS-110	110
12-EFS-160	160

**PIPE CLAMP**

Code	Size
12-PPC-110160	110-160

STOP VALVE

Code	Size
12-STV-020	OD20
12-STV-025	OD25
12-STV-032	OD32
12-STV-040	OD40
12-STV-050	OD50
12-STV-063	OD63

LONG STEM STOP VALVE WITH METAL HANDLE

Code	Size
12-LSV-020	OD20
12-LSV-025	OD25
12-LSV-032	OD32

CONCEALED VALVE

Code	Size
12-LCV-020	OD20
12-LCV-025	OD25
12-LCV-032	OD32

**MANUAL PEELING TOOLS**

Code	Size
12-MTS-020025	20-25
12-MTS-032040	32-40

**ELECTROFUSION WELDING MACHINE**

Code	Size
12-EFM-110160	110-160

**PPR PIPE SCRAPER**

Code	Size
12-PPS-110160	110-1160

**ASSISTANT TOOLS FOR SOCKET FUSION**

Code	Size
12-ATS-090160	90-160

**SOCKET FUSION WELDING MACHINE**

Code	Size
12-MAC-020063	20-63
12-MAC-075110	75-110
12-MAC-160	160

**PIPE CLAMP**

Code	Size
12-PPC-110160	110-160

Installation Procedures



1

Cut

Cut pipe square and chamfer the inside and outside of the pipe.



2

Cleaning the pipe and fitting

Clean the inner surface of the fitting and the outer surface of the pipe. Both surfaces should be free from any dirt, grease or cracks as the presence of any of these can affect the quality of weld.



3

Marking and machine

Mark the required insertion depth. Select the right heating bush and ensure the heating bush has achieved the required fusion temperature.



4

Heating the pipe and fitting

Push the pipe and fitting into the heating bush. After the pipe and fitting have reached the required heating time, remove the pipe and fitting immediately.



5

Fusion and joint inspection

Fuse the pipe & fitting by pushing them together until the pipe reached the insert depth. DO NOT TWIST THE JOIN WHILE FUSING. Hold the joint until the fusion time lapse. Do not move or disturb the joint until it has fully cool down. Visually inspect the joint to ensure that continuous fusion seam is formed around the pipe circumference.

Processing Parameters

Pipe Size (mm)	Welding Depth (mm)	Heating Time (s)	Fusion Time (s)	Cooling Time (m)
20	11.0	6	4	2
25	12.5	7	4	3
32	14.5	8	6	4
40	19.0	12	6	4
50	20.0	18	6	5
63	24.0	25	8	6
75	26.0	30	8	8
90	29.0	40	10	8
110	32.5	50	10	8
160	50.0	120	16	15

Heating Temperature 260°C

Product Warranty

Azeeta Pipe System Sdn Bhd warrants its products to be free of defects in workmanship and under normal use, service and when used for the purpose under the conditions for which they are intended.

This warranty shall not apply to any Azeeta Pipe System products that has been altered, repaired or used in any way, stored outside or has been subjected to misuse, negligence, accidental or has not been installed in accordance with installation instructions.

The obligation of Azeeta Pipe System Sdn Bhd under this warranty shall be limited to the replacement of any part that may be prove defective under normal use.

Installation instructions must be adhered to or our product warranty is null and void. Installation of socket fusion fittings must be performed by trained and qualified technician.

Azeeta Pipe System Sdn Bhd has the right to inspect the said material and purchaser shall, if requested, return defective product to Azeeta Pipe System Sdn Bhd. Purchaser shall assume all responsibility and expenses for removal, reinstallation and freight charges in connection with above matter.

Azeeta Pipe System Sdn Bhd shall not to be liable for directly, special, incidental or consequential damage or penalties and does not assume any liability of purchase to others or to anyone for injury to persons and/or property.

Any claims regarding shortage or damages from the product's delivery must be submitted in writing to our company within 7 working days after receipt of products. Buyer shall note losses or damages or discrepancy on delivery order and provide a delivery receipt starting such with driver's signature.

All purchases are responsible for passing on this limited warranty to their respective customers.

AZEETA®

Complete Thermoplastic Piping System

Azeeta Pipe System Sdn Bhd (455260-W)

Sales Office:

No. 9, Jalan Anggerik Mokara 31/59, Kota Kemuning,
40460 Shah Alam, Selangor Darul Ehsan.

Tel: (+603) 5121 8987 (Hunting Line), 5121 8845, 5121 7846

Fax: (+603) 5121 8978

Factory:

Lot 12694, Jalan TJ 2/3, Tuanku Ja'afar Industrial Park,
Sungai Gadut, 71450 Seremban, Negeri Sembilan.



www.azeetapipe.com