

**PPR-80 PIPE SYSTEM** 





- Residential Building
- Hospitality Building
- Commercial Building
- Marine and Industrial Building
- Agriculture



Established in 2019, Chew Pipe and Fitting has been committed to developing high quality piping product that cover plumbing, engineering and mechanical for Domestic, Industrial as well as Marine sector. At present, our main product consist of:

- 1. Carbon Steel Pipe, Fitting and Flange
- 2. Stainless Steel Pipe, Fitting and Flange
- 3. PVC-U Pipe, Fitting and Flange
- 4. PPR Pipe, Fitting and Flange
- 5. Marine and Industrial Valves



To meet with our customer demand, we strive to upgrade our product range to provide more professional systematic solution to our customers.



## POLYPROPYLENE RANDOM COPOLYMER (PPR)

CHEW pipes and fittings are produced from Polypropylene Random Copolymer as raw material having good flexibility, high molecular weight and low melt flow rate.

This raw material is recommended for the production of pressure pipes including hot and cold water transfer lines, floor heating, potable water transfer lines and also for chemical industry application. Good long term pressure resistance and easy processing and installation technique give cold and hot water systems made of PP-R pipes an advantage as an alternative to the traditional systems.

#### Polypropylene Random Copolymer Type 3 corresponds to German DIN standards.

- 1. DIN 8077 Dec. 1997 PP Pipe Dimensions
- 2. DIN 8078 April 1996 PP pipes General Quality Requirements and Testing.

We have well equipped in house testing facility for the control of quality by:

- 1. Testing of incoming Raw material & additional
- 2. Inspection and testing during production as per standards
- 3. Final inspection and dispatch
- 4. Periodical calibration of testing equipment

### **COMPARISON CHART**

PROPERTIES	PP-R	GI	COPPER	HDPE
SERVICE LIFE	50 YEARS +	10 YEARS	10-20 YEARS	20-30 YEARS
TEMPERATURE RESISTANCE	VERY GOOD	EXCELLENT	EXCELLENT	GOOD
FOOD GRADE	EXCELLENT	NOT RECCOMENDED	NOT RECCOMENDED	AVERAGE
HEAT LOSS	NEGLIGIBLE	VERY HIGH	VERY HIGH	AVERAGE
CHEMICAL RESISTANCE	EXCELLENT	NOT RECCOMENDED	NOT RECCOMENDED	AVERAGE
MAX WORKING TEMP	90DEG C	ABOVE 100DEG C	ABOVE 100DEG C	80DEG C
MAINTENANCE	EASY	HIGH IN COST	HIGH IN COST	EASY
CORROSION/ABRASION RESISTANCE	EXCELLENT	LOW	LOW	AVERAGE
JOINTING METHOD	HEAT FUSHION	WELDING	BRAZING	COMPRESSION/ BUTT WELD





SPECIALIST FOR DOMESTIC WATER SUPPLY SYSTEM

Today the buildings are getting complex, making the (drinking) water systems ever more complex. From multi story buildings, offices to single occupant hous-es, specialist water supply is more than a pipe system. To make today's complex installations demands a combination of cost-effective pipe design, applied technology and dedicated training.

Chew PPR Pipe System offers you the reassurance of providing the right solu-tion to tackle even the most complex challenges and realise the outcome you want - without being a burden to the services or limited by the cost of high per-formance components. For confidence, not compromise





CHEW premium PP-R pipe system introduces advanced technology and technology at home and abroad, uses high-quality polypropylene pipe special materials, and is produced in strict accordance with GB/T18742-2002 standards. The products have passed ISO9001/2000 international quality system certification and ISO14001/2004 international environmental management system certification.

### **QUALITY SYSTEM**

CHEW premium PP-R pipe system provides the maxi-mum quality installed while ensure that:

- 1. Hygienic reliable drinking water
- 2. Long term system use
- 3. Water and energy saving



Chew PPR Pipe Systems ensure absolute safety features at the joints and best polypropylene raw material chosen to prevent any degradation. Professional design of every detail of pipe fittings makes every "joint" of the piping system safe, firm and reliable, and effectively solves the hidden dangers of home im-provement water pipes that are easy to leak and burst.

PROPERTIES	TYPICAL VALUES	UNIT	METHOD
DENSITY	905	kg/m3	ISO 1133
MELT FLOW RATE (190°C/5 kg)	≤ 0.8	g/10 min.	ISO 1133
FLEXULAR MODULUS (2 mm/min)	800	Мра	ISO 178
TENSILE STRESS AT YIELD (50 mm/min)	25	Мра	ISO 527
ELONGATION	> 400	%	ASTM D638





PP-R For more than 30 years, Polypropylene Random Copolymer (PP-R) has been applied successfully for hot and cold water applications in countries worldwide. The combination of properties such as resistance to internal pressure, flexibility and impact have made PP-R the material of choice for a safe and reliable long-lasting installations. No wonder that PP-R has been continuously replacing traditional materials like copper and galvanized steel over the last decades

### BENEFITS OF PP-R

- No contact corrosion when exposed to iron particles
- Taste and odor neutral
- Bacteriologically neutral
- Fast and easy installation
- Entire plastic systems available
- Good chemical resistance
- Low tendency to incrustations
- Environmental protection and recycling





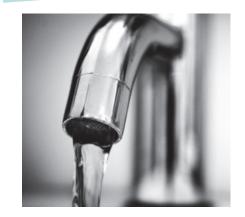
## APPLICATION FIELDS OF PP-R

- 1. The cold and hot water system of the building;
- 2. The heating system in the building;
- 3. Pure water supply system for drinking directly;
- 4. Central (centralized) air conditioning system;
- 5. Agriculture and Horticulture System

Domestic Sanitary



**Drinking Water** 



**Hot & Cold Water** 





## EASY FUSION METHOD



Socket fusion method which Pipe and Fitting are heated before pushed together and be-come joined in an separable manner. The result is a permanent homogeneous joint that requires no seal or solvent and gives great pressure resistance.

### WELDING PARAMETERS

Pipe Diameter (mm)	Insertion Depth (mm)	Heating Time (sec)	Jointing Time (sec)	Cooling Time (sec)
20	14	5	4	120
25	16	6	4	180
32	18	8	6	240
40	20	12	6	240
50	23	18	6	300
63	26	25	8	360
75	28	30	8	480
90	31	40	10	480
110	33	50	10	480



# CHEW PPR PRODUCT RANGE

### **PIPES**



PIPE PN16			
PN1601	D20 X 2.3MM		
PN1602	D25 X 2.8MM		
PN1603	D32 X 3.6MM		
PN1604	D40 X 4.5MM		
PN1605	D50 X 5.6MM		
PN1606	D63 X 7.1MM		
PN1607	D75 X 8.4MM		
PN1608	D90 X 10.1MM		
PN1609	D110 X 12.3MM		

PIPE PN20			
PN2001	D20 X 2.8MM		
PN2002	D25 X 3.5MM		
PN2003	D32 X 4.4MM		
PN2004	D40 X 5.5MM		
PN2005	D50 X 6.9MM		
PN2006	D63 X 8.7MM		
PN2007	D75 X 10.1MM		
PN2008	D90 X 12.3MM		
PN2009	D110 X 15.1MM		

	PIPE PN25
PN2501	D20 X 3.4MM
PN2502	D25 X 4.2MM
PN2503	D32 X 5.4MM
PN2504	D40 X 6.7MM
PN2505	D50 X 8.4MM
PN2506	D63 X 10.5MM
PN2507	D75 X 12.5MM

### **PLAIN FITTINGS**



<b>PLAIN SOCKET</b>				
S2001	D20			
S2501	D25			
S3201	D32			
S4001	D40			
S5001	D50			
S6301	D63			



90DEG ELBOW				
L2001	D20			
L2501	D25			
L3201	D32			
L4001	D40			
L5001	D50			
L6301	D63			



EQUAL TEE				
T2001	L D20			
T2501	L D25			
T3201	L D32			
T4001	D40			
T5001	L D50			
T6301	D63			



REDU	CING SOCKET
S2520	D25 X D20
S3220	D32 X D20
S3225	D32 X D25
S4020	D40 X D20
S4025	D40 X D25
S4032	D40 X D32
S5020	D50 X D20
S5025	D50 X D25
S5032	D50 X D32
\$5040	D50 X D40
S6320	D63 X D20
S6325	D63 X D25
S6332	D63 X D32
S6340	D63 X D40
S6350	D63 X D50



<b>45DEG ELBOW</b>				
L2045	D20			
L2545	D25			
L3245	D32			
L4045	D40			
L5045	D50			
L6345	D63			

**FLANGE SLEEVE AND STUB** 

4002 D40 5002 D50 6302 D63 7502 D75 9002 D90 1102 D110 1602 D160



<b>REDUCING TEE</b>				
T2520	D25 X D20			
T3220	D32 X D20			
T3225	D32 X D25			
T4020	D40 X D20			
T4025	D40 X D25			
T4032	D40 X D32			
T5020	D50 X D20			
T5025	D50 X D25			
T5032	D50 X D32			
T5040	D50 X D40			
T6320	D63 X D20			
T6325	D63 X D25			
T6332	D63 X D32			
T6340	D63 X D40			
T6350	D63 X D50			



<b>UNION SOCKET</b>		
2006	D20	
2506	D25	
3206	D32	
4006	D40	
5006	D50	
6306	D63	



END CAP		
D2001	D20	
D2501	D25	
D3201	D32	
D4001	D40	
D5001	D50	
D6301	D63	
D2501 D3201 D4001 D5001	D25 D32 D40 D50	



(	CROSS TEE	
CT2001	D20	
CT2501	D25	
CT3201	D32	
CT4001	D40	
CT5001	D50	
CT6301	D63	



<b>BRIDGE ELBOW</b>		
2001	D20	
2501	D25	
3201	D32	
3201	D32	



HEX PLUG		
4001	1/2"	
6001	3/4"	
1001	1"	



# CHEW PPR PRODUCT RANGE

### **TRANSITION FITTINGS**



MALE 1	HREAD ADAPTOR
S2012M	D20 X 1/2" MPT
S2512M	D25 X 1/2" MPT
S2534M	D25 X 3/4" MPT
S3212M	D32 X 1/2" MPT
S3234M	D32 X 3/4" MPT
S3210M	D32 X 1" MPT
S4014M	D40 X 1-1/4" MPT
S5012M	D50 X 1-1/2" MPT
S6320M	D63 X 2" MPT



FEIVIALE	I HREAD ADAPTOR
S2012F	D20 X 1/2" FPT
S2512F	D25 X 1/2" FPT
S2534F	D25 X 3/4" FPT
S3212F	D32 X 1/2" FPT
S3234F	D32 X 3/4" FPT
S3210F	D32 X 1" FPT
S4014F	D40 X 1-1/4" FPT
S5012F	D50 X 1-1/2" FPT
S6320F	D63 X 2" FPT



MALE	ADAPTOR UNION
2012M	D20 X 1/2" MPT
2534M	D25 X 3/4" MPT
3210M	D32 X 1" MPT
4014M	D40 X 1-1/4" MPT
5012M	D50 X 1-1/2" MPT
6320M	D63 X 2" MPT



FEMIALE THREAD ELBOW	
L2012F	D20 X 1/2" FPT
L2512F	D25 X 1/2" FPT
L2534F	D25 X 3/4" FPT
L3212F	D32 X 1/2" FPT
L3234F	D32 X 3/4" FPT
L3210F	D32 X 1" FPT



	VIALE	I HREAD ELI	BOW
L201	.2M	D20 X 1/2"	MPT
L251	.2M	D25 X 1/2"	MPT
L253	4M	D25 X 3/4"	MPT
L321	.2M	D32 X 1/2"	MPT
L323	4M	D32 X 3/4"	MPT
L321	.0M	D32 X 1" M	IPT



BRACKET FEMALE ELBOV		
ZL2012	D20 X 1/2" FPT	
ZL2512	D25 X 1/2" FPT	



	MALE	DAPTOR UNION
2	2012F	D20 X 1/2" FPT
	2534F	D25 X 3/4" FPT
3	3210F	D32 X 1" FPT
4	4014F	D40 X 1-1/4" FPT
	5012F	D50 X 1-1/2" FPT
(	5320F	D63 X 2" FPT



	MALE THREAD TEE		
	T2012M	D20 X 1/2" MPT	
	T2512M	D25 X 1/2" MPT	
١	T2534M	D25 X 3/4" MPT	
Į	T3212M	D32 X 1/2" MPT	
	T3234M	D32 X 3/4" MPT	
	T3210M	D32 X 1" MPT	



	FEM	ALE THREAD TEE
	T2012F	D20 X 1/2" FPT
	T2512F	D25 X 1/2" FPT
	T2534F	D25 X 3/4" FPT
	T3212F	D32 X 1/2" FPT
	T3234F	D32 X 3/4" FPT
	T3210F	D32 X 1" FPT



	LINKED ELBOW
T2012F	D20 X 1/2" FPT
T2512F	D25 X 1/2" FPT



L	NKED SOCKET
T2012F	D20 X 1/2" FPT
T2512F	D25 X 1/2" FPT



	LINKED TEE
T2012F	D20 X 1/2" FPT
T2512F	D25 X 1/2" FPT

### **VALVES**



STOP VALVE			
J2003	D20		
J2503	D25		
J3203	D32		
J4003	D40		
J5003	D50		
J6303	D63		



UNION BALL VALVE			
2005	D20		
2505	D25		
3205	D32		
4005	D40		
5005	D50		
6305	D63		



	BALL VALVE	
2012	D20	
2512	D25	
3212	D32	
4012	D40	
5012	D50	
6312	D63	

### **WELDING MACHINE**





B001 D20 - D63



PPR WELDING MACHINE

C001 D63 - D110



