





borougenajd PP-R

# **ABOUT US**

Borouge Najd is a leading Saudi Arabian plastic pipe manufacturer since our establishment in 2020 we have constantly evolved to meet the requirements of our most demanding customers. Our aim is to provide sophisticated and diverse pipe solutions for hot and cold water applications, telecommunication networks, sewage and drainage systems together with water and gas infrastructure.

We are a certified to ISO Quality Management Systems organization and all our products comply with the appropriate World International (ISO) Standards.

Our products are tested extensively in our state-of-the-art laboratory, to ensure that the quality and performance are continuously maintained.

Our success is the result of the company's persistent commitment to continuous innovation and investment in technology, in the relentless pursuit of providing quality products and services. Today, we are pleased to offer a wide range of plastic products, divided into four categories:

WE DESIGN, DEVELOP, MANUFACTURE
AND PROVIDE INNOVATIVE PIPE
SOLUTIONS THAT BEST MEET THE
NEEDS OF OUR CUSTOMERS

# CHARACTERISTICS OF PP-R SYSTEMS

#### Installation

#### Inside and outside buildings

#### Area of applications

- Potable Hot and Cold water supply
- Chilled water systems
- District cooling and heating
- Compressed air systems
- Rainwater and agriculture systems
- Industrial applications
- Outdoor water transport systems

#### Colors

#### RAL 6017

#### Pipe Technologies

1-layer technology (PP-R)

3-layers technology

- Outer layer: PP-R with improved impact resistant and reliable welding.
- Middle layer: Glass fiber reinforced PP-R/GF layer for improved mechanical strength and dimensional stability.
- Inner layer: PP-R with improved long-term pressuretemperature resistance and high flow rates.

Co-extrusion technology

 Co-extruded UV resistant PP-R layer for protection against UV rays in outdoor applications

#### Welding Technologies

- Socket welding with hand-held welding device
- Socket welding with bench welding machine
- Welding saddle
- Electrical socket welding
- Repair plugs

#### Optional

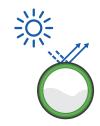
UV resistant



# ADVANTAGES OF PP-R SYSTEMS







High strength and improved dimensional stability due to 3-layer technology

High temperature and pressure resistance up to +70°C

UV resistance due to co-extrusion almona technology of UV resistant layer







Fast and easy installation due to advanced welding technologies

Low temperatures (above 0°C) operation and installation

Leak free due to advanced welding technologies



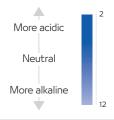




Resistant to building settlement and earthquakes due to high pipe flexibility

Noise reduction without insulation due to 3-layer almona technology

Maintenance free 50 years lifetime







Chemical resistance ranging from pH2 to pH12

Corrosion free system

100% recyclable and sustainable systems

# **PRODUCT RANGE**

## **Pipes**

Borougenajd manufactures PP-R pipes range in size from 20mm to 160 mm.

Additional pipe dimensions for single layer (up to 630mm) can be produced on request.

#### borougenajd pipe PP-R - PN20, SDR6

Structure of pipe: Single layer PP-R

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11



	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	(3,,
10302	20	13,2	3,4	5,8	35	0,172
10304	25	16,6	4,2	5,8	25	0,266
10306	32	21,2	5,4	5,8	15	0,434
10308	40	26,6	6,7	5,8	10	0,671
10310	50	33,2	8,4	5,8	7	1,04
10355	63	42	10,5	4	4	1,65
10356	75	50	12,5	4	1	2,36
10357	90	60	15	4	1	3,36
10358	110	73,2	18,4	4	1	5,01
10359	125	83,2	20,9	4	1	6,25

#### borougenajd pipe PP-R (UV) - PN20, SDR6

Structure of pipe: Single layer PP-R

Special feature: UV resistant

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11



	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	( 3, )
10302/UV	20	13,2	3,4	5,8	35	0,172
10304/UV	25	16,6	4,2	5,8	25	0,266
10306/UV	32	21,2	5,4	5,8	15	0,434
10308/UV	40	26,6	6,7	5,8	10	0,671
10310/UV	50	33,2	8,4	5,8	7	1,04
10355/UV	63	42	10,5	4	4	1,65
10356/UV	75	50	12,5	4	1	2,36
10357/UV	90	60	15	4	1	3,36
10358/UV	110	73,2	18,4	4	1	5,01
10359/UV	125	83,2	20,9	4	1	6,25

#### borougenajd pipe PP-R/GF/PP-R - PN25, SDR6

Structure of pipe: Multilayer, with fiberglass reinforced middle layer Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11, ISO 21003



	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	(3, )
10332	20	13,2	3,4	5,8	35	0,166
10334	25	16,6	4,2	5,8	25	0,257
10336	32	21,2	5,4	5,8	15	0,423
10338	40	26,6	6,7	5,8	10	0,657
10340	50	33,2	8,4	5,8	7	1,029
10342	63	42	10,5	4	4	1,624
10344	75	50	12,5	4	1	2,301
10346	90	60	15	4	1	3,488
10348	110	73,2	18,4	4	1	4,943
10350	125	83,2	20,9	4	1	6,385

#### borougenajd pipe PP-R/GF/PP-R (UV) - PN25, SDR6

Structure of pipe: Multilayer, with fiberglass reinforced middle layer

Special feature: UV resistant

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11,

ISO 21003



	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	( 3,  )
10332/UV	20	13,2	3,4	5,8	35	0,166
10334/UV	25	16,6	4,2	5,8	25	0,257
10336/UV	32	21,2	5,4	5,8	15	0,423
10338/UV	40	26,6	6,7	5,8	10	0,657
10340/UV	50	33,2	8,4	5,8	7	1,029
10342/UV	63	42	10,5	4	4	1,624
10344/UV	75	50	12,5	4	1	2,301
10346/UV	90	60	15	4	1	3,488
10348/UV	110	73,2	18,4	4	1	4,943
10350/UV	125	83,2	20,9	4	1	6,385

#### borougenajd pipe PP-R - PN16, SDR7.4

Structure of pipe: Single layer PP-R

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11



		Pi	ре			
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	(3, )
10101	20	14,4	2,8	5,8	35	0,138
10103	25	18	3,5	5,8	25	0,215
10105	32	23,2	4,4	5,8	15	0,347
10107	40	29	5,5	5,8	10	0,542
10109	50	36,2	6,9	5,8	7	1,849
10111	63	45,8	8,6	4	4	1,336
10113	75	54,8	10,3	4	1	1,903
10115	90	65,8	12,3	4	1	2,729
10117	110	79,8	15,1	4	1	4,092
10119	125	90,8	17,1	4	1	5,269
10121	160	116,2	21,9	4	1	8,637

#### borougenajd pipe PP-R (UV) - PN16, SDR7.4

Structure of pipe: Single layer PP-R

Special feature: UV resistant

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11



	Pipe					
Part No.		Dimension	(mm)	Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	J	( 3, )
10101/UV	20	14,4	2,8	5,8	35	0,138
10103/UV	25	18	3,5	5,8	25	0,215
10105/UV	32	23,2	4,4	5,8	15	0,347
10107/UV	40	29	5,5	5,8	10	0,542
10109/UV	50	36,2	6,9	5,8	7	0,849
10111/UV	63	45,8	8,6	4	4	1,336
10113/UV	75	54,4	10,3	4	1	2,903
10115/UV	90	65,4	12,3	4	1	2,729
10117/UV	110	79,8	15,1	4	1	4,092
10119/UV	125	90,8	17,1	4	1	5,269
10121/UV	160	116,2	21,9	4	1	8,637

## borougenajd pipe PP-R/GF/PP-R - PN20, SDR7.4

Structure of pipe: Multilayer, with fiberglass reinforced middle layer Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11, ISO 21003



	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	3	(3)
10102	20	14,4	2,8	5,8	35	0,142
10104	25	18	3,5	5,8	25	0,222
10106	32	23,2	4,4	5,8	15	0,358
10108	40	29	5,5	5,8	10	0,559
10110	50	36,2	6,9	5,8	7	0,876
10112	63	45,8	8,6	4	4	1,378
10114	75	54,4	10,3	4	1	1,963
10116	90	65,4	12,3	4	1	2,815
10118	110	79,8	15,1	4	1	4,221
10120	125	90,8	17,1	4	1	5,435
10122	160	116,2	21,9	4	1	8,909

## borougenajd pipe PP-R/GF/PP-R (UV) - PN20, SDR7.4

**Structure of pipe:** Multilayer, with fiberglass reinforced middle layer **Special feature:** UV resistant

Standard: DIN 8077/78, EN ISO SASO 15874, ASTM F 2389, CSA B 137.11,

ISO 21003

## PP-R/GF/PP-R (UV)

	Pipe					
Part No.	Dimension (mm)			Length	Packing/ Bag	Weight (kg/m)
	O.D.	I.D.	Т	(m)	J	( 3,  )
10102/UV	20	14,4	2,8	5,8	35	0,142
10104/UV	25	18	3,5	5,8	25	0,222
10106/UV	32	23,2	4,4	5,8	15	0,358
10108/UV	40	29	5,5	5,8	10	0,559
10110/UV	50	36,2	6,9	5,8	7	0,876
10112/UV	63	45,8	8,6	4	4	1,378
10114/UV	75	54,4	10,3	4	1	1,963
10116/UV	90	65,4	12,3	4	1	2,815
10118/UV	110	79,8	15,1	4	1	4,221
10120/UV	125	90,8	17,1	4	1	5,435
10122/UV	160	116,2	21,9	4	1	8,909



## Fittings

Borougenajd manufactures a variety of PP-R fittings, reducers and accessories, presented below:

## borougenajd coupling, PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
10402	20	50	9
10404	25	30	15
10406	32	25	27
10408	40	10	49
10410	50	6	84
10412	63	6	154
10414	75	3	254
10416	90	2	418
10418	110	1	581

## borougenajd Saddle, PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
10420	40-25	10	17
10422	50-25	6	19
10424	63-25	6	19
10426	63-32	6	28
10428	75-25	3	19
10430	75-32	3	28
10432	90-25	2	20
10434	90-32	2	28
10436	110-25	1	20
10438	110-32	1	30

## borougenajd reducer PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
10504	25-20	50	11
10506	32-20	40	15
10508	32-25	30	17
10511	40-25	20	32
10512	40-32	15	35
10514	50-32	10	52
10520	50-40	10	62
10522	63-25	5	109
10524	63-32	8	102
10526	63-40	8	89
10528	63-50	5	93
10530	75-50	6	147
10532	75-63	4	163
10534	90-63	2	256
10535	90-75	2	252
10536	110-75	1	516
10537	110-90	1	520

## borougenajd elbow 90oPN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
10602	20	50	14
10604	25	30	25
10606	32	15	47
10608	40	8	86
10610	50	6	158
10612	63	2	295
10614	75	2	501
10616	90	1	811
10618	110	1	1292

## borougenajd elbow 45oPN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
10624	20	50	12
10626	25	25	19
10628	32	15	32
10630	40	10	72
10632	50	6	133
10634	63	4	245
10636	75	2	387
10638	90	1	659
10640	110	1	1025

## borougenajd tee PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
10702	20	25	18
10704	25	20	20
10706	32	10	58
10708	40	6	104
10710	50	4	198
10712	63	2	357
10714	75	1	582
10716	90	1	981
10718	110	1	1598





## borougenajd almona Tee reducer PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
10730	20-25-20	20	39
10732	25-20-25	20	36
10734	20-32-20	10	72
10736	25-32-25	10	63
10738	32-20-32	10	57
10740	32-25-32	10	55
10742	40-20-40	6	125
10744	40-25-40	6	125
10746	40-32-40	6	115
10750	50-32-50	4	231
10752	50-40-50	4	222
10753	63-40-63	2	419
10754	63-50-63	2	418

## borougenajd end cap PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
10802	20	100	5
10804	25	50	10
10806	32	30	16
10808	40	20	25
10810	50	15	46
10812	63	10	101
10814	75	4	168
10816	90	2	296
10818	110	1	440

## borougenajd adaptor female PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11202	20 (1/2")	25	57
11204	20 (3/4")	25	79
11206	25 (3/4")	20	81
11208	25 (1/2")	20	59
11209	32 (3/4")	10	93
11210	32 (1")	10	190

#### borougenajd adaptor female (hexagon) PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11211	32 (1")	10	227
11212	40 (1,1/4")	5	227
11214	50 (1,1/2")	4	413
11216	63 (2")	3	567
11218	75 (2,1/2")	2	890
11220	90 (3")	1	1185
11222	110 (4")	1	1510

## borougenajd adaptor male PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11402	20 (1/2")	25	64
11404	20 (3/4")	20	94
11406	25 (3/4")	15	99
11408	25 (1/2")	15	65
11409	32 (3/4")	10	108
11410	32 (1")	10	200

## borougenajd adaptor male (hexagon) PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11411	32 (1")	10	245
11412	40 (1,1/4")	4	300
11414	50 (1,1/4")	4	455
11416	63 (2")	2	654
11418	75 (2,1/2")	1	1013
11420	90 (3")	1	1508
11422	110 (4")	1	2730

## borougenajd saddle adaptor female PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11230	40 (1/2")	4	88
11232	50 (1/2")	4	90
11234	63 (1/2")	2	95
11236	63 (3/4")	2	109
11238	75 (1/2")	1	100
11240	75 (3/4")	1	109
11242	90 (1/2")	1	90
11244	90 (3/4")	1	110
11246	110 (1/2")	1	95
11248	110 (3/4")	1	110







## borougenajd saddle adaptor male PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11430	40 (1/2")	4	88
11432	50 (1/2")	4	90
11434	63 (1/2")	2	95
11436	63 (3/4")	2	109
11438	75 (1/2")	1	100
11440	75 (3/4")	1	109
11442	90 (1/2")	1	90
11444	90 (3/4")	1	110
11446	110 (1/2")	1	95
11448	110 (3/4")	1	110

## borougenajd union female PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11302	20 (1/2")	20	123
11304	25 (1/2")	15	157
11305	25 (3/4")	15	157
11306	32 (1")	8	225
11307	32 (3/4")	8	225
11314	40 (1,1/4")	6	303
11316	50 (1,1/4")	4	404
11318	63 (2")	2	924



## borougenajd union male PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11502	20 (1/2")	20	121
11503	25 (1/2")	15	166
11504	25 (3/4")	15	166
11508	32 (1")	8	227
11509	32 (3/4")	8	227
11516	40 (1,1/4")	6	365
11518	50 (1,1/4")	4	461
11520	63 (2")	2	1045

## borougenajd union two side socket PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11522	20	20	205
11524	25	15	345
11526	32	8	481
11528	40	6	617
11530	50	4	559

## borougenajd elbow 90ofemale PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11602	20 (1/2")	20	67
11604	20 (3/4")	12	81
11606	25 (1/2")	15	77
11608	25 (3/4")	15	95
11610	32 (3/4")	5	110
11612	32 (1")	8	251

#### borougenajd elbow 90omale PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11616	20 (1/2")	15	74
11618	20 (3/4")	12	89
11620	25 (1/2")	10	99
11622	25 (3/4")	10	82
11624	32 (3/4")	6	133
11626	32 (1")	8	266
11622 11624	25 (3/4") 32 (3/4")	10	82

#### borougenajd elbow 90ofemale with clamp PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11614	20 (1/2")	15	80
11615	25 (1/2")	12	90

## borougenajd wall elbows with holder PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11630	20 (1/2")	15	80
11632	25 (1/2")	12	90

#### borougenajd tee adaptor female PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11702	20 (1/2")	15	74
11704	20 (3/4")	12	89
11706	25 (1/2")	10	116
11708	25 (3/4")	10	85
11710	32 (3/4")	6	118
11712	32 (1")	6	272

#### borougenajd tee adaptor male PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11716	20 (1/2")	15	80
11714	20 (3/4")	12	98
11718	25 (1/2")	10	111
11720	25 (3/4")	10	92
11721	32 (3/4")	5	122
11722	32 (1")	5	288

#### borougenajd butterfly valve PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11804	20	5	205
11806	25	5	211
11808	32	5	351

## borougenajd chrome coated valve PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11810	20	1	323
11811	25	1	438
11812	32	1	351

#### borougenajd valve body PN25, SDR 5



Part No.	Dimension (mm)	Packing	Weight (g)
11720	20	1	53
11722	25	1	85
11724	32	1	135

## borougenajd spherical valve PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11826	20	10	105
11828	25	10	113
11830	32	6	179
11832	40	3	260
11834	50	2	517
11836	63	2	-
11838	75	2	-

## borougenajd spherical valve with union PN25, SDR 5

Standards: DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11827	20	10	105
11829	25	10	113
11831	32	6	179

## borougenajd crossover PN20, SDR 6



Part No.	Dimension (mm)	Packing	Weight (g)
10902	20	1	52
10904	25	1	75
10906	32	1	153

## Accessories

## borougenajd end piece (male)

Standards: : DIN 16962, EN ISO SASO 15874



Part No.	Dimension (mm)	Packing	Weight (g)
11890	20 (1/2")	100	7
11892	25 (3/4")	100	10

#### borougenajd chrome coated valve extension



Part No.	Dimension (mm)	Packing
11805	30	1

## borougenajd welding machine



Part No.	Dimension (mm)	Packing
12410	16-63	1
12411	50-125	1
12412	125-160	1

## borougenajd welding sockets



Part No.	Dimension (mm)	Packing
12704	20	1
12706	25	1
12708	32	1
12710	40	1
12712	50	1
12714	63	1
12716	75	1
12718	90	1
12720	110	1
12722	125	1
12724	160	1

## borougenajd repair sockets tools



Part No.	Dimension (mm)	Packing
12726	9	1

## borougenajd repair sockets



Part No.	Dimension (mm)	Packing
12728	9	1

## borougenajd repair sockets



Part No.	Dimension (mm)	Packing
12800	16-40	1
12802	40-63	1









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