

## HDPE PIPES

Africa HDPE is a leading provider of HDPE products for a variety of applications. Our HDPE products are made from high-density polyethylene and are highly durable and resistant to wear and tear chemicals, and extreme temperatures. Africa HDPE specializes in the fabrication of custom HDPE products and supplies a wide range of HDPE fittings.

We strive to provide our customers with the highest quality HDPE products available, at a competitive price along with excellent customer service.

Contact us today to learn more about our products and services.



### **HDPE PIPES**

HDPE stands for "High-density polyethylene" which is a polyethylene thermoplastic made from petroleum, by a catalytic process, with a high strength-to-density ratio. The density of HDPE can range from 0.93 to 0.97 g/cm3 or 970 kg/m3. HDPE is a hard and dense material and can withstand high temperatures ( $120 \, ^{\circ}\text{C}/248 \, ^{\circ}\text{F}$  for short periods,  $110 \, ^{\circ}\text{C}/230 \, ^{\circ}\text{F}$  continuously).

It can be easily moulded and welded together. Due to its high chemical resistance property, it is used in piping systems. HDPE pipes are used to both carry potable water and hazardous waste. It has other applications also like in making vehicles fuel tanks, chemical bunds, custom tanks, backpacking frames, bottle caps, food storage containers, etc.

## Solid Wall Pipes

#### **Applications for Solid Wall Pipes:**

- 1. Water distribution and sewage disposal Water Supply
- 2. Mining (Surface and Underground) Slurries
- 3. Agriculture / Irrigation
- 4. Fishing Industries
- 5. Chemical effluent
- 6.Chemical industry
- 7.PE in Gas Distribution



#### **Coil Dimensions:**

We supply coils (100 meters maximum) up to 110mm PN10 and apart from that we have the capabilities to manufacture and supply all of the sizes from 20mm to 630mm at 0m – 12m lengths.

The option we give to coil certain sizes and pressure ratings has numerous advantages where the biggest one is the reduction in the number of joints which results in a significant cost saving.

		ID	OD		Width (W)			
		mm	mm	mm	mm	mm		
O.D		Coil length - metres						
mm	SDR's	50/100mm	50m	100m	50m	100m		
20	7.4/9/11/13.6	600	N/A	860	N/A	180		
25	7.4/9/11/13.6/17	600	N/A	890	N/A	200		
32	7.4/9/11/13.6/17	700	N/A	1090	N/A	220		
40	7.4/9/11/13.6/17/26	700	N/A	1090	N/A	220		
50	7.4/9/11/13.6/17/26	1300	1410	1560	150	220		
63	7.4/9/11/13.6/17/26	1300	1780	1960	190	280		
75	7.4/9/11/13.6/17	1300	1780	1960	190	280		
90	7.4/9/11	2500	3100	3300	270	360		
90	13.6/17/21	1800	2360	2540	360	450		
110	7.4/9/11	2500	3160	N/A	330	N/A		
110	13.6/17/21	2200	2860	3200	400	600		







# Straight Lengths

Africa HDPE manufacture sized 20mm to 630mm (supply up to 1000mm), pressure rating from PN4 – PN25 (SDR41 – SDR7.4) and manufacturing capacity of 1000 tons per month.



SANS 4427-2: 2008

PE	100 (10)	MPa) 150	14427															
PN	PN PN6.3		PN 8 PN 10			PN 12.5			PN 16			PN 20						
508		SDR 26			5DR 21			SOR 17		508 13.6		SDR 11			SDR 9			
O.D	MIN	MAX	MASS	MIN	MAX	MASS	MIN	MAX	MASS	MIN	MAX	MASS	MIN	MAX	MASS	MIN	MAX	MASS
mm	mm	mm	kg/m	mm	mm	kg/m	mm	mm	kg/m	mm	mm	kg/m	mm	mm	kg/m	mm	mm	kg/m
16.0						1-2												
20.0													2.0	2.3	0.11	2.3	2.7	0.13
25.0					1 1 11					2.0	2.3	0.15	2.3	2.7	0.17	3.0	3.4	0.20
32.0							2.0	2.3	0.19	2.4	2.8	0.23	3.0	3.4	0.27	3.6	4.1	0.32
40.0				2.0	2.3	0.24	2.4	2.8	0.29	3.0	3.5	0.36	3.7	4.2	0.43	4.5	5.1	0.50
50.0	2.0	2.3	0.31	2.4	2.8	0.37	3.0	3.4	0.45	3.7	4.2	0.54	4.6	5.2	0.66	5.6	6.3	0.78
63.0	2.5	2.9	0.49	3.0	3.4	0.57	3.8	4.3	0.71	4.7	5.3	0.87	5.8	6.5	1.04	7.1	8.0	1.25
75.0	2,9	3.3	0.67	3.8	4.1	0.84	4.5	5.1	1.01	5.6	6.3	1.23	6.8	7.6	1.46	8.4	9.4	1.76
90.0	3.5	4.0	0.97	4.3	4.9	1.17	5.4	6.1	1.45	6.7	7.5	1.76	8.2	9.2	2.11	10.1	11.3	2.53
110.0	4.2	4.8	1.42	5.3	6.0	1.76	6,6	7.4	2.15	8.1	9.1	2.60	10.0	11.1	3.13	12,3	13.7	3.76
125.0	4.8	5.4	1.83	6.0	6.7	2.25	7.4	8.3	2.74	9.2	10.3	3.35	11.4	12.7	4.06	14.0	15.6	4.87
140.0	5.4	6.1	2.30	6.7	7.5	2.82	8.3	9,3	3.45	10.3	11.5	4.20	12.7	14.1	5.06	15.7	17.9	6.18
160.0	6.2	7.0	3.02	7.7	8.6	3.69	9.5	10.6	4.50	11.8	13.1	5.48	14.6	16.2	6.65	17.9	19.8	7.94
180.0	6.9	7.7	3.76	8.6	9.6	4.64	10.7	11.9	5,69	13.3	14.8	6.96	16.4	18.2	8.40	20.1	22.3	10.0
200.0	7.7	8.6	4.67	9.6	10.7	5.75	11.9	13.2	7.02	14.7	16.3	8.54	18.2	20.2	10,36	22.4	24.8	12.47
225.0	8.6	9.6	5.86	10.8	12.0	7.27	13.4	14.9	8.90	16.6	18.4	10,84	20.5	22.7	13,11	25.2	27.9	15.73
250.0	9.6	10.7	7.27	11.9	13.2	8.89	14.8	16.4	10.91	18.4	20.4	13.35	22.7	25.1	16.13	27.9	30.8	19.56
280.0	10.7	11.9	9.06	13.4	14.9	11.23	16.6	18.4	13.71	20.6	22.8	16.73	25.4	28.1	20.22	31.3	34.6	24.25
315.0	12.1	13.5	11.54	15.0	16.6	14.11	18.7	20.7	17.36	23.2	25.7	21.20	28.6	31.6	25.59	35.2	38.9	30.73
355.0	13.6	15.1	14,59	16.9	18.7	17.91	21.1	23.4	22.10	26.1	28.9	26,88	32.2	35.6	32,49	39.7	43.8	39.03
400.0	15.3	17.0	18.50	19.1	21,2	22.84	23.7	26.2	27.93	29.4	32.5	33.18	36.3	40.1	41.25	44.7	49.3	49.52
450.0	17.2	19.1	23.39	21.5	23.8	28.89	26.7	29.5	35.38	33.1	36.6	43.18	40.9	45.1	52.23	50.3	55.5	62.69
500.0	19.1	21.2	28.72	23.9	26.4	35.64	29.7	32.8	43.72	36.8	40.6	53.28	45.4	50.1	64.45	55.8	61.5	77.25
560.0	21.4	23.7	36.17	26.7	29.5	44.61	33.2	36.7	54.77	41.2	45.5	66.84	50.8	56.0	80.74	62.5	68.9	96.92
630.0	24.1	26.7	45.83	30.0	33.1	56.35	37.4	41.3	69.37	46.3	51.1	84.49	57.2	63.1	102,30			

SDR: Standard Dimension Ratio
PN: Nominal Working Pressure 10MPa



We have the capacity to manufacture and supply Spiral Pipe ID range 300mm tot 1200mm with ring stiffness of 2kN/m2, 4kN/m2 and 8kN/m2 at very competitive prices.

(See table below with technical info).

HDPE Spiral Pipe represents the latest advancements in material and manufacturing technology. Raw material properties and product technology have been combined to provide a light-weight engineered pipe for various gravity and low pressure applications in the municipal, industrial and road construction, rehabilitation and marine pipeline applications.

#### **Applications for Spiral Pipe:**

- 1. Storm Water Management
- 2. Sewerage Pipelines
- 3. Slurry Lines
- 4. Waste Gas Ducts & Ventilation
- 5. Manholes / Manhole drops
- 6. Pipe Rehabilitation
- 7. Drainage Pipelines
- 8. Culverts
- 9. Floats



<u> </u>	side m)	Inside Diameter (mm)	Outside Diameter (mm)	Wall Thickness (mm)		
300	S1 = 4 kN/mm2	300	328	1.8		
	S2 = 8 kN/mm2	300	338	2.5		
400	S1 = 4 kN/mm2	400	438	2.5		
	S2 = 8 kN/mm2	400	450	2.5		
500	S1 = 4 kN/mm2	500	550	2.5		
	S2 = 8 kN/mm2	500	562	2.8		
600	S1 = 4 kN/mm2	600	662	2.8		
	S2 = 8 kN/mm2	600	679	3.3		
700	S1 = 4 kN/mm2	700	778	3.3		
	S2 = 8 kN/mm2	700	888	3.8		
800	S1 = 4 kN/mm2	800	900	3.8		
	S2 = 8 kN/mm2	800	1000	5.2		
900	S1 = 4 kN/mm2	900	1024	4.5		
	S2 = 8 kN/mm2	900	1100	6.0		
1000	S1 = 4 kN/mm2	1000	1124	5.3		
	S2 = 8 kN/mm2	1000	1224	6.0		
1100	S1 = 4 kN/mm2	1100	1250	6.0		
	S2 = 8 kN/mm2	1100	1250	6.5		
1200	S1 = 4 kN/mm2	1200	1324	6.0		
	S2 = 8 kN/mm2	1200	1350	6.5		