PE
PIPING SYSTEMS

Chemical Resistant

Thermal Resistant

Weather Resistant

Smooth inner wall

Light Weight

Elastic

Impact Resistant

Thermally Insulating

Non Toxic

Polyethylene (PE) is a sturdy thermoplastic material produced from the polymerization of ethylene and widely used in water, slurry and gas applications. Sangir PE pipes are manufactured by extrusion in sizes ranging from 16mm to 1600mm. PE is available in rolled coils of various lengths (upto 125mm OD) or in straight lengths up to 12mtrs. PE pipe is available in many varieties of wall thicknesses, but primarily based on Controlled Outside Diameter (OD). A promising material, it has design life extending upto 100 years for some applications.

PE pipe is available in many forms and colours such as the following:

- Single extrusion coloured or black pipe
- Black pipe with coextruded colour Stripe
- Black or natural pipe with with one or more coextruded colored layers

Technical Information

			HDPE	MDPE	LDPE	PEUHMW
Specific gravity (p)	ISO 1183	g/cm^3	0.95	0.938	0.925	0.93
Max. Permissible service temp		°C	-50 to 90	-50 to 85	-50 to 60	-50 to 90
Tensile strength at yield (σS)	ISO 527	Mpa	27	20	11	17
Elongation at break (εR)	ISO 527	%	≥700	≥600	≥600	≥50
Impact strength (an)	ISO 179	kJ/m^2	No Break	No Break	No Break	No Break
Flexural strength (σB 3,5%)	ISO 178	Mpa	22	40	80	27
Modulus of elasticity (Et)	ISO 527	Mpa	1150	760	260	680
Coef. of linear therm. expansion (α)	DIN 53752	K^{-1} X 10^{-4}	1.5	1.5	1.4	2
Vicat Softening Temp	ISO 306		80	80	94	80

PIPING

HDPE

Range :
20 - 1600mm | PN 2.5 -16
Standards :
ISO 4427 | EN 12201
IS 4984 | IS14333
ASNZ 4130 | ASTM 2619/3035

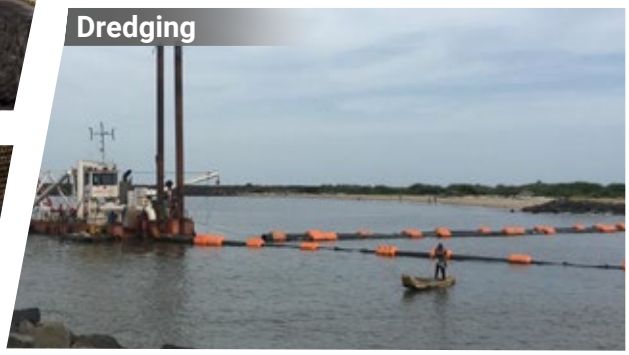
MDPE

Range :
20 - 800mm | PN 2.5 -16
Standards :
ISO 4427

GAS

Range :
16 - 800mm | PN 2.5 -10
Standards :
ASTM 2513
ISO 4437
IS 14885

Applications



HDPE:	Water | Waste-water | Effluents | CBM GAS | Shale Gas | Edible Oil | Phosphoric Acid | Fire-Water Sea-water Intake & Outfall | Desalination | Slurry | Dredging | De-watering | Cooling Water
MDPE Blue:	Drinking Water Distribution & House Service Connections
MDPE/PE-GAS:	City-gas Distribution

FITTINGS

Butt Fusion

Type : Moulded
Range :
20 - 225 mm | PN 6 &10
Standards :
ISO 4427 - 3 | DIN 16963
IS 8008 | ANSI 16.5 B

Butt Fusion

Type : Fabricated
Range :
160 - 1200 mm
Standards :
ISO 4427 - 3 | DIN 16963
IS 8360 | ANSI 16.5 B

Electrofusion

Type : Electrofusion
Range :
20 - 630 mm | PN 6 - 16
Standards :
EN1555
IS17885