

Steel Wire Mesh Reinforced HDPE Pipe



FEATURES

High operating pressure (up to 4MPa)
Thinner wall means low weight for the same pressure requirements
Smooth inner wall provides low flow friction so low resistance
Superior resistance to chemicals
Easy speedy installation
Reliable Electro-fusion jointing and flange connections

APPLICATIONS

Slurry transportation	Open-cut mines
High pressure applications	Ore process Plants
Chemical transportation	Coal Preparation Plants
Water drainage and distribution	Chemical/Petroleum applications
Flexible installation requirements	Civil engineering projects

Roobuck Steel Wire Mesh Reinforced HDPE pipe (Roobuck pipe) is composed of steel wire mesh as the reinforcement and the HDPE as stuffing material around the mesh. Pipe fittings are composed of steel sheet as the reinforcing part and the HDPE as the stuffing material injected on both sides of the steel sheet.

Pipe Size and Pressure Rating

Different from normal PE pipes, Roobuck pipes are specified in Inside Diameter in mm, rather than Nominal Diameter.

PN Rating	Inside Diameter (mm)													
Pn10	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN12.5	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN16	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN20	50	65	80	100	125	150	200	250	300	350	400	450	500	X
PN40	50	65	X	X	X	X	X	X	X	X	X	X	X	X

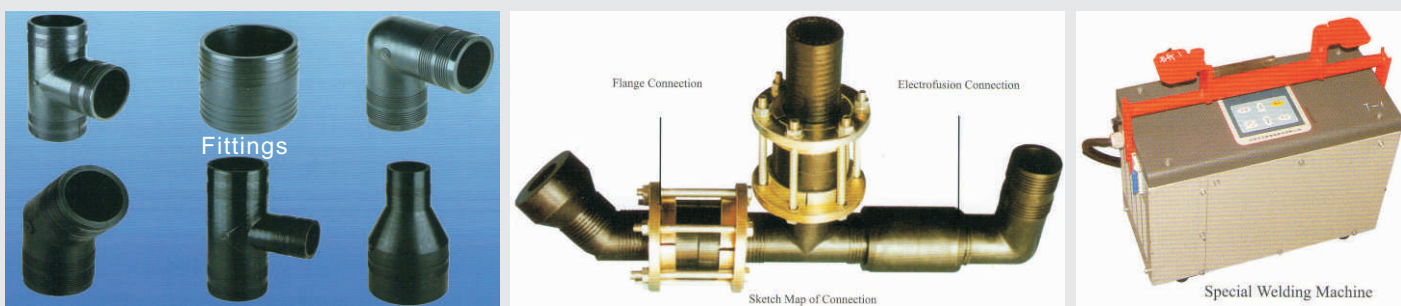
NOTE:

- Standard lengths are 12m, 10m, 8m. Customised lengths are available in 20% extra charge. 12m fits 14' containers.
- Numbers are Inside Diameters in mm.
- The pipes in blue numbers can be connected using either electrofusion or flanges.
- The pipes in red numbers are suggested to use electrofusion only.
- The pipes marked in "X" without Inside Diameter numbers are not available.
- Working pressures are specified at 20 degree Celsius. The pressure capacity must be reduced for operation at higher temperatures. Please let us know your operating temperature so we can help you to choose a correct pressure rating.

Fittings and Connection

The Roobuck pipe can be connected either by Electro-fusion or Flanges. Both ends of the pipeline connected to a water pump, another pipe or other equipment have to use flange connections.

Note: The tensile strength and butt-up strength at the connection points exceeds that of the pipe itself.



Performance Comparison with Other Pipes

	Roobuck PE Pipe	Normal PE Pipe	Steel Pipe	Stainless Steel Pipe
Corrosion Resistance	Excellent same as normal PE pipe	Excellent	Bad need anti-corrosion treatment	Good but high cost
Sanitation	Excellent same as normal PE pipe	Excellent	Bad need anti-corrosion treatment	Good but high cost
Hydraulic Characteristics	Good, smooth wall so low transmission resistance	Good, smooth wall so low transmission resistance	Bad, rough wall so high transmission resistance	Good, smooth wall so low transmission resistance
Coupling	Flange & auto-electrofusion less human factors	Electrofusion & Hot Plate high human & environment factors	Welding only high human & equipment factors	Welding only high human & equipment factors
Economy	Low cost for >DN300, especially when pressure >16bars	Low cost for <DN300, high cost for >ND300 & pressure >16bars	Low cost for pipe, high cost for anti-corrosion treatment, installation & follow-up treatment	High cost of materials
Incrustation	Difficult to form	Difficult to form	Easy to form	Easy to form
Flexibility/Rigidity	Moderate flexibility and rigidity	Good flexibility but poor rigidity	Poor flexibility but good rigidity	Poor flexibility but good rigidity
Heat Resistance	Max 70 °C	Max 45°C	Above 300°C	Above 300°C