

Certification

Kingbull piping systems have certificates from Australia SAI Global, French BV, Spanish AENOR, Swedish SP, Swiss SGS, ISO 9001, ISO 14001, China National Accreditation Service (CNAS) for Kingbull Lab, and other institutes. Kingbull piping products working life is 50 years and Kingbull provides customers 10 years quality warranty.



Contents

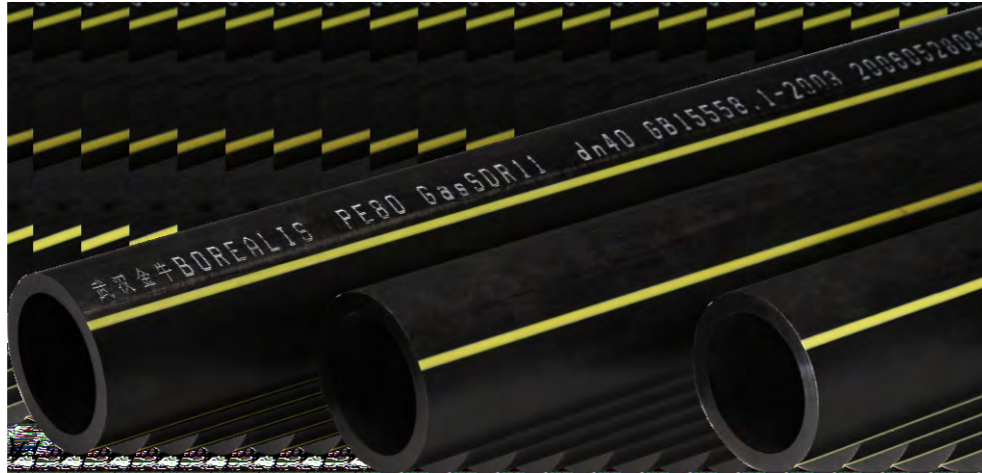
Buried PE Pipe Introduction	01
Specification of Buried Gas Pipe	03
Fittings and Tools for Buried PE Gas Pipe	04
Multilayer Gas Pipe Introduction	07
Fittings and Tools for Multilayer Gas Pipe	08
Ball Valve for Gas Pipe	09
Installation	10

Buried PE pipe for Gas Transportation

Construction

Buried PE pipe for Gas Transportation is produced using polyethylene (PE80 or PE100).

Polyethylene (PE), the most popular plastic resin in the world, is the second most widely used thermoplastic piping material and has been successfully used in piping applications for more than 60 years. PE gas pipe systems are specifically engineered and certified for use underground outside of buildings. With



continuous lengths of corrosion proof, flexible piping, simple assembly, and the lowest installed cost compared to other underground gas piping material, PE is by far the most common material for this application, with nearly universal use.

Pipe Color

black with yellow lines,yellow

Executive Standard

ISO 4437-2007, GB15558-2003

Performances

- * High strength, excellent performance in resistance to environment stress.
- * Good impact resistance and earthquake resistance.
- * Good flexibility to adapt to dislocation and inequalities.
- * Good corrosion resistance and anti-UV, long service life.
- * Connecting with thermo-fusion or electro-fusion safely without leakage.

Properties

Hydrostatic Strength	100h,20℃,PE80:9.0Mpa/ PE100:12.4Mpa, No burst occur 165h,80℃,PE80:4.5Mpa/ PE100:5.4Mpa, No burst occur 1000h,80℃,PE80:4.0Mpa/ PE100:5.0Mpa, No burst occur
Elongation at break	≥350%
Resistance to rapid crack propagation	PC ≥1.5 MOP
Resistance to slow crack growth	>500h(en>5mm)
Thermal stability	>20min(200℃)
Heat reversion	≤3%(110℃)

Advantage of KINGBULL buried PE gas pipe

- ◎ High-class PE special used for gas pipe.
- ◎ Advanced equipment and technology.
- * Kingbull adopts Battenfeld and Krauss- Maffei equipments and stability of production is good.
- * Kingbull adopts IKV forced feed system and BM barrier screw.
- * Test on-line and pipe wall is uniform.
- * Detection devices are advanced.
- ◎ **System mating advantage.**
- ◎ **Perfect quality assurance.**

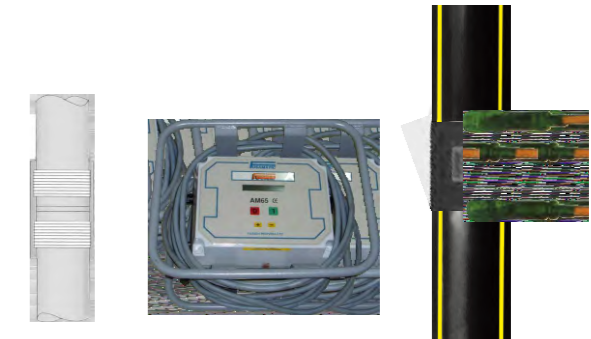


Joining

* Electro-fusion welding

PE pipes (Dn< 90mm),are suitable for electro-fusion connection.

Electro-fusion, is to use electro-fusion welding machine to heat the resistance wire under the surface of fittings, melt the surface of pipes and fittings, connect the fittings and pipes molecular.



* Butt -Fusion welding

PE pipes (Dn≥ 90mm),are suitable for thermo-fusion connection.

Thermo-fusion is to use thermo-fusion welding machine to heat the ends of pipes and fittings simultaneously(at the temperature of 210℃), and then insert the heated pipe into fitting without rotation in order to reach connection.



* Steel-plastic Flange Connection

When PE gas pipe is needed to connect with steel pipe and valves, should use the way of steel-plastic flange connection.

Applications

Application for outdoor buried NG and LPG gas pipe systems with a maximum operating pressure 1.6MPa.