Product Introduction

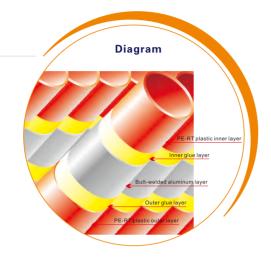
# KINGBULL PIPE INDUSTRY www.kingbullpipe.com

## **Product executive standard**

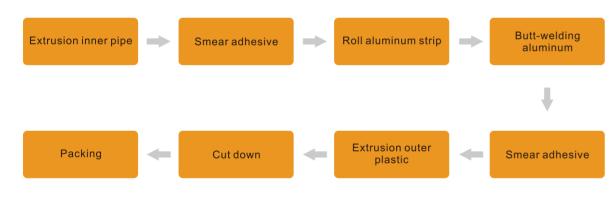
UNE 53961 CJ/T 159-2006

#### **Product introduction**

PERT-AL-PERT butt-welding aluminumplastic composite pressure pipe, is a kind of aluminum-plastic composite pressure pipe which the embed metal layer is butt-welding aluminum alloy pipe, the inner layer and outer layer is resistant-temperature polyethylene (PERT), and each layer are composited by hot melt adhesive.



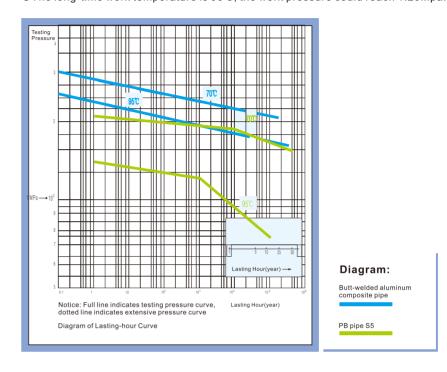
## One-time molding technology



#### **Product characteristic**

- ●A kind of metal pipe covered with plastic protect layer. The only one of plastic composite pipe accord with the requirement of using 95°C hot water at present.
- •The thickness of Aluminum accord with ASTM standard and Pipe working pressure is high.
- •Using argon arc welding, safety and strong.
- The special and professional process and the strict testing standard which is higher than industry standard. Good adhesive performance in normal temperature and high temperature.

●The long-time work temperature is 95°C, the work pressure could reach 1.25Mpa.



Safety and long working life.



- The coefficient of linear expansion is low. Using without deformation.
- Good at oxygen barrier, avoid corrosion of metal parts.
- •Smooth plastic inner layer and outer layer, avoid corrosion and deposition by settling.

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Product Feature



#### **Product main performance**

Item		Test parameter			Index		
		Tempera	Time (hour)	Pressure (MPa)	Radial force (N)	Blast pressure (MPa)	Pipe ring minimum average stripping force (N)
Pipe ring radial tension	Dn16				2300	≧ 8.00	25
	Dn20				2500	≧ 7.00	28
	Dn25				2890	≧ 6.00	30
	Dn32				3270	≧ 5.50	35
Expanding test					Without degumming between inner/outer layer and metal layer, without break of inner/outer layer		
Hydrostatic		95	1	2.42	Without break, partly spherical expansion, leakage		
streng	th	95	1000	1.93	Without break, partly spherical expansion, leakage		' ' '

## **Advantage**

- 1. Kingbull PERT-AL-PERT butt-welding aluminum-plastic composite pressure pipe and double-fusion connection technology inherit the advantage of butt-welding aluminum-plastic composite pipe which is high bearing capacity and high temperature resistance. At the same time, they overcome the disadvantage of traditional aluminum-plastic composite pipe which is mechanical connection and easy to leakage. It's an initiate technology in China and an advanced technology in global.
- 2. The main performance accord to German standard and higher than the standard. For example: the expanding test, standard requires belling 1.13 times and our test require belling 1.3 times. The pipe have good welding and adhesive performance, peel strength reach 60~110 N/mm, and through the 5000 times cold-hot water cycling test.
- 3. The first manufacturer that accomplished long-time high temperature performance. (3 month  $80^{\circ}$ C hot water cycling test)

## **Applied**

Building cold and hot water system.
Solar energy pipeline system.

The high temperature heating system.

Oil wellbore of heavy oil viscosity reduction system.

Industry pipeline system.

## **Product specification**

Nominal diameter (mm)	Packing length (m/pcs)		
dn16	100		
dn20	100		
dn25	100		
dn32	50		

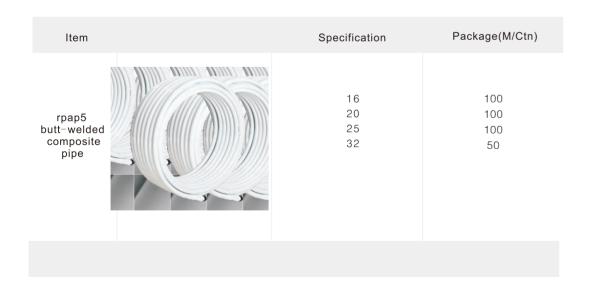
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Pipe Specification

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# Specification:





		Darkers
Equal union	Specification	Package (Pcs/Ctn)
	16	200
	20	120
	25	100
7.	32	120
Equal Tee	Specification	Package (Pcs/Ctn)
	16	60
	20	60
	25	40
	32	50
90° Elbow	Specification	Package (Pcs/Ctn)
	16	120
	20	160
	25	120
	32	70
Male Adapter	Specification	Package (Pcs/Ctn)
( 章 ) 章	16×(1/2)"	60
平置 至	20×(1/2)"	60
	20×(3/4)"	60
	25×(1/2)"	60
171	25×(3/4)"	50
77,	32×(3/4)"	40
	32×1"	20
Female Adapter	Specification	Package (Pcs/Ctn)
	16×(1/2)"	70
16-14-10-127	20×(1/2)"	70
	20×(3/4)"	60
	25×(1/2)"	60
	25×(3/4)"	50
	32×(3/4)"	40
	32×1"	24
Female Elbow with plate	Specification	Package (Pcs/Ctn)
SEC YE	20×(1/2)"	30
	25×(3/4)"	30
	20//(0/4)	33
<b>Oliven</b>		

Unequal union	Specification	Package (Pcs/Ctn)
	20X16	120
	25X16	80
	25X20	80
	32X20	60
	32X25	60
Unequal Tee	Specification	Package (Pcs/Ctn)
7 - 4 -	25×20×20	80
	20×25×20	80
	25X20	80
	32X20	60
	32X25	60
Unequal Elbow	Specification	Package (Pcs/Ctn)
	25X20	140
	32X20	100
	32X25	80
45° Elbow	Specification	Package (Pcs/Ctn)
48	20	100
ä	25	150
	32	80
Market State of the State of th		
Female Elbow	Specification	Package (Pcs/Ctn)
	16×(1/2)"	60
-	20×(1/2)"	60
	20×(3/4)"	40
	25×(1/2)"	40
	20/(1/2)	
		40
Undel	25×(3/4)"	40 40
General plant		
Male Elbow	25×(3/4)" 32×(3/4)"	40
Male Elbow	25×(3/4)" 32×(3/4)" 32×1"  Specification	40 20 Package
Male Elbow	25×(3/4)" 32×(3/4)" 32×1"  Specification  16×(1/2)"	40 20 Package (Pcs/Ctn)
Male Elbow	$25 \times (3/4)$ " $32 \times (3/4)$ " $32 \times 1$ "  Specification $16 \times (1/2)$ " $20 \times (1/2)$ "	40 20 Package (Pcs/Ctn)
Male Elbow	$25 \times (3/4)$ " $32 \times (3/4)$ " $32 \times 1$ "  Specification $16 \times (1/2)$ " $20 \times (1/2)$ " $20 \times (3/4)$ "	40 20 Package (Pcs/Ctn) 60 60
Male Elbow	$25 \times (3/4)$ " $32 \times (3/4)$ " $32 \times 1$ "  Specification $16 \times (1/2)$ " $20 \times (1/2)$ " $20 \times (3/4)$ " $25 \times (1/2)$ "	40 20 Package (Pcs/Ctn) 60 60 40
Male Elbow	$25 \times (3/4)$ " $32 \times (3/4)$ " $32 \times 1$ "  Specification $16 \times (1/2)$ " $20 \times (1/2)$ " $20 \times (3/4)$ "	40 20 Package (Pcs/Ctn) 60 60 40 40

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