



Producer of 5-Layer Fusion Fittings for PE-RT 5-Layer Pipes

About Us

With God's care, this complex has been able to have more than a quarter of a century of experience in the production of pipes and fittings with modern machinery and also using a well-equipped laboratory and experienced and skilled personnel, produce quality products with mechanisms at the level of international standards for domestic and foreign markets.

Also, this company, together with German and Iranian experts and receiving various certificates, has succeeded in inventing and producing a new generation of PE-RT welding fittings for PE-RT-AL-PE-RT 5-layer pipes under the "KayerPipe" brand.

Fusion fittings have been able to eliminate the disadvantages of other 5-layer fittings

And thus another greatness of Iranian genius and creativity appeared in the domestic and foreign markets.

Certificates

- ✓ Technical Certificate of Road, Housing and Urban Development Research Center
- ✓ Melli Standard certificate
- ✓ Health certificate from the Ministry of Health
- ✓ Patent certificate
- ✓ Certificate of approval from the Ministry of Science
- ✓ ISO 9001 certificate
- ✓ CE certificate
- ✓ IMS certificate
- ✓ HSE certificate
- ✓ "IRAN" insurance guarantee for 5 years

Parameters & Features

- ▶ Tolerates hot water with a temperature of 90° and pressure of 10 bar
- ▶ Lower price of KayerPipe Fittings in comparison with other 5-layer fittings
- ▶ Easy installation with 100% sealing coefficient in shrinkage and expansion of the piping network
- ▶ Low price of installation equipment
- ▶ Suitable for heating and cooling systems

Expenditures of KayerPipe, 5-Layer Pipes & Fittings

1- Sanitary Plumbing (hot and cold water):

Due to the passage of drinking water through "KayerPipe" pipes, no chemical changes are made in it and there is no change in the smell and taste of water. Due to the lack of rust and corrosion and also the lack of accumulation of sediments, these pipes are healthy and will have a long life.

2- Underfloor Heating System:

Today, in many developed countries, underfloor heating system is widely used due to the uniform and pleasant distribution of heat in homes, hotels and systems, community halls. This heating system is free of any pollution and works with minimal waste of cost and energy. In addition to reducing installation costs, this system also significantly reduces pumping costs.

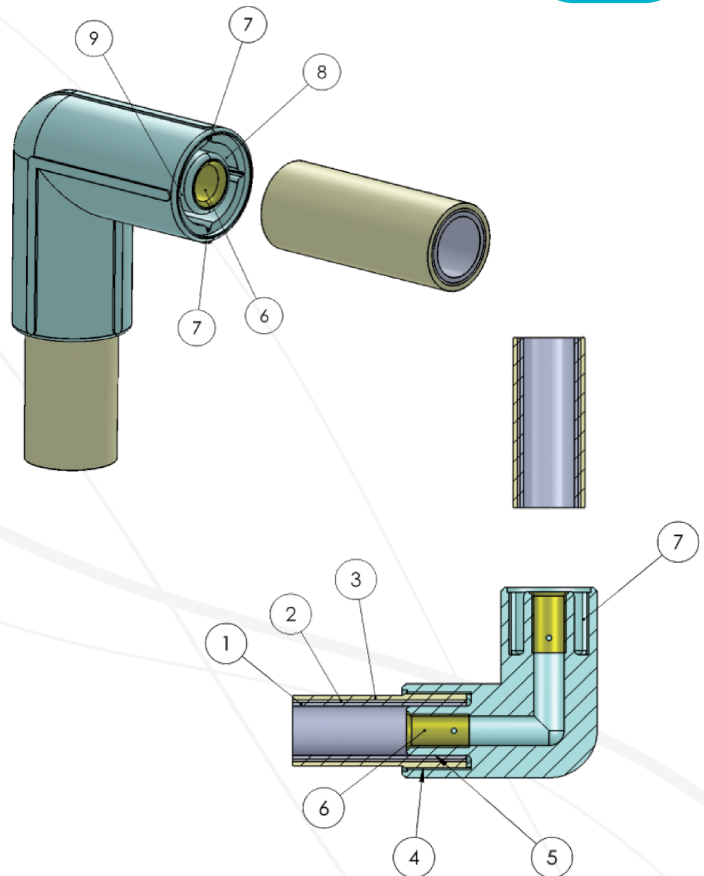
3- Industrial, Laboratory and Chemical Uses:

The unique structure of "Kayerpipe" pipes has made their use in factories and chemical industries. These tubes can be used for cases with temperatures below 90 degrees Celsius, such as acids, bases, gases, oils and petroleum products, etc. Medical industries such as medical gases and dialysis systems, food, pharmaceutical, ship industries Used and other resources that are not capable of working with metal pipes.

5-Layer Fusion Fittings

Connecting System

- 1- Polymer inner layer of 5-layer PE-RT pipe.
- 2- Aluminum layer of 5-layer pipe.
- 3- Polymer outer layer of 5-layer PE-RT pipe.
- 4- Welding line and connection point of the outer layer of the pipe with the connection female.
- 5- The Welding line and the connection point of the inner layer of the pipe with the connecting male.
- 6- Brass pipe to prevent the state of the joint from changing during Welding.
- 7- Groove designed in the joints to let air out during Welding.
- 8- Female connection.
- 9- Male connection.



Product Specs

- ▶ **Resistant to Earthquake Waves, Vibration, Drift, Building Subsidence**
Due to its high flexibility and recyclability, PE-RT polymer is resistant to expansion and longitudinal contractions and has a high resistance to earthquake waves and building subsidence.
- ▶ **Easy Installation**
"KayerPipe" PE-RT pipes can be installed in a very simple way. KayerPipe is one of the newest and safest 5-layer piping systems today, which uses hot fusion welding machine to install connections.
- ▶ **Ease of Transportation**
"KayerPipe" pipes and fittings are light and can be arranged up to a high height, and they can also be moved and transported without the use of special equipment.

Working Hints

- ▶ Pay attention to the "KayerPipe" logo on the products and do not weld the 5-layer pipes of other brands to the "KayerPipe" fittings.
- ▶ Do not use damaged pipes.
- ▶ Do not rotate the pipe and fitting after welding.
- ▶ Protect the pipes from hard blows and falling tools on them.
- ▶ Do not use paste and hemp to install the brass joint.
- ▶ For welding, use only clean pipes and fittings.
- ▶ Do not screw conical metal cores into the combined brass ribs.

5-layer Fusion PE-RT Fittings



**Fusion Male
Wallplated Elbow**

16x1/2" code: 2345001
20x3/4" code: 2345004
32x1" code: 2345006
20x1/2" code: 2345002
25x3/4" code: 2345005



**Fusion Female
Wallplated Elbow**

16x1/2" code: 2335001
20x3/4" code: 2335003
25x1/2" code: 2335005
20x1/2" code: 2335002
25x3/4" code: 2335004
32x1" code: 5590072



**Fusion Male
Wallplated Tee 90**

16x1/2"x16
code: 2525016
20x1/2"x20
code: 2525020



**Fusion Female
Wallplated Tee 90**

16x1/2"x16
code: 2515016
20x1/2"x20
code: 2515020



**Fusion Male
Wallplated Tee 180**

16x1/2"x16
code: 2525051
20x1/2"x20
code: 2525052



**Fusion Female
Wallplated Tee 180**

16x1/2"x16
code: 2525001
20x1/2"x20
code: 2525002



Fusion Male Straight

16x1/2" code: 2225001 20x3/4" code: 2225003 25x3/4" code: 2225005
 20x1/2" code: 2225002 25x1/2" code: 2225004 32x1" code: 2225006



Fusion Female Straight

16x1/2" code: 2215001 20x3/4" code: 2215003 25x3/4" code: 2215005
 20x1/2" code: 2215002 25x1/2" code: 2215004 32x1" code: 2215006



Fusion Tee

16 code: 2505016 25 code: 2505025
 20 code: 2505020 32 code: 2505032



Fusion elbow

16 code: 2305016 25 code: 2305025
 20 code: 2305020 32 code: 2305032



Fusion Reducing Straight

20x16 code: 2405016 25x20 code: 2255020 32x20 code: 2325020
 25x16 code: 2255016 32x25 code: 2325025 32x16 code: 2325016



Fusion straight

16 code: 2205016 25 code: 2205025
 20 code: 2205020 32 code: 2205032



**Fusion
Female Union**

16x1/2"
code: 2705016

25x3/4"
code: 2705025

20x1/2"
code: 2705020

32x1"
code: 2705032



**Fusion
Reducing Tee**

16x20x16
code: 2165216

25x16x16
code: 2255616

25x20x25
code: 2255225

20x16x16
code: 2205616

25x16x20
code: 2255620

32x16x32
code: 2325632

20x16x20
code: 2205620

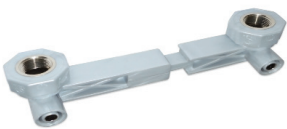
25x16x25
code: 2255625

32x20x32
code: 2325232

20x20x16
code: 2205216

25x20x20
code: 2255220

32x25x32
code: 2325532



**Wallplated Twin
Elbow (15 cm)**

16X1/2"
code: 2305116

20X1/2"
code: 2305120



**Wallplated Twin
Elbow (50cm)**

16X1/2"
code: 2305216

20X1/2"
code: 2305220



Manifold

(3b)1"x1/2
code: 2995003

(4b)1"x1/2
code: 2995004

(5b)1"x1/2
code: 2995005

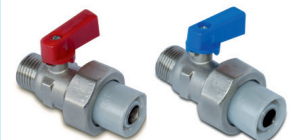
(6b)1"x1/2
code: 2995006

(7b)1"x1/2
code: 2995007

(8b)1"x1/2
code: 2995008

(9b)1"x1/2
code: 2995009

(10b)1"x1/2
code: 2995010



**Ball Valve For
Manifold**

RED

16x1/2"
code: 2975116

20x1/2"
code: 2975120

BLUE

16x1/2"
code: 2975016

20x1/2"
code: 2975020



Manifold Cap

1" with ventilation screw
code: 2805000

1" code: 2805001



Manifold Box

45x45cm code:2985045

45x95cm code:2985095

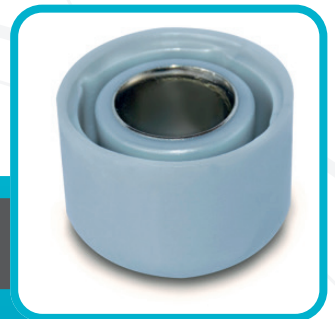
45x65cm code:2985065



Plastic Thread Long Cap

20 code: 2840001

25 code: 2840003



Fusion Cap

16 code: 2815016

20 code: 2815020

25 code: 2815025

32 code: 2815032



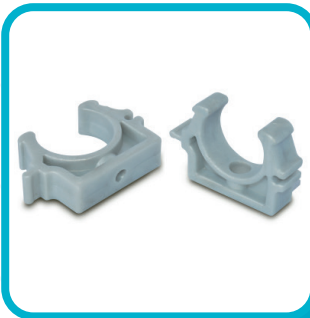
500mm Radiator Installation Plate

code: 2961002



153mm Radiator Installation Plate

code: 2961001



Silver Clamp

16
code: 2905016

25
code: 2905025

20
code: 2905020

32
code: 2905032



Plastic Thread Short Cap

20
code: 2801020

32
code: 2801032

25
code: 2801025

Tools



Installation Machine

code: 5590086



Scissor

code: 5590072



Pipe Cutter

code: 5591004



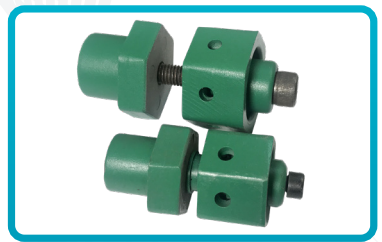
Bending Spring

code: 5591005



Calibrator

code: 2955001



Welding Mold

code: 2945000



Manifold Wrench

code: 2965101



Thermometer

code: 6220090005

5-Layer Fusion Fittings



5-Layer PE-RT-AL-PE-RT Pipe



5-Layer PE-RT-AL-PE-RT Pipe (Overlap)

16 code: 2106016	25 code: 2106025
20 code: 2106020	32 code: 2106032



5-Layer PE-RT-AL-PE-RT Pipe (Laser)

16 code: 2105016	25 code: 2105025
20 code: 2105020	32 code: 2105032



5-Layer PEX-AL-PEX Pipe (Overlap)

16 code: 2107016	25 code: 2107025
20 code: 2107020	32 code: 2107032



Welding Steps

1) Adjust the welding molds on the welding machine or pipe iron at a constant temperature of 280 to 300° C. (Note: Calibrating the temperature of the welding machine or pipe ironing is a must.)

2) Calibration of the pipe is mandatory and its implementation before welding in the "KayerPipe" piping system is not allowed without this action.

(Note: During calibration, no lubricating fluid should be used for calibration.)

3) Observing the heating time of the pipe and fitting according to the times announced in the table from the moment of placing the pipe and connection on the welding mold and paying full attention to the mark and welding depth of the "Kayerpipe" pipe for the pressure on the welding mold, which is a necessary measure.

Note: - The Fitting or pipe should not be wet during welding.

- During welding, the fittings should be free of any dust that must be in plastic packaging.

Very important points:

- Before welding, the necessary marking must be done based on the size of the pipe.

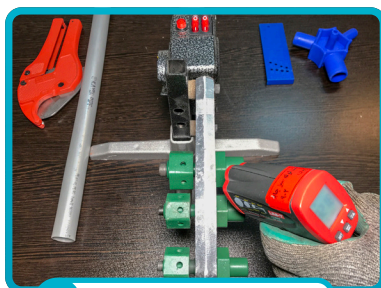
- Twisting pipes and fittings should be avoided when removing it from the welding mold.

- Avoid cleaning Teflon welding molds with metal objects and use a cotton cloth or a piece of wood free of any sharpness to clean welding molds. Before welding, clean the welding molds of pipes and fittings.

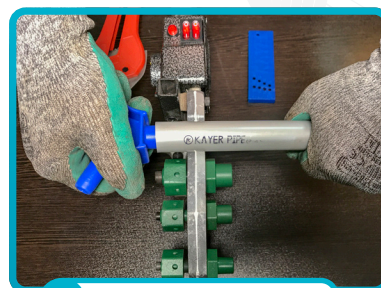
(If necessary with a solution of water and alcohol)

Table of Welding Conditions
for Pipes and Fittings of
"KayerPipe"

Outer Diameter of the Pipe	Welding Depth	The Time of Placement of the Pipe and Simultaneous Fitting Inside the Machine (second)	Minimum Cooling Time (min)
16	14	5-8	1
20	14	6-10	1
25	16	6-10	1
32	18	8-15	1



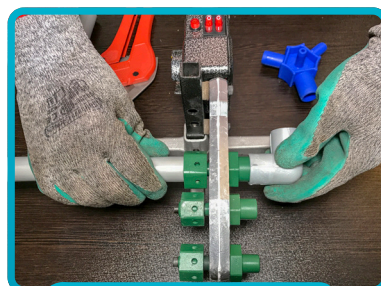
1 Temperature Adjustment



2 Calibrate the Pipe



3 Mark with Stencil



4 Heating the Pipe and Fitting



5 Welding

5-Layer Fusion Fittings

Producer of 5-Layer Fittings (Fusion tech)

Exclusively for PE-RT 5-Layer Pipes



Certificates





K A Y E R P I P E

Unit 4, 23th Block, Mirzahassani Ave,
Ghaem Magham Farahani St, Shahid Beheshti Blv,
Tehran, Iran

Tel: 88726252 - 88724156 - 88728281

Postalcode: 1586767716 Fax:88554641

www.kayerpipe.com

info@kayerpipe.com