RADIATECH PIPE & FITTINGS

We offer a complete range of PPR and PPRC Fibertherm pipes and fittings.

RECH

INDUSTRIAL & DOMESTIC
PIPING SOLUTION

COMPANY PROFILE

The driving force behind Radiatech Pipe and Fittings' success is the unwavering pursuit of perfection. As one of the most reputable suppliers of PPR-C pipes and fittings, Radiatech is committed to enhancing sustainability within the pipe and fittings industry—an essential factor for ensuring both quality and safety.

With over five years of industry experience, Radiatech offers a comprehensive range of PPR-C pipes in sizes from 16 mm to 315 mm and pressure ratings from PN 6 to PN 20. All fittings fully comply with DIN 16962 standards, ensuring durability and reliability.

Radiatech's PPR-C pipes and fittings are an excellent alternative to conventional piping systems and are ideal for applications including hot and cold water distribution, compressed air systems, chemical supply lines, and clean water networks.

PROPERTIES

* Resistance to high temperature (95°C). • No Reaction with salts & Acids. Extremely long life, 50 years of service life. • Good chemical resistance. Physically neutral. • Leak proof & frost proof.
* Smooth inner surface.
* Very Low Frictional Factor (1.5. Ft/ 100 Ft)
* Low laying time & cost.
* Sound insulation.

UV Stabilized PPR-C Top layer:

Numerous chemical characteristics found in UV stabilizers provide protection from UV radiation through a variety of chemical processes.

2. Although colors like black and green are already quite resistant to UV radiation, adding UV stabilizers makes the light even better.
3. The product's thermal stability.
4. UV stabilizers extend the product's life and provide long-term durability.

Anti-microbial PPR-C Inner Layer

the anti-microbial layer stops bacteria, algae, microorganisms, etc. from growing within the pipe, it may be used for any application involving clean water or liquid food supply.

Fields of Application

* Hot/Cold Water Supply
* Chemical Plants
* Cooling Towers & Condensor Lines
* Chilled Water Supply
* Pharmaceutical Industries (USDA Approved)
* Effluent/ Water/Sewage Treatment Plants
* RO Drinking Water Plant
* Solar Water Heater
* Fire Application

HOT & COLD WATER SUPPLY :

- CHILLING PLANTS
- PROCESS COOLING LINES
- COOLING TOWERS
- CONDENSOR UNITS
- DATA CENTER COOLING SYSTEM

CLEAN WATER SUPPLY :

- DRINKING WATER
- PLUMBING APPLICATION
- DM WATER
- SOLAR WATER HEATER
- LIQUID FOOD SUPPLY

CHEMICAL SUPPLY:

- CHEMICAL PLANTS
- EFFLUENT TREATMENT PLANTS
- SEWAGE TREATMENT PLANTS
- WATER TREATMENT PLANTS

AIR APPLICATIONS:

- COMPRESSED AIR
- NITROGEN AIR
- OXYGEN AIR
- VACUUM LINE

TECHNICAL AND COMMERCIAL COMPARISON

Properties	PPR-C	GI	Copper	CPVC	Aluminium
Service Life (Years)	50 Years Plus	2 - 5 Years	10-25 Years	20-30 Years	20-30 Years
Temperature Resistance	Very Good	Excellent	Excellent	Good	Poor
Food Grade	Exellent, Hygienic	Non - Hygienic	Non - Hygienic	Non - Hygienic	Non - Hygienic
Heat Loss	Negligible - Very	Very High	Very High	Moderate	High
Chemical Resistance	Excellent	Very Weak	Weak	Good	Weak
Maximum Safe Working Temp 'C'	100	High	High	80	High
Easiness in Repair / Maintenance	Easy / Nil	Huge Cost	Huge Cost	Expensive	Very Expensive
Corrosion / Abrasion Resistance	Excellent	Very Low	Very Low	Moderate	Good
Friction Factor	Very Low	High	High	Low	Moderate
Reliability	Very Good	Poor	Ok / Expensive	Average	Moderate
Joint Reliability / Leak Proof (Max : 100, Min:0)	100	0 - 50	0 - 50	0 - 80	0 - 50
Jointing Method	Simple Heat Fusion	Conventional	Conventional	Special Solvent Chemical	O - Ring
Jointing Skill	Very Simple & Can be done by Unskilled labour	Needs Skilled Labour	Needs Skilled Labour	Need Special attention & Skilled Labour	Need Special attention & Skilled Labour
Jointing Time	Few Seconds	Few Hrs	Few Hrs	Few Minutes	Few Minutes
Jointing Life Commissioning	Immediate	24 Hours	24 Hours	24 Hours	24 Hours
Easiness in Fittings	Very Easy	Difficult	Difficult	Easy	Ok
Laying (Easiest = 100 & Hardest = 0)	100	0 - 50	0 - 50	0 - 80	0 - 50
Electrical Conductivity	Nil	More	More	Nil	More

RESISTANCE TO CHEMICAL

ANALYZED MATERIAL	CONCENTRATION	ANALYZED MATERIAL	CONCENTRATION
Acetone	100	Cyclohexan	100
Acetic anhydride	100	Heptane	100
Acetic acid	100	Cyclohexanol	100
Ammonia gas	100	Ethyl Acetate	100
Aniline	100	Diethyl Ether	100
Benzaldehyde	100	Dimethyl formaide	100
Benzoid acid	100	Diossano	100
Benzol	100	Ethyl Alcahol	100
Benzoyl chloride	100	Ethyl Bebzol	100
Boric acid	100	Ethyl Chloride	100
Bromine (liquid)	100	Ethyl Hexanol	100
Butane liquid	100	Glycerine	100
Butane gas	100	Glycolic Acid	100
Butter	100	Hexane	100
Gas	100	Iso Octane	100
Carbon, tetrachloride	100	Iso Propylic Alcohol	100
Chlorine, liquid	100	Mercury	100
Chlorine, dry gas	100	Methanol	100
Chlorine, wet gas	100	Methyl Chloride	100
Chloroform	100	Oil	100
Chlorosulfonic, acid	100	Oil Ether	100

PPR-C pipes and fittings are easy to join, and the end result is an inseparable watertight union. In order to fuse the material of the pipe and the fitting together, a basic welding machine is used to fuse the fitting's internal surface with the pipe's exterior surface.

STEP 1

STEP 2

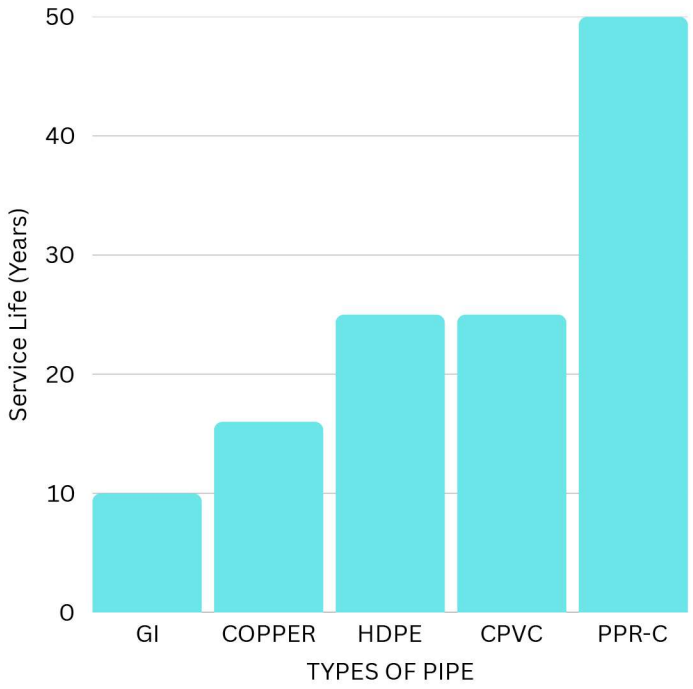
STEP 3

The steps involved in the welding process are described below :

Fit the welding dies of the desired diameters into the welding machine to get it ready. After inserting the plug into the 220V power supply socket, watch for the machine's green light to go out, signifying that the welding machine has reached operating temperature.

1. Using an appropriate pipe cutter, cut the pipe at a right angle to its axis.
2. Deburr the cutting area to get rid of burrs and cutting chips.
3. Using the appropriate marker, indicate the pipe's welding depth.
4. To reach the designated welding depth, insert the pipe end without turning into the heating sleeve.
5. At the same time, slide the fitting up to the stop without turning into the opposite side of the heating tool. Observing the specified heating times is crucial (see the table below).
6. Til the allotted heating time has passed, leave the pipe and fitting in the heating tool.
7. After the heating period is over, take the pipe and fitting out of the heating tool and press them up against one another right away until the welding depth mark is reached.
8. At this point, the welding bead will cover the depth mark.
9. Avoid rotating the pipe and fitting in relation to one another during this procedure. Before using, let the joint cool completely.

LIFE SPAN OF PPR PIPES



Expected Lifespan of PPR Pipes

- Cold Water Applications → Lifespan 50+ years
- Hot Water Applications → Lifespan 30–50 years
- Industrial Use → Lifespan 25–40 years

Key Factors Affecting PPR Pipe Longevity

(A) Temperature Resistance

(B) Pressure Resistance

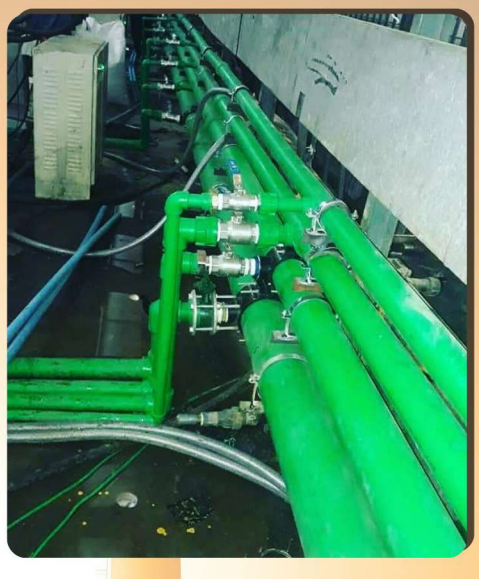
(C) Corrosion and Chemical Resistance

(D) Water Quality and Scaling

(E) Installation and Maintenance

PRODUCT INSTALLATION









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