Fusion-Tech Pipe
Multi-Layer Pipe
Safety-Pol Fittings

Professional PP-R Fusion Pipe Solutions for Fluid Handling Systems since 1985
In launching aquatechnik® in North America, it is clear that this proven flame-free PP-RCT fusion pipe installation will quickly emerge as a preferred alternative to conventional soldering and welding methods.

The new aquatechnik North America team believes that building owners, engineers, architects and mechanical contractors in HVAC and other sectors will welcome a versatile green building product that is safer, more affordable, easier and faster to install in a wide range of applications — always promising decades of reliable performance.

Welcome to the future of aquatechnik® PP-RCT fusion pipe quality and reliability.
Fusion-Tech Pipe

Advantages
- Resistant to lime, cement, plaster and electro-chemical reaction.
- Economical quick-and-easy installation.

Applications
Sanitary systems, domestic plumbing, heating/cooling, industrial, food grade (pending) and non-food grade fluid transport.

FUSION-TECH PIPE FIELDS OF APPLICATION

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<th>PLUMBING SYSTEMS</th>
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<th>RAIN WATER COLLECTION</th>
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<td>faser FIBER-T</td>
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<td>Violet Pipe</td>
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<td>Red-Striped Pipe</td>
<td>Grey-Striped Pipe</td>
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HEATING SYSTEMS       Yes       Yes       No
CHILLED WATER SYSTEMS Yes       Yes       No
MARINE APPLICATIONS   Yes       Yes       Yes
RAINWATER COLLECTION  No        No        Yes
COMPRRESSED AIR SYSTEMS Yes       Yes       No
IN-FLOOR HEATING      Yes       Yes       No
CHEMICAL APPLICATION  Consult Factory Consult Factory No
POTABLE WATER*        Yes       No        No
FOOD GRADE            Pending   No        No
FIRE PROTECTION       Pending   Pending  No
UNDERGROUND APPLICATIONS Yes       Yes       No
IRRIGATION            No        No        Yes

Notes: * Blue-Striped Pipe is used for potable cold water only. For all other applications, please consult your aquatechnik® PP-RCT fusion pipe distributor. aquatechnik® Fusion-tech pipe and fittings are certified to NSF/ANSI Standards 14, 51, 61 and 372.
Socket Fusion Welding

Socket welding is generally used with pipe/fitting diameters of ½” through 4”. This is a widely used technique for joining plastic piping systems using injection moulded fittings. The operating principles are straightforward, with the welding cycle basically consisting of a heating phase and a cooling/welding phase. To obtain a proper fusion, be sure to cut and mark the pipe to the proper depth. The pipe and fitting are heated for a specified period of time, after which the pipe is inserted into the fitting to cool.

Butt Fusion Welding

This technique is generally used for pipe and fittings ranging from 6” and larger. The process involves the joining of plain-end pipe with plain-end fittings. The pipe and fittings are heated while being pressed against a “heated plate” for a specified period of time. The heat is absorbed into the pipe and fitting, allowing them to weld together, and then cooled. Welding and cooling time is determined by the pipe diameter and wall thickness.
The electrofusion process involves the use of moulded socket fittings containing an electric heating coil. The pipe ends are inserted into the sockets and clamped. An electrical current is then passed through the coil for a pre-set time. Heating of the surrounding plastic and heat transfer to the pipe wall then takes place. This process is commonly used where space is limited and/or lateral pipe movement is not possible.

This method may be used as an alternative to using reducing tees. The fusion outlets can be fused to the outside of the pipe with ease. Fusion outlets are socket fused using welding heads and heating irons.

The main features of the safety-pol system are:
- patented aquatechnik® tools flare the pipe around the fitting to maintain precise inside diameters of the fittings, reducing pressure drops throughout the fittings
- the pipe is locked on the fitting by a tight collar/cap connection, but can be unlocked and used again.
Multi-Layer Pipe

Multi-Layer PEX-AL-PEX

Range
From Ø ½” to 2½”

Use
Transport of hot/cold, potable and non-potable fluids with maximum working temperature/pressure 203°F/145psi

Applications
Domestic plumbing, heating/cooling, industrial, food grade and non-food grade fluid transport

Advantages
■ Extremely flexible
■ High working temperature and pressure
■ Chemically safe and stable for food-grade fluids
■ Non-corrosive
■ Leader in high flow rates and low pressure drops
■ Economical quick-and-easy installation
■ Impermeable to oxygenated fluids

Multi-Layer PEX-AL-PE-HD

Range
From Ø ½” to 1”

Use
Transport of hot/cold and non-potable fluids with maximum working temperature/pressure 203°F/145psi

Applications
Heating/cooling, industrial and non-food grade fluids transport

Advantages
■ Extremely flexible
■ High working temperature and pressure
■ Chemically safe and stable for food-grade fluids
■ Non-corrosive
■ Leader in high flow rates and low pressure drops
■ Economical quick-and-easy installation
■ Impermeable to oxygenated fluids
■ Excellent price/product value

Polipert

PE-RT pipe with an EVOH oxygen barrier

Range
From Ø ½” to ¼ ”

Use
Heating systems

Applications
Heating systems with radiators, conditioning systems and floor heating/cooling systems for industrial and community structures

Advantages
■ Simple and safe connections for in-wall and free-hanging installations
■ Extremely flexible
■ Easy laying operations
■ Long life and reliability of systems
■ Non-corrosive
■ Extremely flexible using the aquatechnik® coupling tool
■ Economical quick-and-easy installation
■ Impermeable to oxygenated fluids
■ Excellent price/product value
■ Less processing waste when used with safety fittings
Safety®-Pol Fittings

Patented fittings of PPSU with PAM caps

The safety-pol fittings are the product of continuous technical innovation and research, which are an integral to aquatechnik® success. This new range was designed and patented by the aquatechnik® group spa to reach the highest safety standards regarding the connection of in-wall multi-layer pipe installations.

The main features of the safety-pol system are:
- patented aquatechnik® tools flare the pipe around the fitting to maintain precise inside diameters of the fittings, reducing pressure drops throughout the fittings
- the pipe is locked on the fitting by a tight collar/cap connection, but can be unlocked and used again.

The idea to develop the safety-pol fittings came from the decision to increase the flow – consequently decreasing pressure drops and friction - making a greater diameter socket on the pipe head for the connection.

The project has been carried out step by step, going through all necessary tests and paying great attention to reliability factors for its in-wall piping use.

The industrial production began only after receiving certifications from international authorities for the whole range and its dedicated accessories.

The socket on the pipe head is made by special tool that ensure a quick, reliable and safe connection.

Range
From Ø ½” to 2½”

Use
Transport of hot/cold fluid and non-potable fluids with maximum working temperature/pressure 203°F/145psi

Applications
Heating/cooling and industrial fluid transport

Advantages
- Simple and safe connections for in-wall installations
- High impact-resistant
- High flow rates and low pressure drops
- Quick-and-easy installation
- Possibility to unlock fittings for re-use
- Resistant to lime, cement, plaster and electro-chemical reaction
- Low cost and economical dedicated tools
- Less waste by re-using fittings