

# PE Electrofusion Systems for Gas Applications



## GAS AND ELECTROFUSION SYSTEMS

- Exposed coil design
- Extra-wide fusion zones
- No alignment clamps
- The industry's strongest, most reliable sealed joint
- Exceeds industry standards



Engineered Smarter™



# How has Friatec earned the municipal gas industry's seal of approval?

## With a smarter engineered electrofusion system.



As the leading North American specialist in the installation and repair of polyethylene pipe for the gas industry, at Friatec we know PE joining better than anyone. So it's no surprise we've come up with a smarter engineered electrofusion system that produces the industry's strongest, most reliable joint seal. In fact, Friatec fittings are tested at 1.5 times the gas industry's maximum allowable operating pressure (MAOP) of 125 psi, exceeding ASTM requirements.



**“Exposed Coil” Design.** Unlike the competing embedded coil technology fitting, which has to heat the entire coupling, Friatec's unique “exposed coil” melts the fitting and pipe surfaces directly, sinking into the pipe to form a leak-proof bond.

**Extra Wide Fusion Zones.** Friatec electrofusion fittings are designed with extra wide fusion zones that provide greater contact area, further increasing the integrity of the bond between coupling and pipe.

**No Alignment Clamps.** Friatec is also easier to use. In our state-of-the-art facilities, Friatec fittings are manufactured smarter to closer tolerances. Their high dimensional uniformity ensures a precise fit around the pipe, eliminating joint deflection during fusion and the need for expensive alignment clamps, commonly required with competing systems.



### Faster, easier installation

Thanks to Friatec's portable “FRIAMAT® II” universal electrofusion processor, installation is quick and easy. It can be performed right in the trench, where space is extremely limited.

For trackability, the barcode label of each coupling is also scanned with FRIAMAT® II's reader wand. FRIAMAT® II automatically determines the best electrical current and fusing time required. And most importantly, the

FRIAMAT® II is more:

- **Reliable:** because it uses electricity to distribute heat uniformly around the fitting for a more uniformly sealed joint.
- **Repeatable:** as it automatically adjusts processing parameters for each fitting by accounting for the job-site conditions, such as ambient temperature, eliminating human error and ensuring that the seal is precisely to specification, every time!
- **Verifiable:** because it generates a fusion report for each fitting, empowering contractors with instant verification of seal integrity and comprehensive documentation for archiving.

MB  
2"

# Couplings and Fittings

## Providing the widest range of coupling sizes available today!

Some of the unique advantages of our fittings include:

- Suitability for tough building-site conditions
- No alignment or clamping tools necessary
- Thick center walls (15-30% thicker than SDR 11 pipe)
- Wide fusion zones (at least 35% of OD)
- Barcode labeled for automatic fusion
- Can be re-fused in case of electrical power interruption
- Identification molded into fitting
- Large diameter fittings up to 28" IPS



## Iron Pipe Sizes (IPS) and Copper Tube Sizes (CTS) Fittings

### ASTM Approved

Friatec fittings are often the only way to make a safe, durable joint in polyethylene pipe. Friatec fittings are made of PE 3408. We offer a range of sizes that no other manufacturer can match—up to 28 inches.

Friatec exceeds the industry standard of 100 psi for IPS and CTS fittings. This provides an additional safety factor for gas piping systems.



## Saddles

Friatec Molded Saddle Fittings may be clamped onto pipes up to SDR 9 and sealed using electrofusion. In addition to house connection fittings, Friatec Molded Saddle Fittings can also be used as branch saddles for polyethylene relining pipes (U-liners, C-liners, Roll-down).

Benefits include:

- universal compatibility with various diameters of polyethylene pipe from 3" up to 28"
- quick, easy and safe assembly



### SA Branch Saddle

- Available with either a 2" or 3" outlet

## Tapping Tees

The design of the Friatec tee leads the electrofusion industry. They're the right solution for fast and safe installation of service and branch pipe.

### DAA High Pressure Tapping Tees

- Hot tapping tee designed for leakproof installation under pressure up to 145 psi
- Easily to assemble—no rounding clamps or special tools
- Cutter and sleeve made of brass
- Brass guide allows easy cutting of thick wall pipe
- Lower and upper "cutter stops" prevent overcutting as well as accidental removal of cutter
- Threaded plug with o-ring seal
- Corrosion-proof construction



### DAS II Tapping Tees

- Top loading
- High volume
- Self-tapping tee
- Internal cutter blade that is the largest on the market



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Name

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**Company classification**

- Architect/Design Firm
- Builder/Developer
- Contractor
- Distributor/Wholesaler
- Engineering Firm
- Government
- OEM – Products manufactured:
- Utility
- Other: \_\_\_\_\_

**Product interests:**

- Couplings
- Large Couplings
- DIP Couplings
- FRIAMAT® II
- DAA Tapping Tees
- VA Service Saddles
- Repair Clamps and Patches
- Molded Saddle Fittings
- SA Branch Saddles
- Pipeline Relining
- Repair Systems
- Scraper Tools
- Accessories and Services

**I would also like to know about other IPEX products:**

- Plumbing and mechanical piping systems
- Electrical or telecommunications piping systems
- Irrigation piping systems
- Municipal piping systems

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# FRIAMAT® II

## FRIAMAT® II Universal Electrofusion Processor

Combines flexibility and practicality into one, easy to operate and transport.



Features include:

- Documentation function
- Connects to your computer, allowing for direct data transfer
- Universal barcode fusion capability

### Other things you should know about FRIAMAT® II

- **Designed for tough building site conditions:**  
Electronics safely protected in a splash-proofed case.
- **Easy to service:**  
Few components, inexpensive maintenance.
- Operating temperature from -4° F to 122° F



# Tools

Friatec provides training and operating instructions for the proper and safe use of all of our installation tools.

## Re-Round Clamps

If the end of a PE pipe is not perfectly round, the coupling will not fit over the end of the pipe. Friatec Re-Round Clamps solve this problem.



## Repair Patches and Clamps

Friatec pipe repair systems are both simple to use and effective for pipe repair up to 28". Our repair systems make use of existing Friatec technology to seal a pipe puncture.



## Scraper Tools

Friatec Scraper tools are designed to assist the installer in producing a quality electrofusion joint.



# Accessories and Services

Products alone rarely provide a successful solution to a problem. It is often the service offered along with new technology that decides how conveniently and to what level of quality the installation can be carried out. Recognizing this, Friatec offers comprehensive services, including:

- On-site training
- On-site instruction
- Technical consultation
- Electrofusion seminars



## SALES AND CUSTOMER SERVICE

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### About the IPEX Group of Companies

As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the world's largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centers across North America, we have established a reputation for product innovation, quality, end-user focus and performance.

Markets served by IPEX group products are:

- Electrical systems
- Telecommunications and utility piping systems
- PVC, CPVC, PP, ABS, PEX, FR-PVDF and PE pipe and fittings (1/4" to 48")
- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- PE Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems

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