

# COMPRESSED AIR AND INERT GAS PIPING SYSTEMS



**Duratec**<sup>®</sup>  
AIRLINE SYSTEM

FOR FOOD & BEVERAGE  
APPLICATIONS



INDUSTRIAL SYSTEMS

## THE PERFORMANCE OF PLASTIC WITH THE STRENGTH OF METAL

- 1/2", 3/4" and 1" sizes
- Operating Pressures 200psi at 73°F,  
160psi at 140°F

  
**IPEX**  
by aliaxis

We build tough products for tough environments<sup>®</sup>

## THE DURATEC ADVANTAGE

Duratec is an innovative compressed air and inert gas distribution system ideally suited for the demanding food and beverage industry and hospitality sector. Meeting NSF and FDA requirements, Duratec is a completely clean pipe and fitting system. Designed to be absolutely leak-proof, installed quickly and easily, and maintained cost-effectively, Duratec saves you time and money.

Traditional metallic compressed air and inert gas systems are a main cause of unnecessary energy use and excessive wear and tear on equipment. The culprits? Corrosion and leakage at pipe joints and fitting connections which often go undetected until they're discovered during a detailed system audit.

Engineered to outperform traditional metal piping systems, Duratec pipe comes in long 100 foot or 300 foot coils, which significantly reduces the number of joints in your system. The Duratec system is secured with durable nickel-plated brass and stainless steel adapter fittings. All fittings feature double o-ring seals to ensure long term joint integrity.

## QUICK INSTALLATION

Cutting and joining Duratec is fast and simple.

1. Cut pipe square using plastic pipe cutter.
2. Slide nut and split ring over pipe and bevel the inside of the pipe by inserting then rotating the beveling tool.
3. Push the fitting into the pipe.
4. Turn the nut finger tight plus one full turn with a wrench.



## APPLICATIONS



- Inert Gas Distribution
- CO<sub>2</sub> Distribution
- Microbulk Inert Gas Delivery Systems
- Plant Air
- Valve Actuation – Control Systems

Duratec uses a unique and cost-effective D1 nickel-plated brass insert fitting for easy connections. All Duratec fittings are protected with a corrosion-resistant, industrial-strength nickel plating and include double o-ring seals ensuring joint integrity. Select fittings are also available in 316 stainless steel.

National CRN 0A02020.2CL\* (Fittings)  
National CRN 0C02020.2CL (Ball Valves)

CSA B51, B137.9

ASTM F1974

ASME B31.3, B31.9

Certified to OSHA  
Safety Regulations



\* Some fittings do not have CRN registration. Contact IPEX Inc. for details.

## FEATURES & BENEFITS

### LOW INSTALLATION COSTS

Duratec reduces costs on a typical installation not only for materials but also for labour and transportation costs when compared to traditional materials. How? Duratec's lightweight construction and simple assembly procedures which include:

- ✓ **Ease of Handling**  
Duratec is 75% lighter than the equivalent diameter of copper and SCH 40 carbon steel.
- ✓ **Quick Removable Connections**  
Threading is not required. All joints have double o-ring seals and can be quickly assembled or disassembled. Easy on-site modifications and repairs can be made.
- ✓ **Quick Installation**  
No special training or equipment is required to complete a Duratec system.
- ✓ **Fewer Fittings**  
Duratec pipe comes in convenient 100 ft. and 300 ft. coils eliminating several joints and the need for threading, or soldering.
- ✓ **Flexible Yet Rigid**  
Due to its composite structure, Duratec pipe can be easily bent by hand and will maintain its desired shape. This unique feature allows for straight, professional looking installation and eliminates sagging.

### LOWER OPERATING COSTS

Due to Duratec's advantages over metal systems, it costs you less time, labour and money to keep a Duratec system in optimal condition.

- ✓ **Pressure loss means money loss**  
Metal systems can lose pressure due to pin-hole leaks and leakage at connections, all of which result in increased energy costs. Duratec's high-quality construction, on the other hand, guarantees consistent pressure for years to come.
- ✓ **Smooth Interior**  
Less friction means lower pressure drops and higher flow rates. This may allow for smaller pipe sizes to be used.

### EXTENDED LIFE

Duratec is designed not to rust, scale or pit. Once properly selected for the application and correctly installed, Duratec Airline Systems will provide years of maintenance-free service because they are:

- ✓ **Corrosion Resistant**  
Duratec's tough outer PE-RT (Polyethylene of Raised Temperature) layer protects it against corrosion and deterioration and ensures long service life even in the most aggressive manufacturing environments. Its inner PE-RT layer meets stringent NSF and FDA requirements and is unaffected by inert gases. With a choice of long-lasting nickel-plated brass fittings or 316 stainless steel adapters, the system provides long-term performance superior to traditional metal piping systems.
- ✓ **Clean**  
All Duratec pipe is packaged in cardboard boxes preventing contamination before use. The smooth PE-RT inner layer cannot rust, corrode or form loose scale. Clean air remains clean throughout the life of the system.
- ✓ **Safe**  
Duratec's unique composite construction means that accidental impact or puncture of the pipe results in a safe, ductile mode of failure. Duratec pipe has been third-party tested and certified to stringent OSHA safety requirements, standards that guarantee safety comes first.  
  
IPEX engineered Duratec pipe and fittings to provide top-notch performance. Rated for long term continuous operating pressures of 200psi at 73°F and 160psi at 140°F, Duratec pipe and fitting assemblies are also capable of sustaining quick burst pressures in excess of 800psi. This built-in safety factor ensures system performance and provides peace of mind for designers and facility managers.



## SALES AND CUSTOMER SERVICE

IPEX Inc.  
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ipexna.com

### 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 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
- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings

Products manufactured by IPEX Inc.  
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A policy of ongoing product improvement is maintained. This may result in modifications of features and/or specifications without notice.

