Railroad Braking System Case Study

ASAHI/AMERICA®
Your Experts in Plastics™

Background

Asahi/America's Air-Pro® HDPE piping system was developed in 1992 to meet OSHA requirements to safely transport compressed air. Since its development, Air-Pro® has been the specified pipeline for major railroad, airline, auto and other high-end manufacturers with extremely demanding applications. Air-Pro® continues to provide long-term safety for compressed gases up to 230psi.

Problem

A rail-based freight transportation company was having problems with a corroding air brake system. The company faced thousands of feet of failing pipelines. Their system failed due to its inability to withstand the application's physical and environmental demands. The company had to find the right piping system that was rugged, durable, corrosion resistant and cost effective. Asahi/America had what they needed.

Solution

Air-Pro® compressed air piping system was the solution. It has a proven track record in the railroad industry. It does not rust or degrade when buried underground and, therefore, will not develop leaks.

Air-Pro®'s heat fusion joining method made it extremely easy and economical to construct a completely leak-free system, saving on costs as well as installation, maintenance and material costs. Thus, Air-Pro® piping system was the ideal piping replacement in this demanding and corrosive railroad environment.

Pictured: The existing corroded rail air brake system, replaced with Asahi/America's Air-Pro®.

Asahi Advantage

- Low-cost maintenance and installation
- Leak-free performance
- Butt, socket or electrofusion joining methods
- Air-Pro® has high mechanical strength and superior impact resistance
- Start-to-finish project assistance from specification, weld training and installation

Ideal Applications

- Compressed air

Other Asahi Pipe Offerings

Visit our website at **www.asahi-america.com** to view other piping systems options.

Year of installation: 2007

Applied Products

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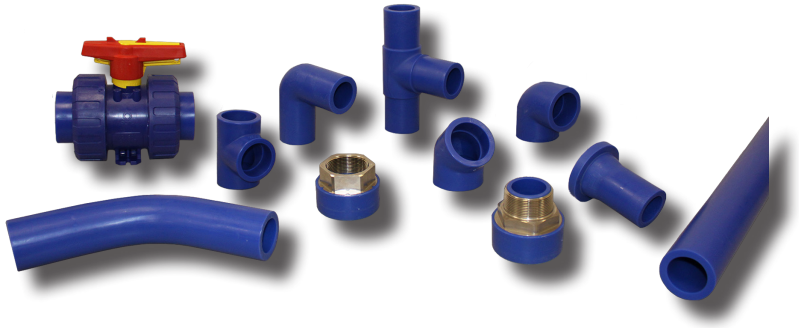
Air-Pro® Compressed Air Piping System

Features and Benefits

- Increased compressor efficiency due to low friction
- Thermal fusion is more reliable than welded, soldered or mechanical joints
- Lightweight materials reduce transportation costs
- Wide temperature range (-40°F to 140°F)
- Excellent chemical resistance
- High pressure capacity (230psi at 68°F)
- Ideally suited for horizontal directional drilling and underground buried applications
- Compatible with all compressor lubricants



AIR-PRO®
Compressed Air Piping

Pipe and Fittings

- 20 - 110mm (1/2” - 4”) SDR 7.4, 230psi
- 160 - 315mm (6” - 12”) SDR 11, 150psi

Seals and O-Rings

- FKM

Valves

- Ball Valves
- Tapping Saddles

Welding Methods

Air-Pro® Compressed Air Piping System

Developed in 1992, Air-Pro® piping system has been installed with confidence for over 25 years in industries as varied as airplane manufacturing, hospitals and railroad yards. Air-Pro® revolutionized the use of thermoplastics for air transport. Unlike PVC systems, Air-Pro® meets the requirements set by California OSHA Unfired Pressure Vessel Safety Order 462 (m) (3).

Engineers and designers continue to exclusively specify Air-Pro® due to its reliability, large size range, ease of installation and low cost of ownership. Air-Pro® includes all necessary adapters to transition from existing, failing metal or ABS systems.