

## Background

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



## Problem

An airplane manufacturer in Washington state needed more than 10,000 feet of 6" compressed air piping for an underground installation between workshops and along its test runways. The compressed air would be utilized for pneumatic tools used to assemble an aircraft. The pipeline would have smaller diameter branches transitioning above ground going to point-of-use stations from the larger main run.

Washington state experiences a wide range of weather fluctuations that can result in condensation in piping systems. Depending on how corrosive the air is, metal piping systems could require cleaning and descaling every five to ten years. Given the nature of the project, the

piping system would also be exposed to vibration from air traffic and from continual use of pneumatic equipment.

## Solution

Air-Pro<sup>®</sup> is a specially blended PE designed to resist corrosion internally from compressor lubrication as well as scaling due to humidity. Air-Pro<sup>®</sup> can be installed underground without consideration for cathodic protection like metal systems. Air-Pro<sup>®</sup> won't rust internally and, therefore, won't transmit rust from the pipeline to the high-end manufactured components. Air-Pro<sup>®</sup> is the only thermoplastic system designed for compressed air down to freezing temperatures.

## Asahi Advantage

- Low-cost maintenance and installation
- Leak-free performance
- Butt, socket or electrofusion joining methods
- Start-to-finish project assistance from specification, weld training and installation

## Ideal Applications

- Compressed air

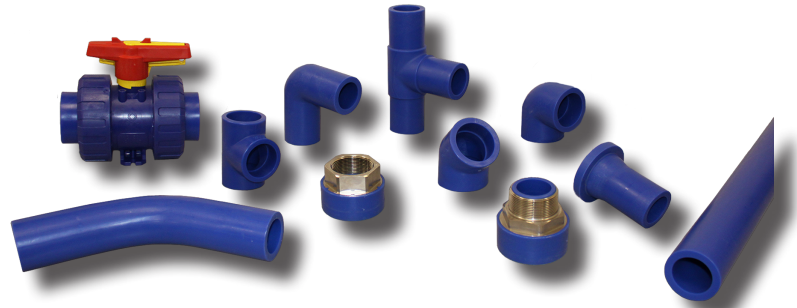
## Other Asahi Pipe Offerings

Visit our website at [www.asahi-america.com](http://www.asahi-america.com) to view other piping systems options.

## Air-Pro<sup>®</sup> Compressed Air Piping System

### Features and Benefits

- Increased compressor efficiency due to low friction
- Thermal fusion is more reliable than compression fittings on aluminum systems
- Lightweight materials reduce transportation costs
- Wide temperature range (-40°F to 140°F)
- Excellent chemical resistance
- High pressure load resistance (230psi at 68°F)
- Rodent and bacteria resistant
- Acceptable for high pressure water use (320psi at 68°F)



**AIR-PRO**<sup>®</sup>  
Compressed Air Piping

### Pipe and Fittings

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

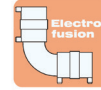
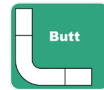
### Valves

- Ball Valves
- Tapping Saddles

### Seals and O-Rings

- FKM

### Welding Methods



## Air-Pro<sup>®</sup> Compressed Air Piping System

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

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

**Another  
Corrosion  
Problem  
Solved.**<sup>™</sup>