

## **GASCalc™ Training Class**

Title: Introduction To GASCalc 5.0

Level: Basic/Beginner

Industry Sector: Any Gas Piping Systems

**Duration:** Approximately 1.5 day

This course is intended for the occasional or regular User of the GASCalc software. The course will cover an introduction to the routines and features available in the latest version of the GASCalc software, with examples for various types of piping systems. Examples may include applications associated with distribution, transmission, gathering, or fuel piping type systems.

The course consists of both classroom and extensive hands-on training, allowing the student to gain an understanding of both the concepts and functional operation of performing calculations using the GASCalc software. Topics to be covered will include:

- An introductory review of applicable functions and features found in the latest version of the software
- Students will work through several calculation examples including:
  - Gas Properties
  - Atmospheric Pressure
  - Pressure Factors
  - Pipe Sizing
  - Steel & Plastic Pipe Design Formula
  - Hoop Stress
  - Blowdown Time
  - External Loading
  - Thermal Expansion
  - Regulator Station Overpressure Protection Monitors & Relief Valves
  - Meter Sizing
  - Service Line Sizing
  - Gas Loss From Damage
  - Unit/Energy Conversions
- Working with the various property tables.
- Student suggested topics and example models.

Attendees should have a basic understanding of using Windows based software applications. Although general system design and operation topics will be discussed during the course, the course itself is not intended to provide detailed training in these topics. The attendee should have a basic understanding of the operation and design of natural gas piping systems. Students are encouraged to bring example models/problems. A portion of the class time will be set aside for working with student examples and specific topics of interest.

