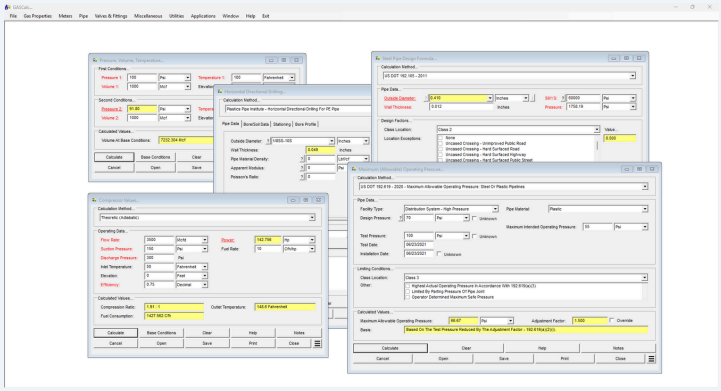
TECHNICAL TOOLBOXES

GASCalc™



Our extensive suite of tools for sizing, designing, and analyzing nearly every component of a gas piping system built for utilities and pipeline operators.

GASCalc™ is now part of the Technical Toolboxes product lineup, following our acquisition of the GASCalc™ software assets from B3PE LLC.

This trusted application has supported gas utility professionals, engineers, and pipeline operators for decades by delivering reliable gas property and flow calculations that meet regulatory and engineering standards. From simple pressure drop calculations to complex gas blending, GASCalc™ offers more than 80 industry-standard tools to help you model, size, and analyze nearly every component of a gas piping system.

Whether you're calculating MAOP for buried steel pipe, sizing a regulator or relief valve, blending gases to simulate field conditions, or assessing heat transfer through buried pipeline, GASCalc™ gives you the clarity and confidence to move forward, faster. Designed for field-ready analysis and audit-ready documentation, it's ideal for everything from design and operations to compliance, training, and system troubleshooting.

You get the same dependable functionality trusted by gas engineers for over 30 years, now backed by the support, integration, and innovation of Technical Toolboxes.

KEY FEATURES

- **Built in Standards & Accuracy:** Use rigorously validated equations from ASME B31.8, US DOT 192, CSA Z662, AGA 3, 7, 8, 10, PPI, API 520, API 1117, and more. Gas property calculations include AGA 8 and GERG equations for precision you can trust.
- **Gas Blending & Visual Modeling:** Model complex gas mixtures with visual tools to detect critical points, analyze pressure-temperature behavior, and compare custom blends under various conditions.
- **Instant Workflow Efficiency:** Export-ready results, customizable units (SI or Imperial), and reusable blend libraries make it easy to maintain records, support audits, and accelerate design reviews.

GASCALC™ APPLICATIONS

Pipe - Pipe Flow

Calculate flow rates, velocities, Reynolds number, and pressure drops using multiple equations for compressible and non-compressible flow

Pipe - MAOP / MOP

Determine Maximum Allowable and Maximum Operating Pressures with built-in safety and compliance standards

Valves & Fittings

Analyze pressure drops and flow coefficients (Cv) across a wide range of valve types and fittings with user-defined scenarios

Gas Properties

- Calculate gas compressibility (Z-Factor), density, viscosity, and thermal properties for custom or standard gas blends
- View P-V-T diagrams and critical point detection for deeper understanding of gas performance under operational conditions

FIND OUT MORE

Learn more about GASCalc's functionality and schedule a demo to see it in action.

ABOUT TECHNICAL TOOLBOXES

Technical Toolboxes is the global leader of integrity analytics for pipelines to help solve the growing, complex challenges they face across crossings, corrosion, welding, and more. Our modern software platform provides a simple way to get the most accurate pipeline engineering calculations so that you can increase team productivity and improve compliance while decreasing risk. We enable energy companies to move away from rudimentary calculations and processes to a world of fast, secure, scalable pipeline insights you can trust.

To learn more about Technical Toolboxes and the Pipeline HUB, go to www.technicaltoolboxes.com.