taking the pressure out of fluid flow calculations

SOFTWARE OVERVIEW

Pipe Flow Wizard is a software application that helps engineers to calculate flow rates, pressure losses, and pipe diameters.

It calculates results for an individual pipe, allowing for the inclusion of valves, fittings, bends, and changes in elevation.

LIQUID & GAS CALCULATIONS

Pipe Flow Wizard allows users to quickly and easily perform 'What If?' calculations to:

- Find Pressure Drop
- Find Flow Rate
- Find Diameter
- Find Length

The software contains a non-compressible calculation engine for liquids, based on Colebrook-White friction factors and the Darcy-Weisbach equation.

It also has a compressible isothermal gas flow calculation engine that comes with the ability to use the General Flow, Complete Isothermal, IGT, AGA, Panhandle A, Panhandle B, and Weymouth equations.

Steel (A	⊙Find	Diameter	🖴 🖬 🛒 🚟
Internal Rou 0.045999	Steel (Al Sch. 40	⊘FindF	low 🚔 🖬 🖷
Internal Dia	Internal Rou 0.045999	Steel (Al Sch. 40	③FindPressure
26.6446	Length (No	Internal Rou	Steel (ANSI) Sch. 40
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0	Elevation Ch	Internal Dian	0.045999 × mm ~ Pipe
Fluid	0	20.0440	Internal Diameter
Air (20°C)	Fluid	Length (No F	26.6446 × mm ∽ ⊐ Diam.
۵	Air (20°C)	10	Length (No Fittings)
Density: Viscosity	۵	Elevation Ch.	10 × m × 🛃 Fittings
Flow 🕨 (St	Density Viscosity	-	Elevation Change
2.007293	Flow (Standa	Fluid	0 × m ~ 1 Rise ~
Pressure Los	2.007392	Air (20°C)	Fluid
0.000083		@	Air (20°C)
	Pressure Los	Density Viscosity	@ 0 × bar g ~ @ Options
		Pressure Los	Density 1.204 kg/m³ General Iso. Viscosity 0.018 Centipoise Z = 1
		0.156612	Flow (Standard Volume)
			2.007293 × SCMH × Gas Flow ×



PIPES & FITTINGS

The Pipe Flow Wizard software comes with a standard database of fluids, pipe materials, pipe sizes & pipe fittings.

Users can also add their own fluids, pipes, and fittings.

MULTI-PLATFORM

PCs, Macs, iPads, & iPhones.



Calculate results using your mobile device or in the office using your Mac or PC.

- Quick Calculations
- Create PDF Reports
- Create Excel Reports
- Share & Send Results

The user interface and data files are consistent across all platforms allowing ease of use and sharing across devices.

Create and send PDF reports containing detailed result data, direct from your mobile.

FREE TRIAL

For Windows and Mac: www.pipeflow.com/wizard

For iPad & iPhone:



SOFTWARE LICENSE

Licenses for desktop computers are separate to licenses for mobile devices.

Windows & Mac licenses: Buy at PipeFlow.com

iPad and iPhone licenses: Buy on the App Store

Pipe Flow Software is used in over 100 countries worldwide.

Customer Testimonials:

"Great Software, Superlative Service"

National Research Council, Canada

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RESULTS & REPORTS

The Pipe Flow Wizard software can display results for:

ppe+

- Flow Type
- Reynolds Number
- Friction Factor
- Friction Loss
- Fitting Loss
- Elevation Loss
- Fluid Velocity
- Entry / Exit Pressure
- Entry / Exit Flow
- Calculated Pressure Drop
- Calculated Flow (Volume & Mass)
- Calculated Pipe Diameter
- Calculated Pipe Length

Expandable sub sections make it easy to configure and customize the results you display.

Pipe Flow Wizard allows you to create and share professional Excel and PDF reports.



RESULTS VERIFICATION

The Find Pressure, Find Flow, Find Diameter and Find Length results produced by the Pipe Flow Wizard software have been verified against published data from over 50 separate calculation problems, and these are available in a PDF document on the Results Verification menu.

SAVE TIME AND AVOID HEADACHES

Get rid of the headache that comes with setting up complicated spreadsheets and avoid calculation errors.

Pipe Flow Wizard will save you time and give others confidence in your documented calculation results.

○ pipefLow® wizard

SindPressure 🗁 🔚 🔜 123 Results 🛄 📮 🛅 X Calc. Method Darcy-Weisbach Material Steel (ANSI) Schedule / Class Sch. 40 Internal Roughness 0.045999 mm Nominal Size 25 mm Internal Diameter 26.6446 mm Length 100.00 m **Elevation Change** 0.00 m Fluid Vater °C Temperature 20.0 998.0000 Density kg/m³ Viscosity 1.0020 Centipoise **Volume Flow 4.0000** m³/hour Mass Flow 3992.0000 kg/hour Turbulent Flow Type 52884 **Reynolds Number Friction Factor** 0.025709 1.99 Fluid Velocity m/sec Friction Loss 1.911956 bar **Fittings Loss** 4 0.195576 bar Total Entry Loss 0.195576 bar Total Entry K 9.87 25mm x 3 K 2.07 (0.69 x 3) 25mm x 1 K 7.80 (7.80 x 1) Elevation Loss 0.00 bar 2.107533 **Pressure Drop** bar

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