Flow-**X**pert CALCULATION SOFTWARE

FLOW CALCULATIONS AT YOUR FINGERTIPS

Spirit it
A MEMBER OF THE ABB GROUP

Measurement Data: from Well to Awareness
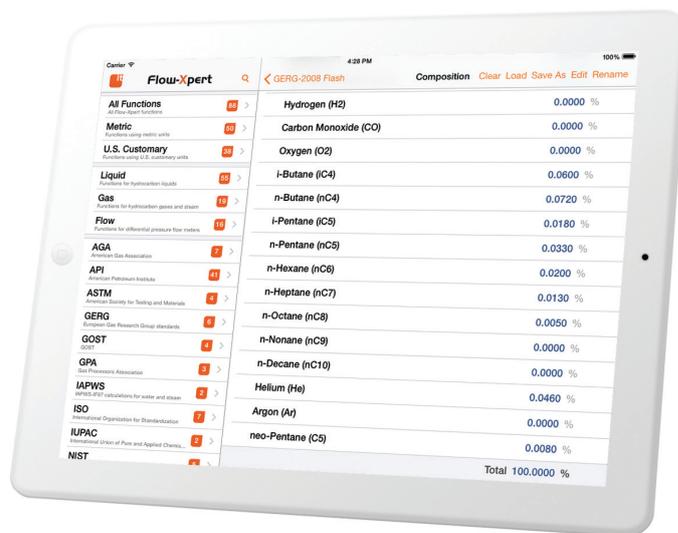
FLOW-XPERT CALCULATION SOFTWARE

Nowadays, a large number of flow measurement calculations is available, in metric and US customary measurement unit variations. Measurement engineers are often challenged to know which type of calculation would best suit their application. They may also need to check or validate a flow computer calculation for compliance.

All too often, these check calculations are produced by engineers themselves, which can require significant development time and resources. Yet always the question remains: Has the system been implemented correctly?

Solving the dilemma with Flow-Xpert

Flow-Xpert provides a comprehensive library of fluid flow calculations and thermodynamic property calculations for measurement engineers. Our regularly updated software includes a wealth of functionality, and is available in two editions: The Flow-Xpert Basic Edition (free of charge) and Flow-Xpert Excel Edition. Both editions contain calculations for liquid, gas and steam, in full compliance with all relevant standards.

COMPREHENSIVE CALCULATION LIBRARY

Spirit IT's Flow-Xpert Calculation Software offers the most comprehensive and complete library on the market to date. The calculations have been verified by many of the world's leading metrology testing agencies, as well as end-user experts in our flow products.

|		Basic Windows PC	Basic Mobile App	Excel Windows PC
Calculations	AGA3, AGA5, AGA8, AGA10, AGA-NX-19	✓	✓	✓
	GERG-2004, GERG-2008, SGERG	✓	✓	✓
	API 11.1 (Tables 5, 6, 23, 24, 53, 54, 59, 60), API 11.2, Historical API 1952 tables, API 11.3.2.1, API 11.3.3.2, API Table E NGL/LPG (TP27)	✓	✓	✓
	ASTM D1550 CTL, D1550 Rel. Density, ASTM D4311M, ASTM D1550, D3588, D411	✓	✓	✓
	GOST8-586	✓	✓	✓
	ISO-5167, ISO-6976	✓	✓	✓
	GPA-2172, GPA-TP15	✓	✓	✓
	IAPWS-IF97 steam and water tables	✓	✓	✓
	NIST-CO2, NIST-Ethylene Viscosity, NIST-1045 Ethylene	✓	✓	✓
	IUPAC Ethylene	✓	✓	✓
	VCone calculations	✓	✓	✓
Features	Comparison of methods (e.g. AGA8 versus GERG-2008)			✓
	Integration of Flow-Xpert functions in custom Excel applications			✓
	Densitometer calculations for Sarasota, Solartron, UGC		✓	✓
	Pre- and user-defined gas compositions	✓	✓	✓
	Email and share calculation results		✓	
	Graphical diplay of calculation results			✓
	Interpolation functionality			✓
	Unit conversion functionality		✓	✓

FLOW-XPERT BASIC EDITION

Flow-Xpert Basic is a free-of-charge Flow and Fluid Property Calculation tool, available for desktop computers (Windows), smartphones and tablets (iOS and Android). This free version can be used to verify single calculations. The Windows desktop version can be downloaded from our website. The Flow-Xpert App for mobile devices is available in the Apple AppStore and the Google PlayStore.

Our Newsfeed option in the Flow-Xpert App keeps you updated regarding our company news, and new product developments.
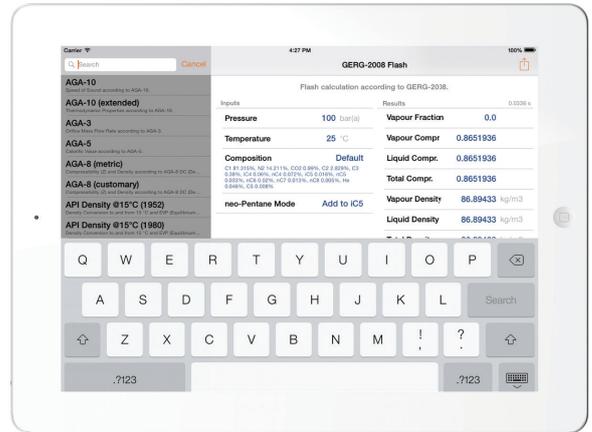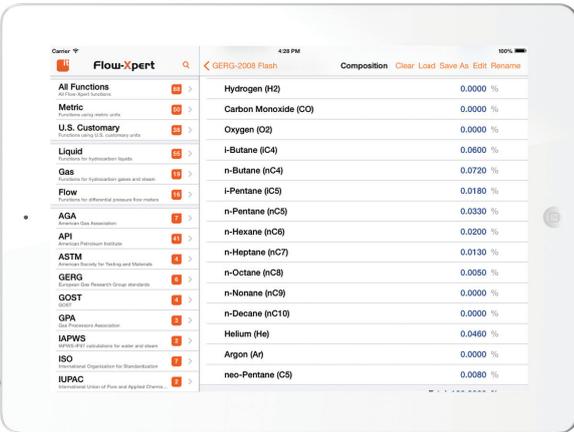
FLOW-XPERT EXCEL EDITION

Flow-Xpert Excel Edition is a MS Excel spreadsheet add-in that comes with a sample Excel workbook containing graphical user interface. All Flow-Xpert calculation functions are available as Excel functions , which allows you to build customized applications, such as a flow computer verification tool and a meter ticket recalculation program.
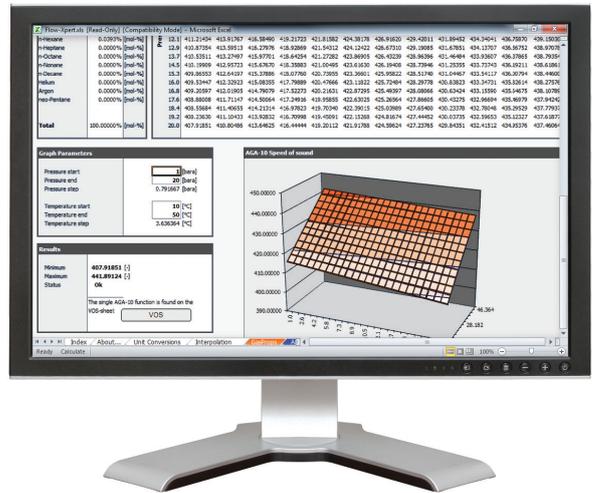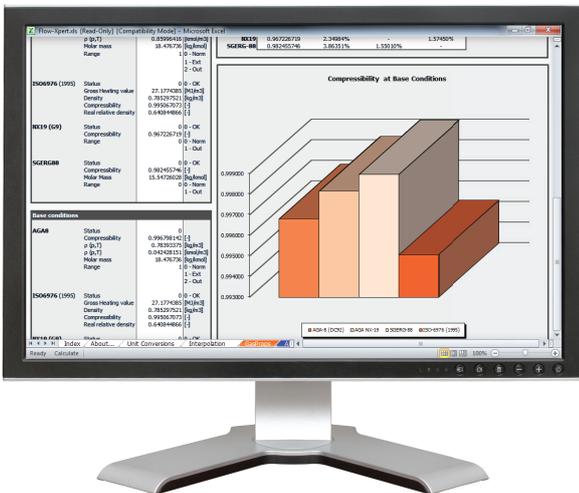
ABOUT SPIRIT IT

Spirit Innovative Technologies develops innovative solutions that result in economical, highly reliable and sustainable measurement and control systems for the global oil & gas industry.

The **Spirit IT** team is driven by a passion for technology and an uncompromising commitment to quality. We take the initiative and responsibility for all our systems and solutions.

By constantly challenging ourselves to think outside the box, we arrive at customized measurement and control solutions for our multinational clientele, whose specific needs are our top priority.

Spirit IT was established in 2001 and our hardware, software, systems and solutions have been successfully implemented in more than 60 countries worldwide.