

IHS PERFORM



To optimize well production and performance, operators choose IHS PERFORM®. This affordable modeling software sets the industry standard in nodal and well analysis.

“PERFORM is a very good tool to help production engineers do an excellent oil well production optimization using nodal analysis, especially if it is heavy oil with artificial lift.”

— Jose Pena, Production Engineer, Momboy Technologies, Trujillo, Venezuela





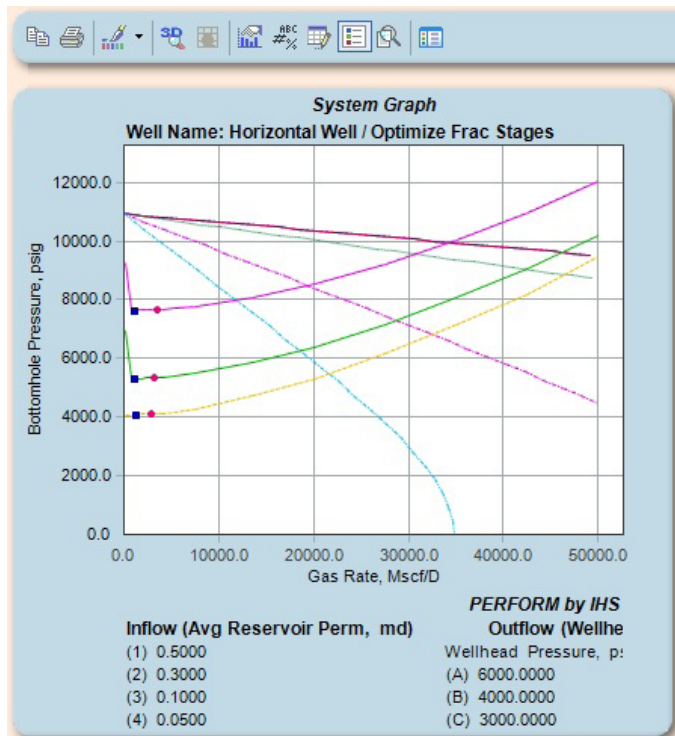
A substantial amount of revenue is tied to the performance of the many wells and fields that a production engineer manages and this is a tremendous amount of pressure and responsibility for anyone.

That is why IHS developed PERFORM. Our software helps engineers to use nodal analysis to gain a complete understanding of flow in each component of a well, to promote workflow efficiency, cost reduction and to realize maximum production.

PERFORM is the easy-to-use, comprehensive engineering software available at the most affordable price.

Simulate Well Production Performance

PERFORM is designed to model well production performance for practically any situation. You can include downhole networks for multilayer and multilateral wells, different completion types, horizontal, deviated wellbore, fractured and non-fractured formations in the flow simulation. You can also do Coiled Tubing, velocity strings, gaslift, and flow assurance calculations all in one tool. You can even simulate chokes and heat loss scenarios in the wellbore with tubing and casing.



Well system analysis (nodal) plot

Optimize New and Existing Wells

Whether onshore or offshore, mature field to unconventional, PERFORM is specifically designed to help optimize the production of both new and existing wells.

New wells

- Size tubing and flowlines
- Size coiled tubing and restrictions
- Design offshore wells and flowlines
- Design completions (perforations, gravel pack)
- Design multilateral completions
- Model water and gas injection
- Select separator pressure

Existing wells

- Improve well performance
- Evaluate future changes (water cut, reservoir properties)
- Estimate unknown reservoir parameters
- Gaslift design and optimization
- Unload gas wells
- Evaluate stimulation effectiveness
- Predict flow assurance (hydrates and scales)
- Model heat transfer
- Analyze information about PVT data, flow patterns, production per layers
- Answer “what-if” questions related to work over results

Graphical User Interface

PERFORM is built on truly scientific algorithms, but has an easy-to-use interface that translates into the most effective workflow for your investment.



Advanced Design Scenarios

Despite its simplicity, PERFORM allows modeling of downhole completions, multilayer (up to 10 layers) and multilateral wells with nine different configurations.

Capabilities include:

Inflow performance models

- Choose from 27 models for gas and oil wells— both vertical and horizontal, including fracture models, coalbed methane (CBM) and transient

Completions

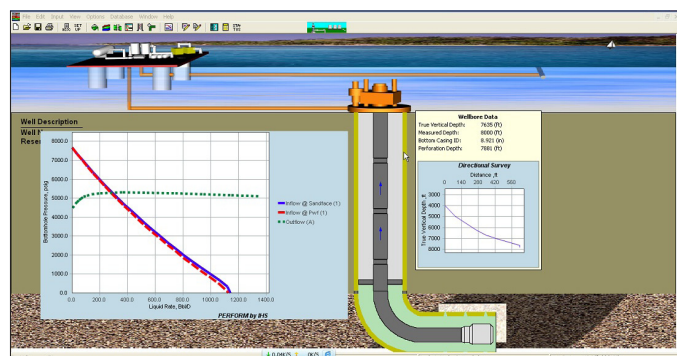
- Enhance decision-making by analyzing nine different completion types for pressure drop
- Skin calculations are included
- Gun data available for leading manufacturers

Multiple correlations for single and multi-phase flow

- Calculate outflow performance with 14 correlations for oil and eight correlations for gas, choosing from empirical and mechanistic models
- Use two different correlations for pressure drop through wellbore and flowline at different sections of the pipe
- Calibrate correlations against field data
- Four techniques for temperature calculation and seven choke flow correlations (critical and subcritical flow)
- Besides built-in fluid property correlations, PERFORM also lets you import compositional and black oil data. PERFORM comes with PVT correlations from around the world developed with the fluid samples from the Gulf of Mexico to the Middle East.

Artificial Lift

- Gaslift design (pressure or fluid operated valves)
- Gaslift optimization
- Model downhole pumps including electrical submersible pumps (ESP's) and progressive cavity pumps (PCP's)



Detailed interface displays both input and output parameters.

Worst-case discharge models and reports for potential well blow outs

- Model maximum flow rate scenarios
 - Model estimated flow rate under absolute open flow conditions
 - Model total volume with multiphase flow considerations
 - Define techniques to find maximum duration of the potential worst case discharge
 - Find estimated spill volume
- Description of assumptions and calculations
 - Show assumptions and calculations used to determine the flow rate of a worst case discharge scenario for existing and new wells
 - State assumptions concerning well design, fluid characteristics, and pressure volume temperature characteristics
- Scenarios covered
 - Onshore and offshore oil and gas wells with and without multiple producing zones
 - Maximum flow rate considerations for new well design

Integrate PERFORM with data source and applications

You can now connect to YOUR data in new ways:

- Integrate your well/production data sources.
- Share data with third party applications.
- Update case files automatically with the latest operations data from the well.

IHS PERFORM Benefits:

- Competitive pricing to fit your production optimization budget.
- Flexible licensing including perpetual licenses, annual leases, or network/ standalone licenses.
- Worldwide technical support.
- Customized training to the needs of end-users.

Our technical support staff are globally positioned to help you get started using PERFORM. To request your free trial, contact sales at sales.psg@ihs.com.

For more information

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