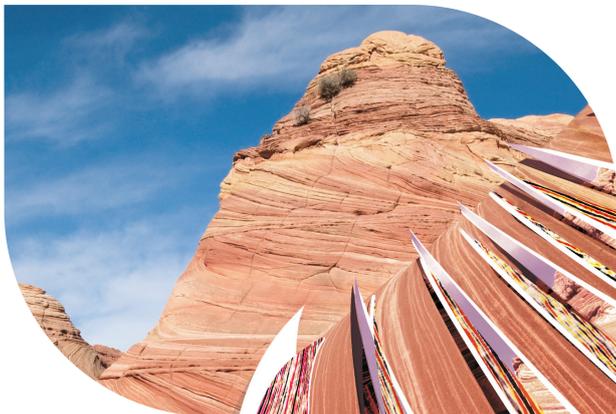


# PRODUCT SHEET



## InterWell™

Seismic Inversion & Characterization  
Time Depth Conversion

**InterWell™ is a seismic inversion, characterization and time-depth conversion software for reservoir and exploration geophysicists, available on Windows and Linux. It handles a large range of data types and customizable workflows, from data conditioning to quantitative property estimation in depth.**

For regional exploration and reservoir development, in both Oil&Gas and New Energy projects, InterWell™ allows to extract the maximum value from seismic data, as an integration tool between seismic, well and regional geological knowledge.

Daily used by quantitative interpretation experts in Beicip-Franlab consulting service, InterWell™ is an efficient, easy-to-use and reliable software.

### Database and conditioning

Conditioning and stacking of gathers, including pre- and post-stack residual NMO correction and more, are available to prepare seismic data for all the available workflows. Several surveys are managed in 2D and 3D in the same study facilitating the integrated use of various datasets.

InterWell™ supports the well data conditioning, modeling from raw log the theoretical elastic response compatible with all available seismic inversion technologies.

### Seismic inversion

Result of decades of R&D from IFPEN, InterWell™ core technology relies on model-based grid-based multi-channel inversion with the same Bayesian formalism and joint inversion approach for all algorithms :

- Multi-well wavelet estimation and multi-cube well calibration with a hybrid deterministic-statistical procedure;
- Prior model building from well log data and seismic velocities according to the stratigraphy (horizons and deposition modes) or guided by the dip of seismic events;
- High Performance Computing with optimized algorithms for simultaneous inversion.

From the standard inversions (post or pre-stack simultaneous inversion) to the most advanced technologies (4D, azimuthal, multi-component, inter-bed multiple modeling), InterWell™ inversion capabilities make it one of the most complete inversion software in the market.

Based on an industrial partnership with CERENA (Lisbon), the post-/pre-stack geostatistical Inversion produces high resolution simulations to capture the uncertainties on the sub-surface elastic model and on the final reservoir properties.

### Matrix and fracture characterization

Pioneer in matrix and fracture characterization, Beicip-Franlab gathers in InterWell™ all its know-how in a complete and reliable characterization software.

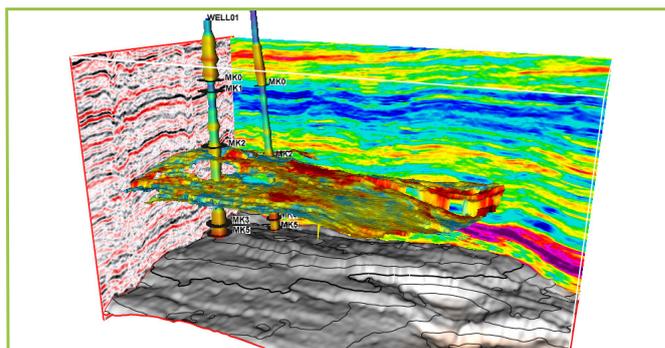
To evaluate either rock properties, lithology or fluid distributions, a large range of applications for matrix characterization is included, powered by machine learning. They cover, without being limited to :

- Map, trace, and volume classification (supervised and unsupervised), including optional principal component analysis and nested approaches;
- Continuous property volume estimation;
- Geobody extraction and analysis.

Benefiting from Beicip-Franlab experience in integrated fracture studies, the multi-attribute fracture characterization workflow includes more than 20 attributes, to be conditioned and combined to provide a synthesis of your fault/fracture network from the raw or previously enhanced seismic dataset.

### Time-depth conversion

Explore and combine different velocity sources, from well data (time-depth laws, markers, sonic logs) and seismic velocity to build the most informed velocity model. Whether using maps, log extrapolation or formulas, InterWell™ is able to build the velocity model adapted to your data and your geological context. It embeds an efficient calibration workflow to perfectly fit with the well data to ensure the most accurate time-depth conversion.



InterWell™ 3D view with seismic data and inverted impedance, and top part of a geobody colored with porosity values.