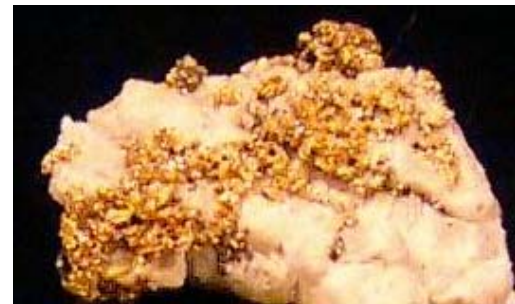




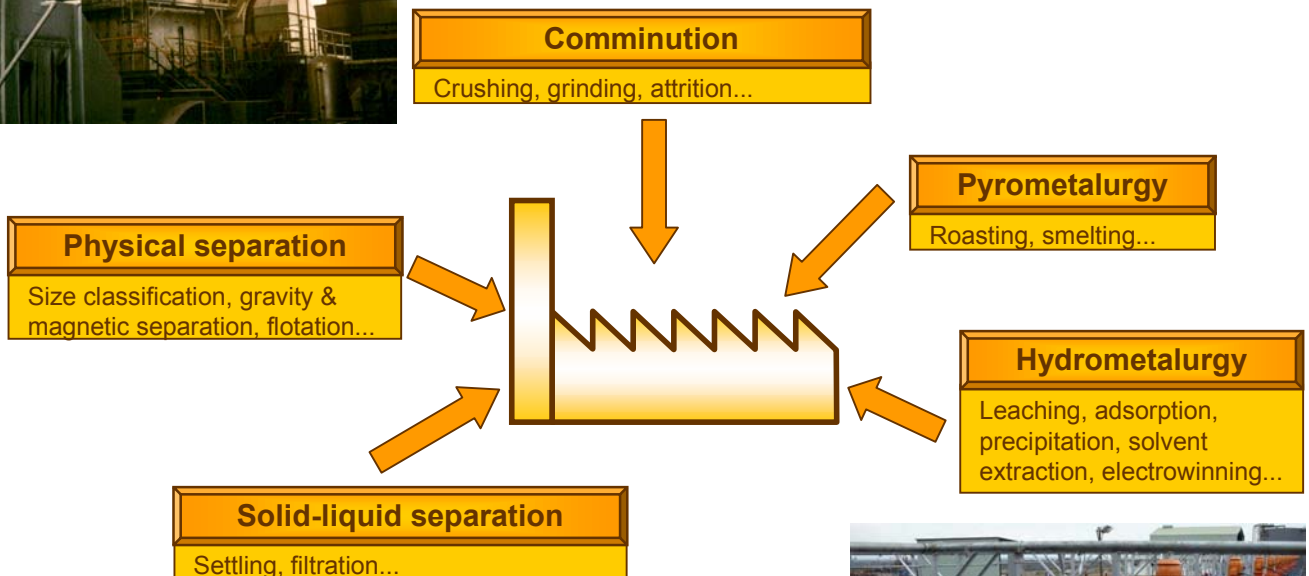
Serving your process needs

# Caspeo™ for the mineral industry

**Caspeo** services all sectors of the mineral industry: base metals, precious and semi-precious metals, industrial minerals (kaolin, talc, mica, carbonates, etc.), building materials (aggregates, cement), precious and ornamental stones...



Based on innovative tools and rigorous methods, **Caspeo** can analyze and improve the operation of numerous industrial circuits



Caspeo™  
 ✉ BRGM Campus, Avenue C. Guillemin, BP 6009  
 45060 Orléans Cedex 2, France  
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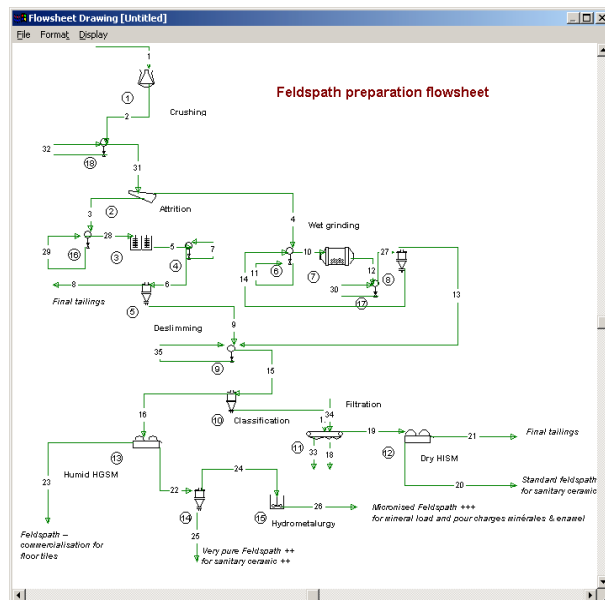


# Caspeo™ works with innovative methods to design and optimize your processes

## Modeling and simulation

These techniques permit improvement of process performances or evaluation of new projects, while reducing the number of industrial tests. Numerous options can then be rapidly tested.

**Caspeo** combines its expertise in simulation and field work with the engineering or production teams to carry out design and optimization projects.



## Mass balancing: a production tool

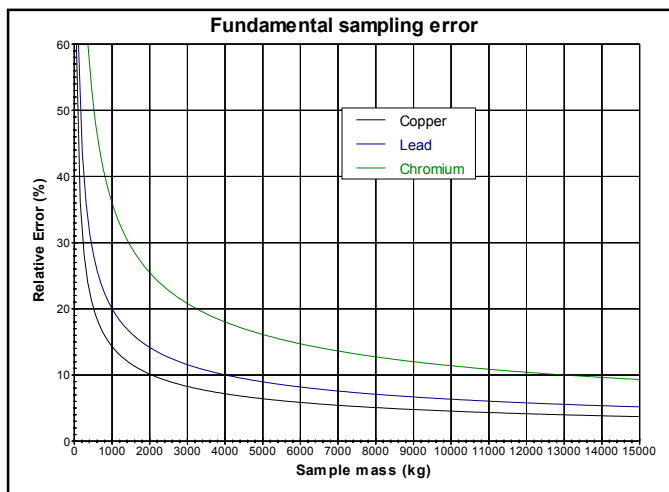
Data quality is improved by reconciliation. This leads to coherent and reliable performance estimation for process follow-up and optimization.

**Caspeo** proposes a complete data analysis system by mass balancing based on the BILCO™ software.

## Solids sampling

For raw material, tailings or products, good sampling procedures ensure an efficient process follow-up.

**Caspeo** provides you with expert solutions in definition of dedicated sampling protocols using the ECHANT™ software.





## Caspeo™ proposes:



### Production plant audit

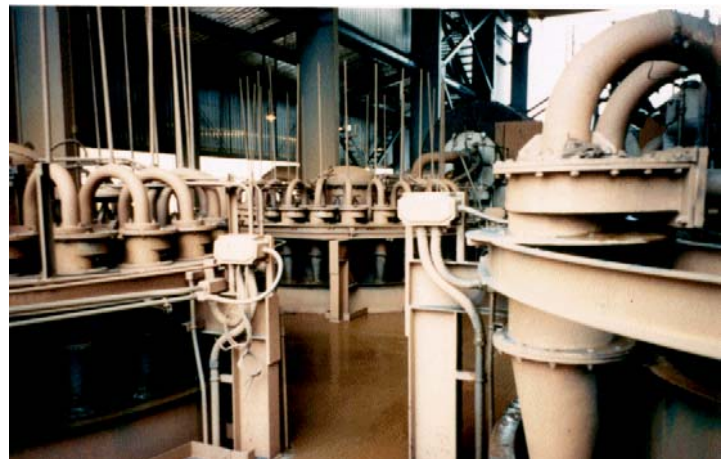
- Sampling campaigns
- Circuit mass balancing
- Process modeling and simulation
- Determination of operating parameters
- Cost calculations

### Process optimization and upgrading

- New equipment testing
- New configuration testing
- Cost evaluation
- Management of contacts with suppliers

### Setting-up on-line mass balancing

- Interfacing the BILCO software with data acquisition systems and/or laboratory databases
- Development of databases
- On-line determination of operating parameters such as residence time, yields, grades, consumption



### And also...

- Custom development of software for a specific production type or company
- Adaptation of complete software modules for a customer ("software customization")
- Utilization of a partner network for assistance to R&D
- Industrialization of research products



## Caspeo™ extras

### Training

**Caspeo** offers you customer specific training sessions in sampling, data reconciliation, process modeling and simulation. Using specialized software products, you will solve industrial case studies that illustrate the theoretical lectures.

### An opening toward other industrial fields

**Caspeo** works with various industrial sectors, including food processing or chemical industries.

The diversity of our activities enables us to propose efficient solutions to your specific needs.



**Caspeo** relies on and distributes the process analysis software of BRGM

**ECHANT**: the sampling aid tool

**BILCO**: the material balancing tool for data analysis

**USIM PAC**: the multipurpose tool for process engineer

### Contacts

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