

The JK Floatability Index Test has been developed through years of industrial benchmarking and is backed up by research undertaken at the Julius Kruttschnitt Mineral Research Centre. It is likely to become the industry's leading predictive tool in the area of flotation.

JK Floatability Index (JKFI)

Incorrect characterisation of metallurgical performance can cost you dearly in the flotation process. It is necessary to know your ore's potential as early as the first drill hole.

The capability to predict the metallurgical performance of ores in flotation plants has been desirable since processing of this nature commenced over 100 years ago. Although some predictive methods exist, they are labour intensive, time consuming, resource demanding and very expensive. For these reasons, very few if any are used routinely. Currently there is a large demand for low cost routine floatability characterisation of plant feed material.

The JKFI methodology makes use of the latest laboratory batch flotation test technology, performing tests and varying bubble surface area flux, to derive a floatability index and produce a number of key model parameters from rock samples.

The index and parameters are used to predict plant metallurgical performance of flotation circuits before there is a change in plant feed.



JKSimFloat, in conjunction with the JKFI test, provides a very powerful tool for minimising the risk of falling concentrate grades, recovery and/or throughput.

Add metallurgical performance to your resource model during evaluation and determination of profitability by combining JK Drop Weight (or SMC) and JKFI testing on the same drill samples.



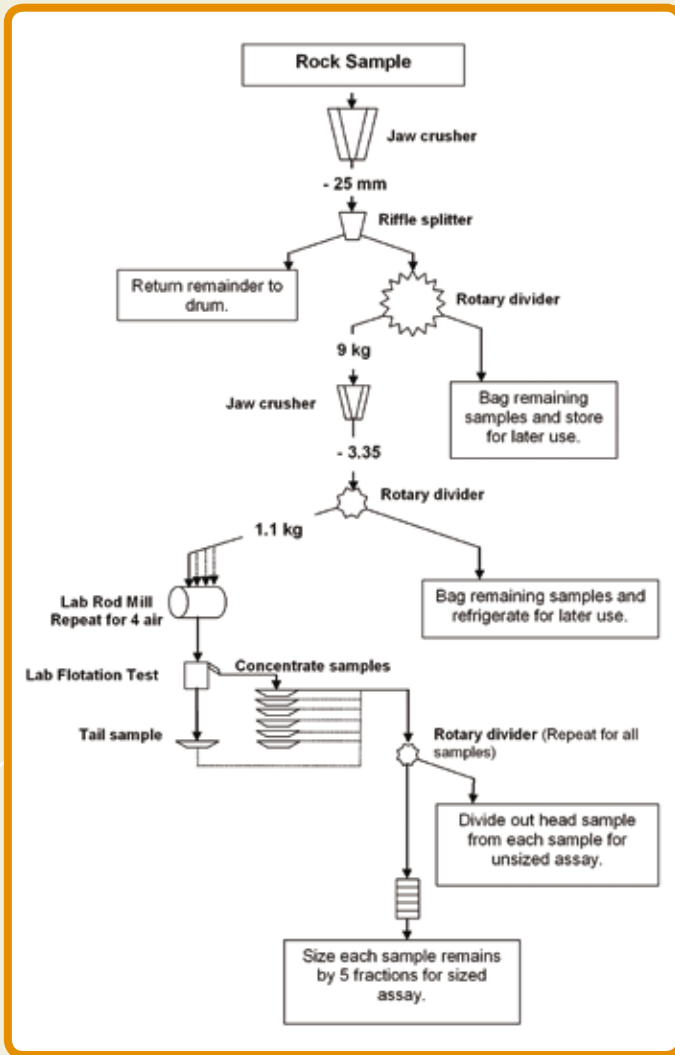
Application

- Extend the application of JKSimFloat for new ore types to predict circuit response or optimise circuit configuration prior to processing
- Determine scale up and re-circulating streams for design work on greenfield sites with the use of the JKTech database of operational JKFI values
- Rank response of ores to change in reagent addition for the purpose of assessing the change
- Rank response of ores with various preparation stages to determine the optimum product quality for the flotation plant

Sample Requirements

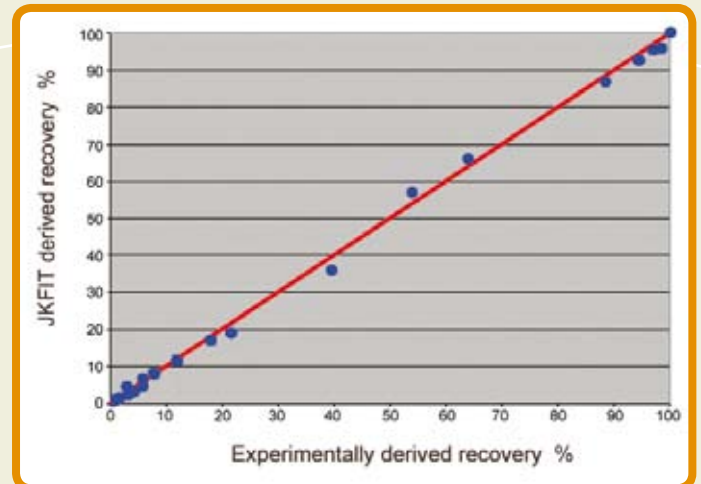
- Any dry rock sample, for example: belt cut, stock pile, drill sample, underground, draw point sample, or tailings
- 10 kg rock sample
- Small quantity of current frother and collector
- Information on grind size, reagent additions and pulp chemistry

Metallurgical Laboratory Services



Benefits

- Laboratory scale test
- Inexpensive
- Little disruption to production
- Fast turn around
- Suitable for ore characterisation from drill core samples
- Comparable to locked cycle testing
- Greenfield Site
 - > Pre feasibility study
- Operating Site
 - > Mine planning
 - > Production planning
 - > Monthly composite
 - Build history
 - Simulate and compare



JKTech can perform

- JK Floatability Index tests on scheduled ore types to predict performance
- JK Floatability Index tests on drill core samples to characterize entire ore bodies
- JK Floatability Index tests on variations to reagent additions to rank flotation response

Other JKTech Services

- Consulting (comminution, flotation, mine-to-mill)
- Quantitative Mineralogy (MLA and JKMineralogy)
- Specialist Software (JKSimMet, JKSimFloat, JKSimBlast)
- Metallurgical Laboratory Services
- Training Courses

Contact



John Dixon
Manager JKMetLab

Telephone: +61 7 3365 5908

Facsimile: +61 7 3365 5900

Email: j.dixon@jktech.com.au

JKTech's range of technologies is supported by the ongoing research activities of the world renowned JKMRRC.

JKTech Pty Ltd

Isles Road, Indooroopilly, QLD 4068, AUSTRALIA
Telephone: +61 7 3365 5842 Facsimile: +61 7 3365 5900
info@jktech.com.au | www.jktech.com.au

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the minerals industry*