

For Immediate Release

News for the Minerals Processing Industry

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StackCell® Flotation Technology Offers Column-Like Performance in a Smaller Footprint

Delta, BC—Recent full-scale plant trials conducted by the [Eriez Flotation Division \(EFD\)](#) verify that low-profile [StackCell® flotation technology](#) provides coal recoveries and product qualities comparable to column flotation systems. Two full-scale approaches were tested: a single unit rougher application and a three-stage, in-series arrangement.



In the rougher application, the [StackCell](#) was able to successfully offload an existing overloaded flotation circuit, which resulted in an increase in combustible recovery in excess of 90 percent. The metallurgical results in the three-stage circuit demonstrate that StackCells, when arranged in-series, effectively meet design requirements at a satisfactory combustible recovery, product carrying capacity and product ash content.

Developed in the early 2000s, [StackCell](#) offers a cost-saving alternative to both conventional and column flotation machines. These unique units feature a small footprint and operate with a gravity-driven feed system which allows cells to be easily stacked in-series or placed ahead of existing conventional or column flotation cells.

The [StackCell](#) design takes advantage of a patented independent contacting chamber. Feed slurry and air enter this chamber and are subjected to intense shear mixing to generate bubbles and provide contacting with the hydrophobic species. Particle collection is achieved in this section and the slurry is subsequently discharged into a quiescent phase separation chamber.

[StackCell](#) provides numerous economic benefits. Since the design focuses energy specifically on creating bubbles within the aeration chamber, the total energy input to the system is approximately half that required by conventional machines. Additionally, when plant space and/or capital is limited, the small size and low weight of this new technology makes it amenable to low-cost plant upgrades where a single unit can be placed into a currently overloaded flotation circuit with minimal retrofit costs.

For more information about StackCell flotation technology, visit <http://erieznews.com/nr445>.

About Eriez Flotation Division

Eriez Flotation Division (EFD) is a world leader in advanced flotation technology and is a wholly owned subsidiary of Eriez Manufacturing Co. EFD provides advanced testing and engineering services, in addition to sparging and column flotation equipment for the mining and mineral processing industries. For more information, visit www.eriezflotation.com or call (814) 835-6000. We can also be contacted at efdusa@eriez.com.

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