

FLOTATION FROTH WASHING SYSTEM



Innovative technologies for efficient resource processing solutions



The CleanProTech Froth Washing System incorporates uniquely designed trays to provide an evenly distibuted flow of wash water to your flotation cell froth layer.

Froth washing has many benefits including;

Removal of slimes and clays - This can reduce product ash and also aid dewatering.

Removal of entrained material - This can reduce product ash by removing product contaminants.

Increased froth mobility - The addition of wash water can often aid in froth mobility.

The unique design of the CPT wash water trays uses specific hole sizes and patterns tailored individually for the requirements of each plant and each flotation cell.

This allows the correct amount of washing water to be distributed in the correct locations.

This allows the correct amount of washing water to be distributed in the correct locations across the entire flotation cell product layer.

The design also allows easy cleaning. The specifically engineered angles and sloped ends allow users to easily remove contaminants using a hose. If this isn't made easy, it won't be done!

The hole size also is selected to reduce the probability of blocking due to contaminants in the process water. This is a major cause of concern for wash water system with small hole sizes.

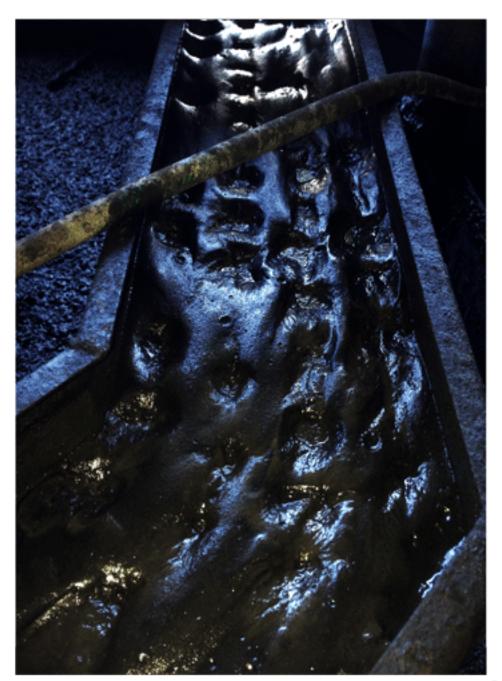
The trays are constructed from a single sheet of **heavy gauge stainless steel** which provides strength and a long operating life in a perparation plant environment.



CleanProTech froth washing system installed on a Jameson flotation cell.



Every type of flotation cell can benefit from the addition of a reliable froth washing system. CleanProTech can tailor our system to suit any type and size of flotation cell ranging from conventional flotation cells to column cells to Jameson type cells.





The above images show poorly operating froth washing systems at Australian CHPPs.

On the left you can see a blocked wash water tray which is very hard to clean, as the material has no escape from the tray due to the 90 degree walls and circular design.

(This build up is solely from the poor quality of clarified water.)

On the right, you can see in froth washing rings (which are no longer used in the froth)

On the right, you can see in froth washing rings (which are no longer used in the froth) giving poor distribution and becoming blocked due to poor water quality and froth build up.

Wash water rings are notoriously hard to clean and remove these blockages once occured. Both of these circumstances will reduce the effectiveness of the froth washing water, resulting in a higher ash product, lower froth mobility and reduced yield.

Other products available from CleanProTech for flotation circuits include;

'FrothTec' froth depth detection systems

Reagent emulsifiers

Reagent dosing systems

Online Slurry Particle Density Meters

Online Tailings Monitors
Residual Frother Gauges
Ultimate Froth Flotation Testing

Circuit review, sampling and consulting

For more information contact Clean Process Technologies on info@cleanprotech.com.au or (02) 6574 7081

700 Standen Drive Lower Belford NSW Australia

Tel +61 2 6574 7081 Fax +61 2 6574 7302

www.cleanprotech.com.au