



CLASSIFIERS

mtTBS

The Teeter Bed Separator that delivers sharp, single-stage classification

How it works



Effective fines separation – in a single pass.

The MT Teeter Bed Separator (TBS) is designed for fine particle classification based on size and density, if applied correctly, can replace the need for multiple spiral circuits.

Technical Features

Uniform water distribution

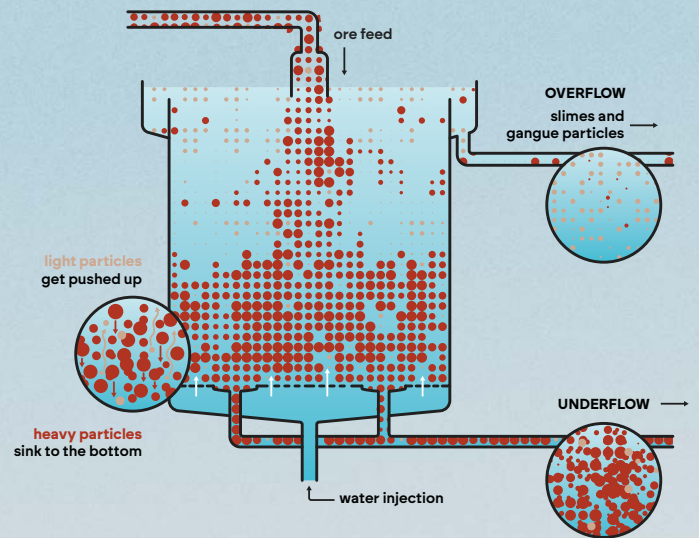
Even fluidisation creates consistent separation conditions throughout the vessel.

Stable bed control

Bed level and water flow work together to maintain repeatable separation performance.

High-capacity operation

The separator processes large throughputs while maintaining efficient density separation across changing feed conditions.



Fluidisation

Water introduced beneath the vessel creates a stable teeter bed.

Hindered settling

Particles settle according to their density and settling velocity.

Density separation

Heavy particles pass through the bed while lighter material reports to the overflow.

Continuous discharge

Separated products leave continuously, supporting stable downstream operation.

Fine particle separation in a single pass

The result is a separator that not only classifies, but also enhances process efficiency and product consistency – making it a critical enabler of outcome certainty in modern mineral processing plants.

The MT Teeter Bed Separator is used across multiple industries where fine particle separation is critical.

- > Mineral sands
- > Iron ore
- > Coal
- > Industrial minerals
- > Silica sand
- > Feed preparation
- > Desliming
- > Pre-concentration

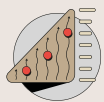


Typical Use Case



Controlled hindered settling

Particles interact within the fluidized bed, improving cut accuracy and minimizing misplaced material.



Dynamic bed pressure management

Sensors measure teeter bed density in real time, adjusting automatically to feed fluctuations for stable performance.



Sharper cut points

Unlike basic classifiers that struggle with fine or near-density material, the TBS achieves a sharper separation curve, improving product quality and recovery.



Engineered for durability

Proven material selection ensures over 10 years of performance in high-wear zones.



Unique Nozzle Design

Allows for one way water flow preventing seepage of unwanted solids into the water chamber.

Benefits of Solution

mtTBS models

Backed by over 60 installations worldwide, the Australian-engineered TBS has proven it's reliability globally since 2005. With a standard range of sizes to meet smaller operations, or larger throughputs upward of 300 tph.



Sizes (Diameter) **Capacity (t/h)**

2.1m	80 – 90	
2.4m	110 – 120	
3.0m	170 – 180	
3.65m	260 – 270	
4.0m	310 – 320	

Mineral DNA

**We start with
the mineral** not the equipment.

FACT: No two ore bodies behave the same. That's why one-size-fits-all solutions rarely deliver the best recovery.

Let us help you discover your ore body's Mineral DNA, and whether mtTBS is the right technology to recover more of what matters.

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