The unique benefits of the BQR Flotation Cell include:

- High shear forces due to the rotor/stator assembly ensure better bubble-particle contact
- Simple process optimization and startup under load
- Stable froth – slurry interface and formation of quiescent zone
- Minimised downtime and easy maintenance due to “hooded” stator assembly
- Maximisation of aerated volume to meet residence time requirements
- Purpose designed solids suspension

Bateman round tank BQR flotation cells are applied in mineral processing circuits globally for roughing, scavenging, cleaning and re-cleaning, unit and pilot cell applications to process all floatable mineral types.

The Bateman flotation cells range in size from 0.5m³ (BQR5) to 150m³ (BQR1500).
External Launder

- Launder which are external to the cell result in increased effective volume and improved froth.

Dart Valves & Dart Boxes

- Top closing internal dart valves in the cell ensure that there are no blockages in the bank as a result of particles settling around the dart valves during operation.
- The dart valves are specifically designed to ensure accurate control over a small range of movement.
- The slope in the dart boxes under the cells, minimizes the distance between the cells and the overall length of the bank.

Feed Boxes

- Semi-circular feed boxes that are integral to the cell, reduce the overall length of the bank of cells.
- The end of the cell is a large rectangular slot to ensure that there are no blockages.
- These also have a froth overflow chute which discharges back into the cell, minimising the amount of spillage over the side.

Froth Crowder

- Froth crowders allow for efficient flow of froth into launders and prevent particles from falling off the froth.

Hooded Stator

- The stator can be removed from the tank with the mechanism, since it is not attached to the base of the tank, making it easier for removal and replacement.
- Start-up under load is easy since the rotor is protected and therefore settled solids do not build up around the rotor.

Rotor & Stator

- The amount of baffling by the stator, by para being sucked into the rotor, is reduced due to stator blades being shorter.