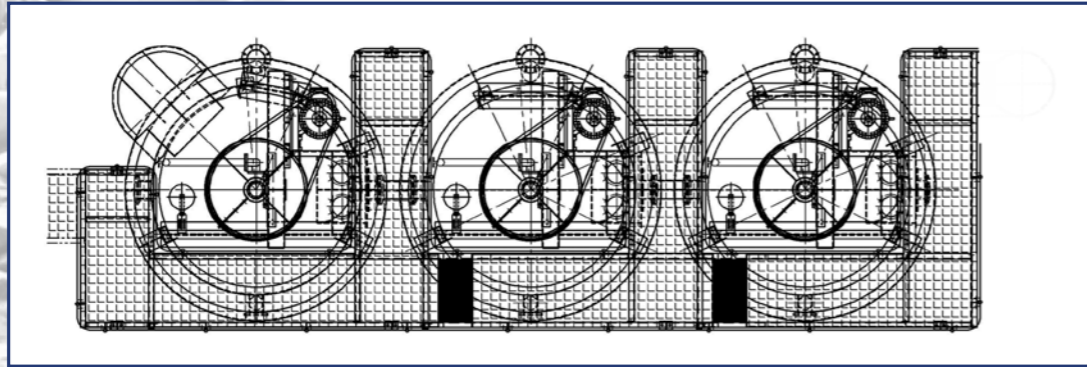
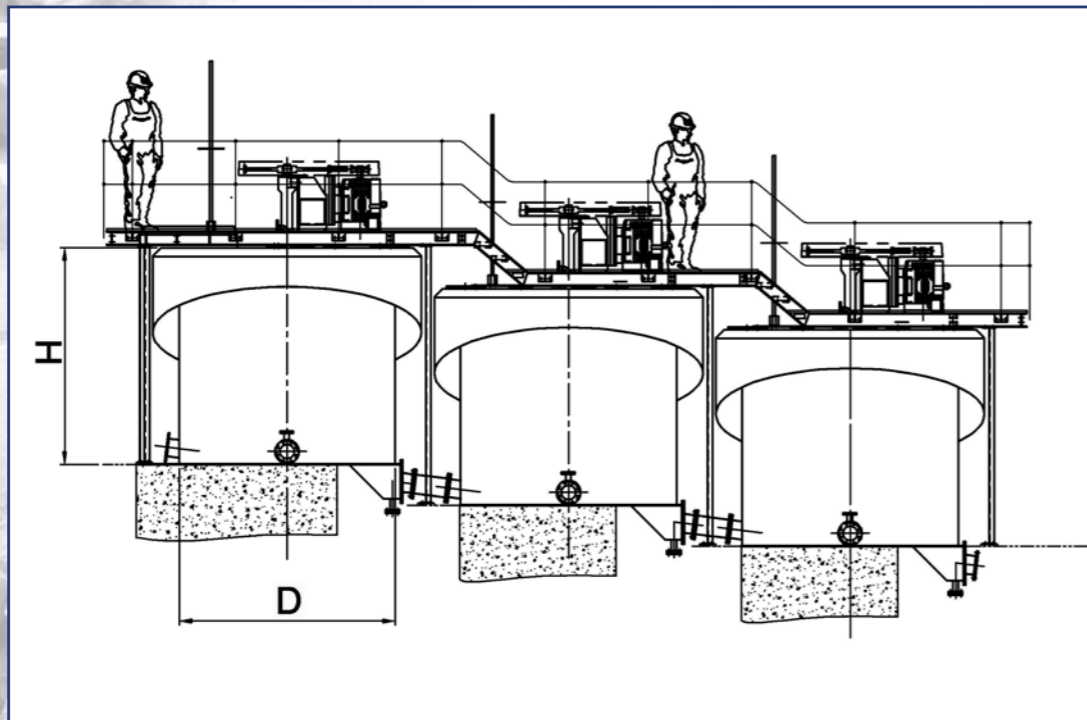


Typical Layout



Top View



Elevation View

Table of dimensions for flotation cells

TANK DETAILS	Diameter D m	Height H m	Effective Volume ^(a)		Air Requirements ^(b) kPa	Installed Power ^(b) kW
			m ³	m ³ /min		
BQR15	1.3	1.4	1.5	0.4	18	9.2
BQR 50	1.9	2.1	5	2	24	30
BQR100	2.4	2.6	10	3	29	37
BQR 200	3.1	3.3	21	6	34	75
BQR300	3.5	3.7	31	7	39	90
BQR400	3.9	4.0	42	8	41	90
BQR500	4.3	4.2	53	9	43	110
BQR700	4.7	4.8	73	9	52	110
BQR1000	5.5	5.0	103	9	47	220
BQR1300	5.9	5.9	141	20	58	220
BQR1500	6.5	5.5	164	38	65	250

(a) Effective volume at 10% aeration factor

(b) Per cell, kPa at a pulp density of 1.30 t/m³

BQR FLOTATION CELLS (ROUND)

www.batemanengineering.com/bet

Process Equipment



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 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

The Bateman flotation cells range in size from 0,5m³ (BQR5) to 150m³ (BQR1500).



BQR FLOTATION CELLS (ROUND)

Process Equipment



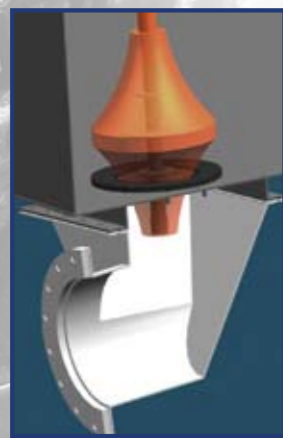
Feed Boxes

- Semi-circular feed boxes that are integral to the cell, reduce the overall length of the bank of cells.
- The inlet to 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.



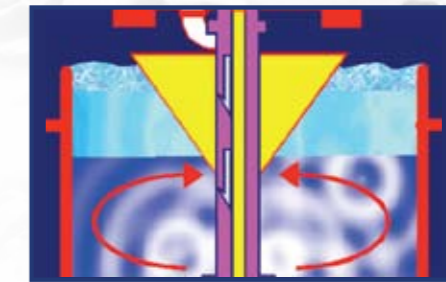
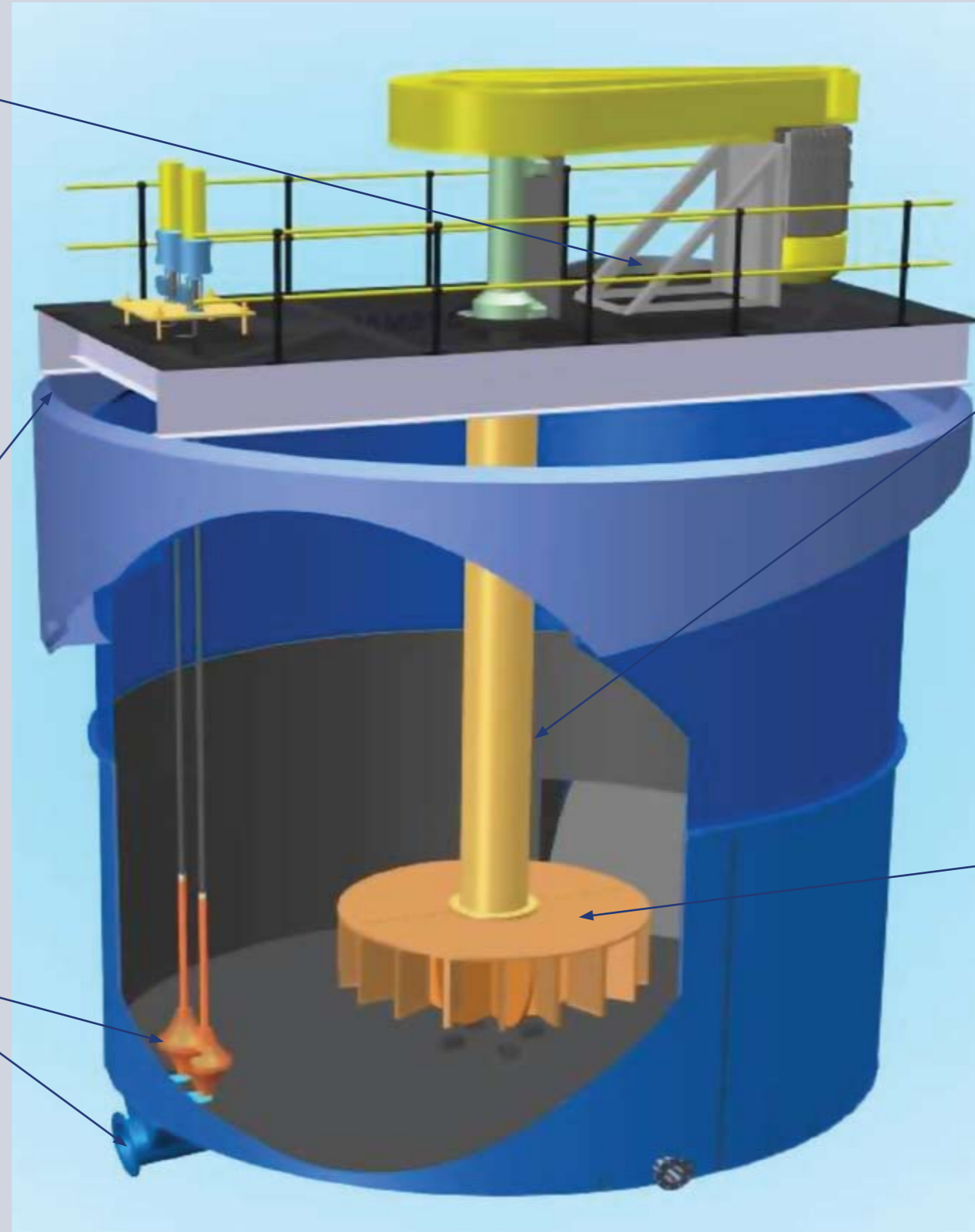
External Launder

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



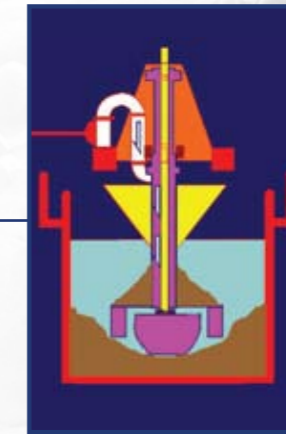
Dart Valves & Dart Boxes

- Top closing internal dart valves in the cells 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 box under the cells, minimizes the distance between the cells and the overall length of the bank.



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 pulp being sucked into the rotor, is reduced due to stator blades being shorter

