FALCON SEMI-BATCH (SB) CONCENTRATORS

APPLICATIONS

- Recovery of gold, silver and platinum group metals
- Recovery of gold from mill discharge, cyclone feed, underflow or overflow within the grinding circuit
- Recovery of gold in alluvial gold operations
- Recovery of gold from aggregate plants

KEY ADVANTAGES

- Unit capacities up to 400 t/h
- The variable frequency drive (VFD) and a dynamic breaking system are used to greatly reduce offline time for concentrate flushing
- Flat lid modular design increases wear life and reduces downtime as well as maintenance costs
- Upgraded standard fluidization control results in a higher degree of machine management
- High G forces (highest in the mineral processing industry) allow for higher efficiency and the recovery of very fine particles
- Reduced water consumption as only the pertinent collection zone section of the bowl is fluidized
- Greater than 95% mechanical availability, extremely low operating costs
- Fully automated, "one touch" operation that provides the least amount of offline time and highest possible concentrate security
- Auto reversing function, alternates direction of rotation each cycle greatly improving component life and reducing maintenance costs

COARSE AND FINE PRECIOUS METAL RECOVERY

Falcon SB Concentrators are known as "Semi-Batch" because they continually accept feed during the run cycle, but only produce concentrate during the periodic rinse cycles. Run times span from five minutes to several hours, depending on the application. Rinse times are generally less than a minute as Falcon Concentrators utilize a dynamic braking system to quickly slow the bowl down, rinse out the concentrate, and then return to full operational speed. Equipped with a variable frequency drive, these gravity concentrators can operate anywhere from 50 to 200 G's.

The typical application for a Falcon SB Concentrator is recovering liberated precious metals (Au, Ag, Pt, etc.) from within a grinding circuit. When installed in this type of circuit, Sepro often recommends that the gravity concentrator be placed on cyclone feed, rather than cyclone underflow to generate higher recoveries. Outside of grinding circuits, Falcon SB Concentrators are also used for precious metal separation from aggregate or placer deposits. The target mineral will usually be in extremely low concentration (grams per tonne) and a very high upgrade is desired (up to 10,000x).

Reliable test work can lead you to the right concentrator for your application. Sepro operates laboratory facilities, which generate decisive data for scale up to commercial operation.

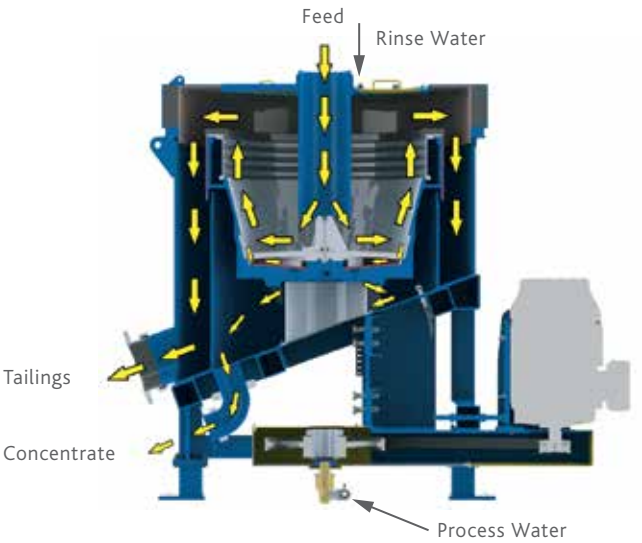
FALCON SEMI-BATCH (SB) CONCENTRATORS

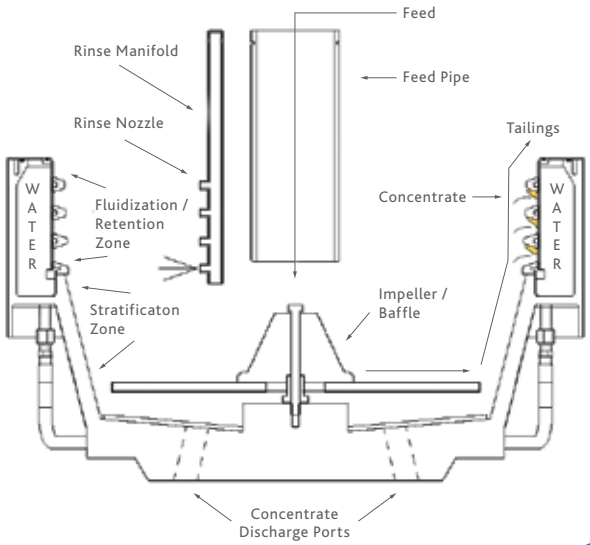
SPECIFICATIONS

MODEL			L40	SB400	SB750	SB1350	SB2500	SB5200
RECOMMENDED SOLIDS CAPACITY*		t/h	0 - 0.25	1 - 15	10 - 80	50 - 150	100 - 250	200 - 400
MAX SLURRY CAPACITY		m³/hr	2.3	30	100	200	300	450
CONCENTRATING SURFACE AREA		m²	0.03	0.21	0.46	1.08	2.14	3.37
G-FORCE RANGE		upper	200	150	200	200	200	200
		lower	50	100	50	50	50	50
MACHINE WEIGHT		kg	35	485	1 250	2 900	4 560	6 900
MOTOR POWER		kW (HP)	0.4 (0.5)	3.7(5.0)	7.5 (10)	18 (25)	45 (60)	75 (100)
PROCESS WATER CONSUMPTION		m³/hr	0.24 - 1.2	3 - 5	8 - 12	12 - 20	15 - 28	25 - 35
WATER SUPPLY PRESSURE		bar	2 - 3	2 - 3	2 - 3	2 - 3	2 - 3	2 - 3
RECOMMENDED MAXFEED PARTICLE SIZE		mm	1.0	2.0	2.0	2.0	2.0	2.0
ABSOLUTE MAXIMUM FEED PARTICLE SIZE*		mm	1.5	2.5	4.0	4.0	4.0	4.0
MAXIMUM FEED PERCENT SOLIDS*		%	55 - 70	65	55 - 70	55 - 70	55 - 70	55 - 70
CONCENTRATE SLURRY FLUSH VOLUME*		litre	1	25	100	150	250	350
CONCENTRATE SOLIDS FLUSH VOLUME*		cm³	120	1 230	5 275	12 425	18 750	24 050
DIMENSIONS	WIDTH	m	0.49	1.02	1.71	2.24	2.67	3.19
	LENGTH	m	0.31	1.00	1.44	1.90	2.00	2.32
	HEIGHT	m	0.51	1.43	1.50	2.07	2.27	2.73

*Denotes application specific parameter, consult manufacturer.

Note: Specifications are subject to change without notice. Equipment may not operate or achieve best performance under maximum capacities.





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11/04/2023