



Centrifugal Concentrators (SB-40)

CONTACT US

Phone: 310-830-6601

FAX: 310-830-9336

Email: info@sepor.com

& services@sepor.com

LOCATIONS

WEST COAST

718 N. Fries Avenue

Wilmington, CA 90744

EAST COAST

3740 NW 124th Ave

Coral Springs, FL 33065



SOLIDS CAPACITY: 0.0 – 0.3 US
tons/hour

MAX SLURRY CAPACITY: 10 US gpm

G-FORCE RANGE: 50 – 200

MOTOR POWER: 1/5 HP

PROCESS WATER: 1 – 5 US gpm

MAXIMUM FEED PARTICLE

SIZE: 0.06 inches

DIMENSIONS: 20 In. (W) x 14 In. (D)
x 23 In. WT: 81 lb

Description:

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 they 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, this gravity concentrator can operate anywhere from 50 to 200 G’s.

The SB-40 concentrator retains the highest density particles from a feed slurry to periodically produce a small but relatively higher-grade concentrate (up to 1% by mass). Concentrate grades can be very high, often measured in percentage of metal. Operating at up to 200 G’s, this product range produces an intermittent stream of concentrate at a maximum mass pull of <1%.

Principal application is recovering fine and coarse free precious metals including gold, silver and PGM’s to a high-grade concentrate. Maximum particle feed size is 6 mm, however, screening at 2 mm is recommended. The heaviest layers pass over the concentrate bed retained in the riffles at the top of the rotor bowl.

The addition of back-pressure water from behind the riffle beds enable heavy target particles to migrate to the bottom of the bed and be retained in preference to lighter particles.



The high G's permit effective recovery for even very fine particles and the depth of the concentrate bed allows coarser particles in the feed stream to be processed. When the bed has built up to a sufficient grade the feed is stopped, the rotor slowed and the built in spray manifold rinses the concentrate under the rotor baffle and out the rotor discharge ports. This Semi-Batch process is well suited to fine native metal (Au, Ag, Pt) recovery. The addition of process water enables these units to handle coarser feed streams. The SB units are suitable for recovery of both fine (down to 10 microns) and coarse precious metals in the free, metallic state recommended.



Bowl In Concentrator

The centrifuge's bowl, high SG solids are held in the ring area, against the wall, while light solids exit with water.

Catalog Number	Size	Feed (m3/Hr)	Feed TPH	GPM	Shipping Weight
050L-010	5	½	2	10	260
050L-011	5TP	½	2	15	400
050L-012	12	2-5	16	100	340
050L-013	12TP	2-5	16	150	540
050L-014	21	12-15	33	250	965
050L-015	30	30-35	80	550	1900
050L-016	38	45-50	111	800	2500