



FALCON ULTRA-FINE (UF) CONCENTRATORS

APPLICATIONS

- Recovery of ultrafine friable particles (tin, tantalum, tungsten, etc.)
- Scavenging from deslime cyclone overflow
- High recovery upgrading of fine flotation concentrates

KEY ADVANTAGES

- High gravitational fields (up to 600 G) allows recovery of ultra fine particles
- The variable frequency drive (VFD) and a dynamic breaking system are used to greatly reduce offline time for concentrate flushing
- Recovery of previously unrecoverable values from flotation concentrate
- Advanced wear materials and a modular design decreases downtime and reduces maintenance costs
- No process water consumption during concentration
- Greater than 95% mechanical availability, extremely low operating costs
- Small footprint
- 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

FORCES UP TO 600 G'S AND GRAVITY RECOVERY DOWN TO 3 MICRONS

Ultra fine mineral recovery has been an industry goal for many years. With Sepro's UF line of Falcon concentrators there is now a way to economically recover and upgrade particles as fine as three microns. The primary objective of the Falcon UF concentrator is to scavenge ultra fine particles that are typically rejected from plant processes as slimes.

Using a variable lip controlled by air pressure the Falcon UF Concentrator is extremely flexible, allowing for a wide range of applications in metallurgical operation from high recovery to high upgrade. Rinse times are generally less than a minute as Falcon concentrators utilizes a variable frequency drive (VFD) with a dynamic braking system to quickly slow the bowl down, rinse out the concentrate, and then return to full operational speed. Falcon UF Concentrators can operate anywhere from 50 to 600 G's. Operating in rougher-cleaner or rougher-scavenger configurations, this concentrator can provide an almost unlimited range of possibilities.

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.



S P E C I F I C A T I O N S

MODEL			UF600	UF1500
RECOMMENDED SOLIDS CAPACITY*		t/h	0.5	2
MAX SLURRY CAPACITY		m³/hr	~ 6	~ 20
RECOMMENDED MAX FEED PARTICLE SIZE		μm	< 38	< 38
MINIMUM EFFECTIVE CAPTURE SIZE		μm	< 5	< 5
CONCENTRATE SLURRY VOLUME PER CYCLE		litre	~ 50	~ 200
RECOMMENDED PULP, PERCENT SOLIDS*		%	5 - 15	5 - 15
CONCENTRATE SURFACE AREA		cm ²	3871	9680
G-FORCE RANGE		upper	450	600
		lower	50	50
MOTOR POWER		kW (HP)	7.5 (10)	45 (60)
RINSE WATER SUPPLY		bar	6 ± 1	6 ± 1
PROCESS WATER CONSUMPTION		m³/hr	NONE REQUIRED	
MACHINE WEIGHT		kg	1,136	2,450
	WIDTH	m	1.23	1.51
DIMENSIONS	LENGTH	m	1.23	2.00
	HEIGHT	m	1.73	2.11

*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.





