

# 4



## FALCON ULTRA-FINE (UF) CONCENTRATORS

### APPLICATIONS

- Recovery of ultrafine slimes (tin, tantalum, tungsten, etc.)
- Scavenging from deslime cyclone overflow
- High recovery upgrade 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 braking 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

### 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 Falcon's UF line of 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 in metallurgical operation from high recovery to high upgrade. Rinse times are generally less than a minute as Falcon equipment uses 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.**

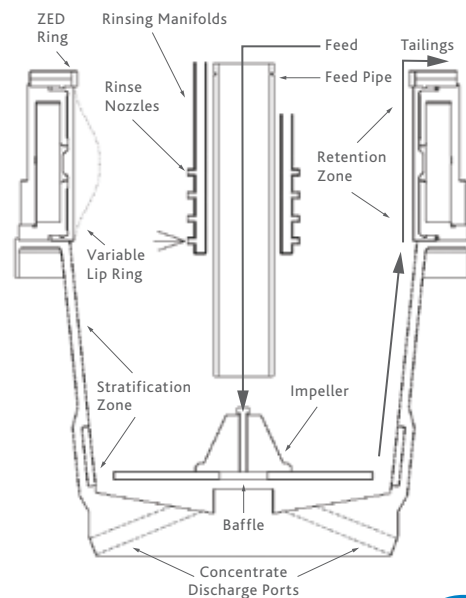
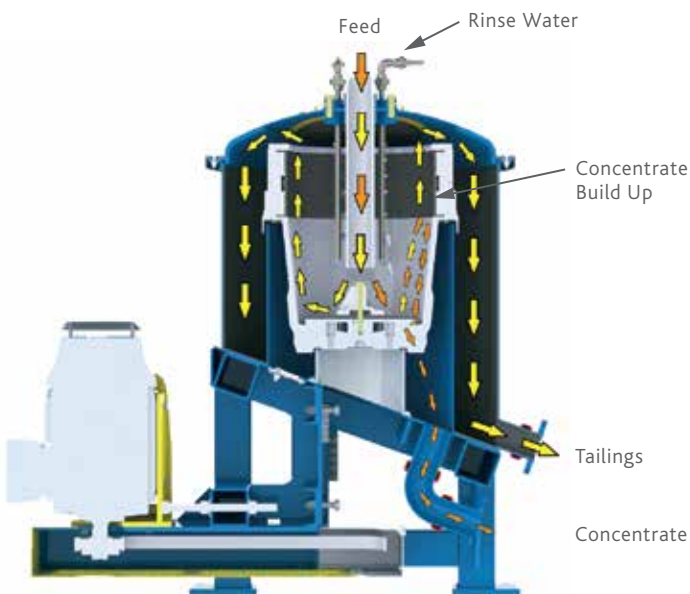
# FALCON ULTRA-FINE (UF) CONCENTRATORS

## SPECIFICATIONS

MODEL		UF600	UF1500	
RECOMMENDED SOLIDS CAPACITY*	t/h	0.5	2	
MAX SLURRY CAPACITY	m <sup>3</sup> /hr	~ 6	~ 20	
RECOMMENDED MAX FEED PARTICLE SIZE	µm	< 38	< 38	
MINIMUM EFFECTIVE CAPTURE SIZE	µm	< 5	< 5	
CONCENTRATE SLURRY VOLUME PER CYCLE	%	~ 50	~ 200	
RECOMMENDED PULP, PERCENT SOLIDS*	%	5 - 15	5 - 15	
CONCENTRATE SURFACE AREA	cm <sup>2</sup>	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	m <sup>2</sup>	NONE REQUIRED		
MACHINE WEIGHT	kg	1,136	2,450	
DIMENSIONS	WIDTH	m	1.23	1.51
	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.



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