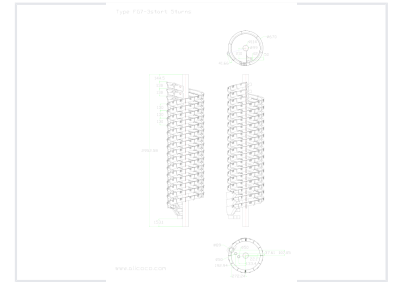


FG7 Spiral Concentrator for Mineral Separation

The FG7 spiral concentrator is a gravity separation machine used for concentrating valuable minerals from ore slurries. It separates materials based on density as slurry flows through its spiral channel.



ADDITIONAL IMAGES



Product Overview

High-Efficiency Gravity Separation

The FG7 Spiral Concentrator is a high-performance gravity separation device designed for precise mineral processing. It utilizes a spiral trough system to effectively separate valuable heavy minerals from lighter gangue materials based on density differences. Featuring modular polyurethane construction, it provides exceptional durability and consistent separation efficiency with minimal operator intervention, making it an ideal choice for diverse mining applications.

Technical Specifications

ALICOCO SPIRAL CONCENTRATOR 'S SPECIFICATIONS

Items/Type	Type FG7	Type H	Type L	Type M	Type ML
Diameter	680mm	1230mm	1230mm	1230mm	1230mm
Pitch Space	380mm	590mm	710mm	590mm	590mm&710mm
Start number	Single/twin/triple	Single/twin/triple	Single/twin/triple/quad	Single/twin/triple	Single/twin/triple
Turns/start	5-12	3-12	3-12	3-12	3-12
Materials & Ambient temperature	Wear resistant Functional polymers - POLYURETHANE/PUL - 30°C --- 70°C; ENGINEERINGPLASTICS/ALLOY - 20°C --- 120°C; Service life: from 7 years to 20 years.				
Particle size	-2mm---+0.03mm	-0.3mm---+0.03mm	-0.3mm---+0.03mm	-0.3mm---+0.03mm	-0.2mm---+0.03mm
Pulp density	10%---55% w/w	10%---55% w/w	10%---55% w/w	10%---55% w/w	10%---55% w/w
Feed volume	2-3 stere/start	5-15 stere/start	5-25 stere/start	5-15 stere/start	5-15 stere/start
H/M% in feed	0.01%---40%	0.01%---98%	0.01%---98%	0.01%---60%	0.01%---98%
Apply stage	Rougher Scavenger	Rougher Cleaner/re-cleaner Scavenger	Rougher Cleaner/re-cleaner Scavenger	Rougher Scavenger	Rougher Scavenger
Wash water	Inside Trough wash-water System is available as per order on some applications				
HMC Splitters	Trough Midway HMC Splitters is available. (each turn or each tow turns)				
Applications	Gold /Tin/tungsten/Chromite/Niobium-tantalum/Zircon/Rutile/Ilmenite/Silica-sand/Pumice-sand/Iron /Hematite/Garnet/Barite/Sillimanite/Andalusite/Titane magnetite/Manganese/Native copper/Base-metal				

PATENT NUMBER: World: CHINA 03113503K, 201120288083, 201120215456, 201120211523, 200620155975;
AUSTRALIA 2012292866; INDIA 6194/Be/np/2013; SOUTH AFRICA 2013/06406; VIETNAM 1-2013-03557;

Diagram illustrating the spiral concentration process and component layout.

Physical Characteristics

680 mm

Diameter

380 mm

Pitch Space

2952.58 mm

Total Height

Operational Performance

Metric	Value
Particle Size Range	-2mm to +0.03mm
Pulp Density	10% - 55% w/w
Feed Volume	2-3 stere/start
Service Life	7 - 20 years

Applications

Supported Minerals

Gold, Tin, Tungsten, Iron Ore, Chromite, Rutile, Zircon, Niobium-Tantalum, Silica Sands, Manganese

Features

Key Features

- Replaceable modular cast polyurethane feed box
- Integrated engaged launder system
- Concentrate diverter for higher grade
- Re-pulping devices for enhanced recovery
- Available with or without wash-water
- Splitter configurations tailored for specific applications