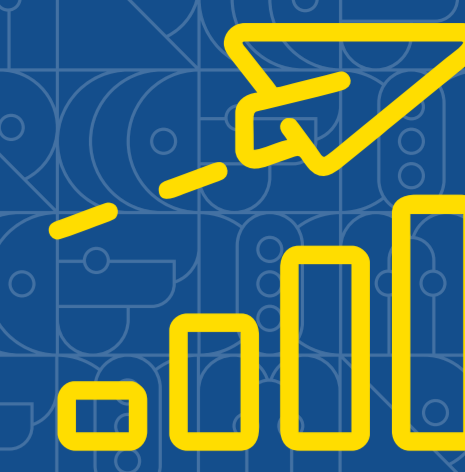




Exploring



Experimenting



Evolving

AREA

FUNCTION

Gravity separators are vital equipment in mineral processing for separating minerals based on their density differences. Spiral separators utilize centrifugal forces to separate minerals based on their specific gravity, with larger and heavier prticles experiencing more drag from the bottom, so moving slower and settling at the center of the spiral and conversely, the light particles staying towards the outside of the spiral. Multi-gravity separators use the principle of centrifugal acceleration to enhance the separation process, allowing for the efficient recovery of fine and ultrafine particles.

- Method:**
- 1- Raw material is fed into the separator's feed chute, ensuring even distribution.
- 2- Water is applied to make a slurry. water flow rate is adjusted to optimize separation efficiency.
- 3- The products are collected and separated.

EQUIPMENT

LIST

No.	Equipment Name	Type	Capacity (t/h)	Specification	Supplier
1	Spiral I	Pilot scale	Up to 1	Input Pressure: 2 bar, Material: Epoxy and glass, lined with polyurethane	AKW Germany
2	Spiral II	Pilot scale	Up to 2	Material: Epoxy and glass lined with rubber	Haiwang China
3	Spiral III	Pilot scale	Up to 3	Feed Size: 75 to 2000 micron Material: PVC (UV resistant)	Iran
4	Multi-Gravity (Micro)	Lab scale	Up to 25 kg/h	Tilt Angle: Up to 9 degree Rotational Speed: 220 - 330 rpm	Gravity Mining UK
5	Multi-Gravity (C900)	Pilot scale	Up to 250 kg/h	Feed size range: 1-500 micron Rotational Speed: 280 rpm	Iran
6	Multi-Gravity (C902)	Industrial scale	Up to 5	Feed size range: 1-500 micron Rotational Speed: 185 rpm	Gravity Mining UK
7	Flotation Machine	Pilot scale	25 liters (each)	Type: Denver Rectangular Bank Type: 6 Series Cells	Iran
8	Smart Flotation Cell	Pilot scale	120 liters	Feed size range: 1-500 micron Rotational Speed: Up to 1400 rpm	FIMRC Iran

CAUTION



Do not operate this equipment unsupervised



Chemical materials.  
Wear required protection



Slippery surface



High-visibility jackets  
must be worn



Eye protection must be worn



Face mask must be worn

