

# HXJQ<sup>®</sup>

China Largest Mining Machinery  
Manufacturer

*Operating Instruction*

# FLOTATION MACHINE



**Henan Hongxing Heavy Machinery Co., Ltd.**

## The Inner Structure and Application of Flotation Machine:

This flotation machine is suitable for separating non-ferrous and ferrous metals as well as non metals such as fluorite and talc. The structure of flotation machine: this machine is mainly

composed of pulp chute, mixing device, air charging system, mineralized bubble discharging device and electro motor.

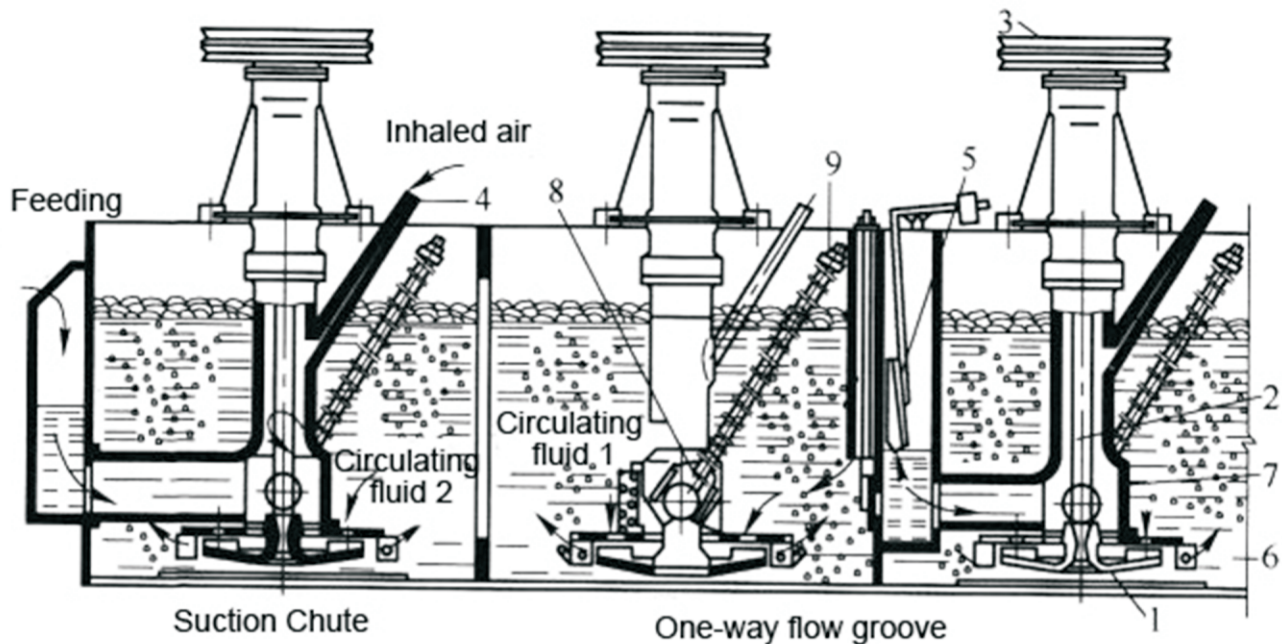


Diagram of the Impeller of Agitating Flotation Machine

1-impeller 2-vertical bearing 3-belt wheel 4-conduit 5-gate  
6-cover board 7-admitting pipe 9-spiral rod

## The Working Process of Flotation Machine:

This machine runs by the triangle belt of the electrical motor driving the impellor to rotate, producing centrifugal effect which will form negative pressure, and on one hand it will absorb sufficient air in order to mix with the pulp, and on the other hand it will mix the pulp in order to mix with the reagents, and at the

same time will refine the foam in order to stick the minerals onto the foam, and float on the surface of the pulp in order to become mineralization foam. The workers can adjust the height of the flashboard and control the liquid level in order to scrap the useful foam.

## Features

Before starting the machine, first check the bolts of all spare parts and before stopping the machine, manually spin the wheel to prevent the depositing of sediment from increasing the load of electro motor. During the working process, carefully adjust the height of the flashboard to maintain the stability of the liquid level, so that the

mineralized bubbles on the liquid surface of the pump can be timely scraped to the launder. A certain space should be maintained between the impeller and the stator, and when the impeller is abraded, it should be changed timely, and the bearing inside the pump should be maintained every three month.





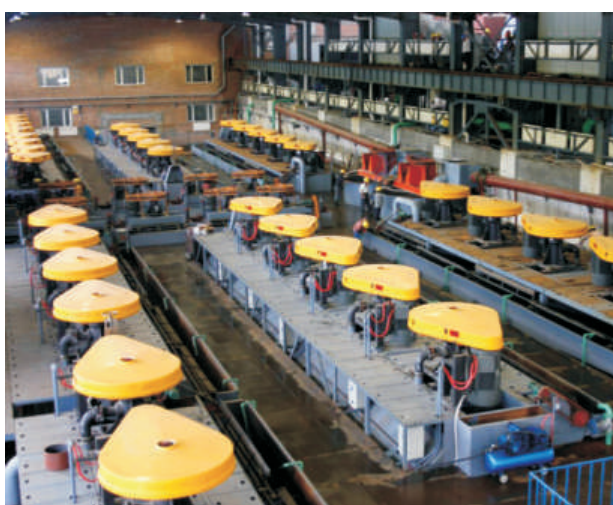
## Characteristics:

Processing ability: 0.2–16 m<sup>3</sup>/min

Impeller rotation speed: 191–400 r/min

Dimensions: 700×700×750–2200×2900×1400 mm

Applied material: non-ferrous metals, ferrous metals, precious metals, non-metallic mineral.



## Working principle

Mix the mashed rocks with water and necessary reagent in the mixing chute, and inject them to the pulp chute. Lead air to the pulp to make it form large quantities of bubbles, and some mineral particles that are difficult to get moist in water and that are generally called hydrophobic mineral particles will stick on the bubbles and float with the bubbles to the surface of the pulp to form mineralized bubble layer, and some other mineral particles that are easy to get moist in water and that are called hydrophilic mineral particles do not stick on the bubbles but stay in the pulp to discharge the mineralized bubbles containing specific minerals, thus completing the separation process.

## Technical data :

Model	Trough cubage (m <sup>3</sup> )	Inside dimensions (L×W×vH) (m)	Airsuction amount (m <sup>3</sup> /m <sup>2</sup> ·min)	Power (kw)	Motor model	Processing capacity (m <sup>3</sup> /min)	Single trough weight (kg)
BF-0.37	0.37	0.74×0.74×0.75	0.9~1.05	1.5	Y90L-4	0.2~0.4	470
BF-0.65	0.65	0.85×0.95×0.9	0.9~1.10	3.0	Y132S-6	0.3~0.7	932
BF-1.2	1.2	1.05×1.15×1.10	1.0~1.10	5.5 4.0	Y132M2-6 Y132M1-6	0.6~1.2	1370
BF-2.0	2.0	1.40×1.45×1.12	1.0~1.10	7.5	Y160M-6	1.0~2.0	1750
BF-2.8	2.8	1.65×1.65×1.15	0.9~1.10	11	Y180L-8	1.4~3.0	2130
BF-4.0	4.0	1.9×2.0×1.2	0.9~1.10	15	Y200L-8	2~4	2585
BF-6.0	6.0	2.2×2.35×1.3	0.9~1.10	18.5	Y225S-8	3~6	3300
BF-8.0	8.0	2.25×2.85×1.4	0.9~1.10	22 30	Y225M-8 Y250M-8	4~8	4130
BF-10	10	2.25×2.85×1.7	0.9~1.10	22 30	Y225M-8 Y250M-8	5~10	4660
BF-16	16	2.85×3.8×1.7	0.9~1.10	37 45	Y280S-8 Y280M-8	8~16	8320
BF-20	20	2.85×3.8×2.0	0.9~1.10	37 45	Y280S-8 Y280M-8	10~20	8670
BF-24	24	3.15×4.15×2.0	0.9~1.10	45	Y280M-8	12~24	8970





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We provide you with the prophase plan, process flow design and manufacturer equipment according to your special demand.

- **Sale services: servant**

Send technicians to the jobsite for guiding the installation and adjustment, training operators and finishing the check and accept together with you.

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