

XCRS74-400×300

wet weak magnetic separator



WELL-TECH EQUIPMENT
威尔国际矿业装备

Application

XCRS Drum Wet weak magnetic separator is mainly used in metal beneficiation laboratory. It uses wet method for magnetic separation of fine-grained strong magnetic ores in the form of parallel flow. XCRS Drum Wet weak magnetic separator is small in size, light in weight, simple in operation and convenient in maintenance. The equipment is not suitable for beneficiation tests with corrosive liquids.

Main technical parameters

Drum size (mm)	Φ400×300
Magnetic field intensity on drum surface (mT)	-125 Stepless adjustment
drum speed (r/min)	25
Rated working current (A)	0-3.5
Temperature rise of magnetic pole coil (°C)	-<100
Max feeding size (mm)	2.5
.Dimension (L×W×H)	783×600×1200
Weight (kg)	about 250

Structural Introduction and Characteristics

XCRS Drum Wet weak magnetic separator is composed of the main body of the magnetic separator and drum power supply. The main body of magnetic separator mainly includes: 1: Frame 2: magnetic drum 3: ore trough(hopper) 4: spray pipe 5: transmission device 6: feeding ore box.

The drum power supply is a single silicon bridge rectifier power supply whose output is adjusted by a voltage regulator handle.

1. Frame: welded by angle steel, which is the support part of the whole machine.

2. Magnetic drum: It is equipped with four excitation coils and magnet cores, and an additional magnetic pole without excitation coil is installed on its discharging side to facilitate ore unloading. These five poles form fan-shaped fixed on the mandrel, the mandrel is fixed on the frame through bearing bushes, and the cylinder is made of non-magnetic material aluminum and stainless steel, and the fan-shaped coil is made of non-magnetic material. The connection results in the alternation of the magnetic field polarity on the palm of each magnetic pole and the flip of ore particles up to 180 degrees per passing magnetic pole. Under the action of magnetic stirring, the quality of magnetic products can be improved. At one end of the mandrel, a square outward structure can be used to rotate the magnetic poles in the drum around the axis, so as to meet the needs of different minerals.

3. Transmission device: Installed on the bottom side of the frame, in order to reduce the center of gravity of the whole machine, the transmission part is composed of three AC motors, worm gears and worm gearboxes. The output of the gearbox is driven to the drum through the chain, which drives the drum to rotate (the magnetic pole does not rotate with it). The speed of the drum is 25 rpm. The direction of rotating force of magnetic drum is consistent with that of ore feeding.

4. ore trough(hopper):

It is welded by aluminium and stainless steel plate and fixed on the frame by screw. An overflow outlet is arranged at the feeding side of the ore trough to keep the liquid level high, and a concentrate nozzle is arranged at the lower part of the concentrate trough for receiving ore.

5. spray pipe:

A copper pipe with holes installed on the rack is connected with the indoor water source for washing concentrate on the magnetic drum. The sprinkler angle can be adjusted by rotating the spray pipe.

6. Feed the ore box: