

4-30TPH Mine Powder Briquetting Plant

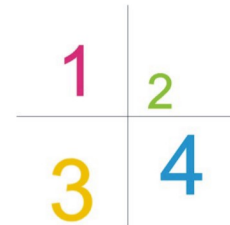
General Introduction

Briquetting technology

Briquetting is the transformation of a powdery or granular product into a larger more convenient size. This is accomplished by compacting the product with a roller press sometimes in the presence of a binder material. The briquettes can be produced with high or low pressure and can undergo mechanical or thermal treatment according to the characteristics of the processed material, the binder used and the desired end product.

Suitable material for briquetting:

Colour and black metallic mine powder:



1. Iron concentrate fines
2. Raw material powder,
3. Manganese ore fines
4. Silicomanganese alloy.

Othes

Iron scale,
Iron sludge
Precipitator dust,

Coal

Coal powder,
Coke powder
Slime peat
Middle coal
Lignite etc.

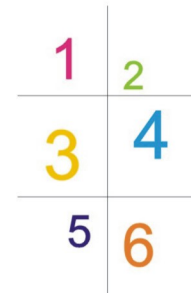
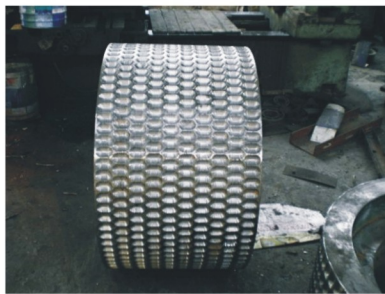
Other material:

Charcoal powder
Fireproof material
Desulfurization gypsum,
Dolomite etc.

Anyway, briquetting is the only way to change the powdery material into briquettes which is suitable for transporting, in the meantime, this way also saves energy.

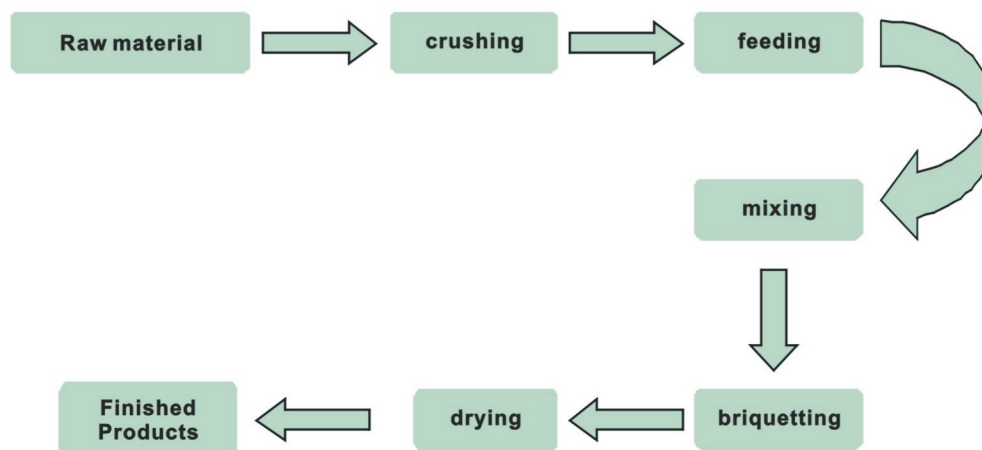
Final Products

All the above material can be transformed into different shapes according to buyer's request through using different rollers. We list some types below:



- 1. Roller
- 2. Pillow shape
- 3. Egg type
- 4. Ball type
- 5. Various type
- 6. Square type

Flowchart



Main Equipment

Crusher

The Vertical Complex Crusher is a new type of rough grinding and fine crushing product combined the domestic and foreign crushing technologies together, developed and designed by our team of highly qualified engineers on main technical parameter. It can be widely used in the medium cement plants to crush crude cement material and chamotte. It provides an ideal fine crushing equipment of technical reconstruction or setting up new cement production lines for cement plant. Also it is suitable for crushing iron ore, sandstone, gypsum, slag, gangue, lump coal and other hard ore.



Special features:

- High and cubic crushing ratio,
- Low energy consumption,
- Steady running,
- Smart structure and easy operation and maintain

Main technical data:

Model	Max input size(mm)	Output size(mm)	Producing capacity(TPH)	Power (kw)	Size (mm)	Weight (kg)
GCLP500	≤20	≤3	3-6	15	1150×750×1200	1100
GCLP650	≤20	≤3	8-10	22	1650×900×1300	1900
GCLP750	≤30	≤3	13-15	37	1500×1050×1600	3500
GCLP1000	≤30	≤3	18-22	45	1800×1270×1900	4700

Box Feeder:

The box quantitative feeding machine is a traditional product; it is mainly used for briquetting production line. Its adjustment of feeding speed is with extraordinary use in the production line.

The main advantage of this machine as following:

- High producing capacity
- Strong adjusting ability
- Equable feeding

Belt conveyor

The machine is used to conveying powder material, grain material and small lumpy material that are easy to fish out. It can also used to the packing material such as coal, detritus, gravel, cement, fertilizer , ect. and the material whose conveying pile density is less than 1.67t/ m3. The temperature of the conveyed material is less than 60?. The length of the machine and the shape can be made according to the demand of the client. When you transmit the material, you can use the electric roller or driving-equipment with driving-stand.

Double paddle mixer

Our double paddle mixer is suitable for blending two or more Powders/ granules with various densities. Small quantity of Liquid also can be sprayed during mixing.

The main feature of our double paddle mixer as following:

- Suitable for mixing of powders, granules and other materials
- High efficient rapid mixing, shortens mixing time
- Enhanced mixing uniformity



Main technical data:

Model	Speed of main shaft (r/min)	Power (kw)	Producing capacity	Weight(kg)	Size (mm)
GCWJ2000	35	11	10-12	1600	3100×750×500
GCWJ2500	35	15	15-20	2100	4200×800×620
GCWJ3000	35	18.5	20-25	2900	4700×800×620

Briquetting Press

Our briquette press has two larger rollers in a fixed position in the frame; the other two smaller rollers are moveable. As its named implied, it has four rollers and do twice pressing in production of briquettes, so the briquette is stronger and in higher density, the surface of briquettes is smoother.

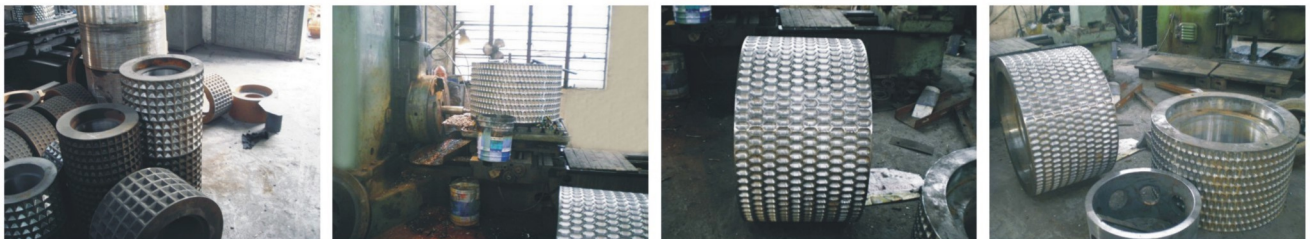


Main technical data

Model	GCXM-4	GCXM-6	GCXM-8	GCXM-10	GCXM-15	GCXM-20	GCXM-30
Producing capacity	4TPH	6TPH	8TPH	10TPH	15TPH	20TPH	30TPH
Width of roller	240mm	250mm	280mm	300mm	336mm	400mm	500mm
Diameter of roller	360mm	400mm	450mm	550mm	650mm	750mm	850mm
Power	7.5-15kw	11-18.5kw	15-22kw	18.5kw-30kw	30-45kw	55-75kw	75-90kw
Speed of main shaft	18r/min	15r/min	15r/min	13r/min	13r/min	13r/min	10r/min
Retarder	ZQ350 ZQ400	ZQ400 ZQ500	ZQ500	ZQ500 ZQ650	ZQ650 ZQ750	ZQ750	ZQ850
Type of pressure	Mechanical	Mechanical	Mechanical & Hydraulic	Mechanical & Hydraulic	Mechanical & Hydraulic	Mechanical & Hydraulic	Mechanical & Hydraulic
Material of roller	65Mn	65Mn	65Mn 9cr2Mn	65Mn 9cr2Mn	65Mn 9cr2Mn	65Mn 9cr2Mn	65Mn 9cr2Mn
Form of structure	Four roller double press	Four roller double press	Four roller double press	Four roller double press	Four roller double press	Four roller double press	Four roller double press
Bearing of main shaft	319*4	319*4	319*4	2097724*4	2097732*4	2097732*4	2097734*4
Main shaft	D: 95mm 45#steel	D:110mm 45#steel	D:120mm 45# steel	D:135mm Forging steel	D:165mm Forging steel	D:165mm Forging steel	D:250mm Forging steel
Shape and size	according to your request	according to your request	according to your request	according to your request	according to your request	according to your request	according to your request

Key part of briquette press

Different Rollers



Vertical Dryer

This type dryer can be used in the drying and dehydration of coal briquettes, fine coke and black nonferrous metals. This is the most ideal equipment for large and medium companies in the production lines.



The moisture of output briquettes can be in the range of 2-4%.

Model	Producing capacity(TPH)	Power (kw)	Time for drying	Temperature for drying	Consumption of coal (kg/hr)
GCLG2200	4-6	22	3hours	150-250 C	50
GCLG2500	6-8	37	3hours	150-250 C	80
GCLG3000	10-12	45	3hours	150-250 C	100

Dry Powder Briquetting Press

General Introduction:

Briquettes made with binders are usually pressed at low pressure. When briquettes are made without binders, however, the success of the process depends upon crushing or plastically deforming the particles to bring them closely together.

High Pressure Dry Powder Briquette Press is widely used to make briquettes from various powdery materials, including aluminium powder, magnesium powder, ore powder, active charcoal powder, alumina, caustic soda (sodium hydroxide), clay, coke powder, coal, cryolite, chemical fertilizer, plastic, calces, pigment etc. without adding binder. The main purpose of the machine is to reduce powder pollution, minimize size/capacity of raw material, recycle and make more it convenient for transportation. This machine is characterized by high efficiency and low power consumption, compact structure and so on.



working principle of dry powder briquetting press

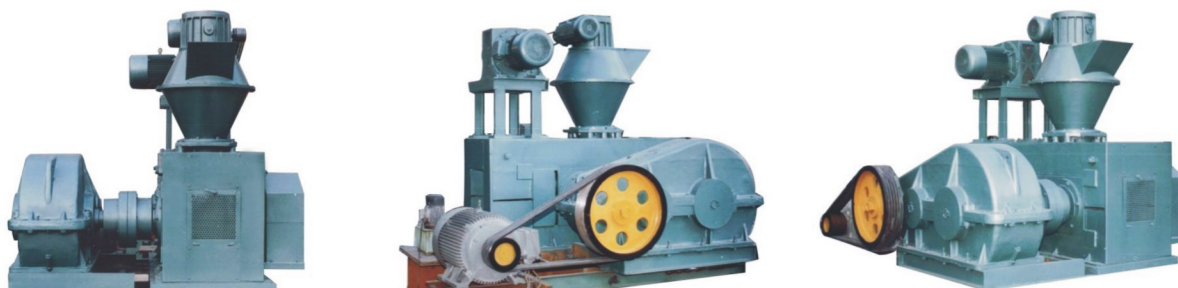


Coal Briquette

Requirement on raw material:

1. Size of raw material: 80-200 mesh.
2. There shouldn't be any metallic material in the raw material to avoid damaging the surface of rollers.
3. Sufficient supply of raw material to make perfect and good-looking briquette.
4. The moisture of material should be no more than 3%.

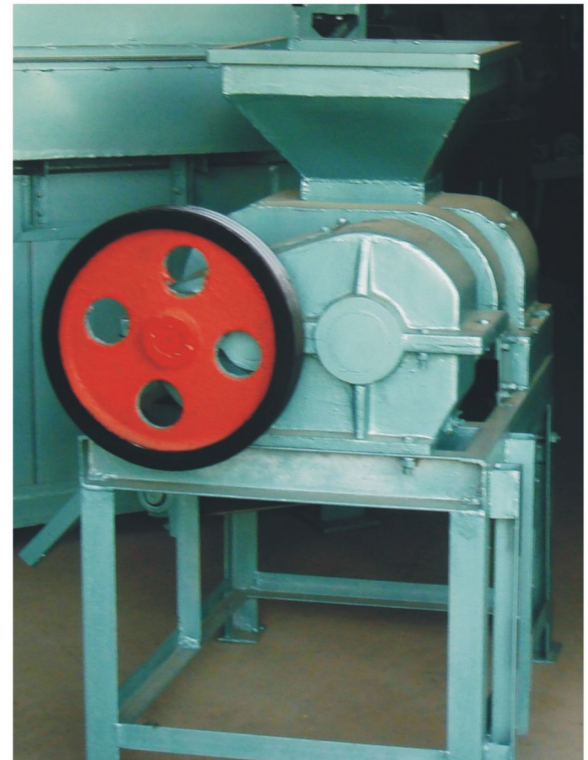
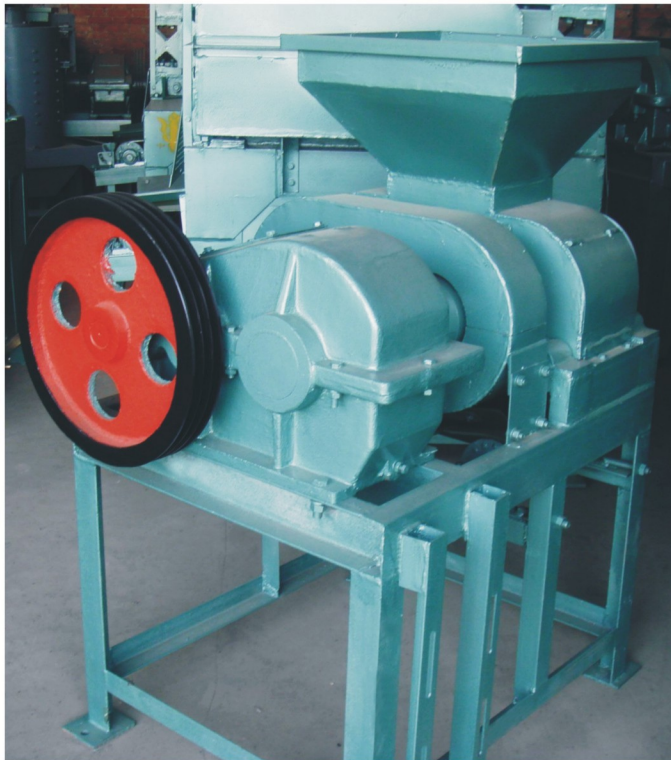
Photos of briquette press



Mini Briquetting Press

General Introduction

Our mini briquetting press GCXM-1 is the special machine for handling coal dust. It is very popular in the world market as its low cost, exquisite appearance and high efficiency. This is two rollers single press type machine. The main technical data of this machine as following:



Technical parameter

Model: GCXM-1

Power: 5.5kw

Producing capacity: 1-2TPH

Type of pressure: Mechanical

Diameter of roller: 290mm

Width of roller: 200mm

Form of structure: Two rollers single press

Overall size: 1200×1000×1420

Weight: 560kg

Shisha Charcoal Briquette Machine

This shisha charcoal briquette machine is applicable for making small round tablets from charcoal dust. The output briquette is in good density, perfect shape, good appearance. Meanwhile, it is easy for combustion, no smell and last longer when burning.

Model: GCZ26

Dies(sets): 40

Max pressure(kN): 100

Dia. of Tablet (mm): 10-60

Thickness. of Tablet (mm): 5-16

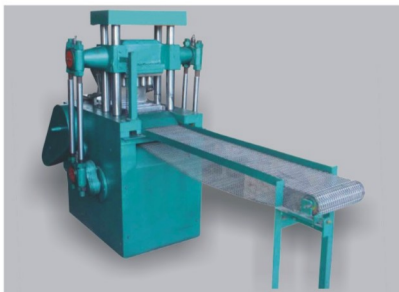
Max. Production capacity:(tablets/hour): 18000

Moisture of charcoal dust before pressing: 15%-20%

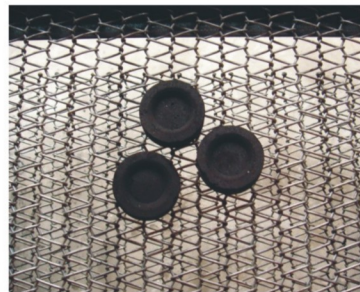
Overall size(mm) : 1100×940×1800

Motor(kW): 7.5

Main machine weight(kg): 1800



Shisha Charcoal Briquette Machine



Shisha Charcoal

Coal Briquette Machine/Coal Ball Machine

This type of coal briquetting machine can press coal powder, charcoal powder etc. into various shapes product.

Model: GC-140

Producing capacity: 40pcs/min

Diameter of finished product: 100-140mm

Power:7.5kw

Weight: 1200kg



Coal Briquette Machine



Coal Ball

BBQ Charcoal Briquette Machine

This BBQ charcoal briquette machine can be used to extrude charcoal stick of different diameter (diameter range: 15-65mm) in cylinder or square shape without hole through different moulds from charcoal dust or charcoal powder.

Technical data

Production capacity: 150kg/h

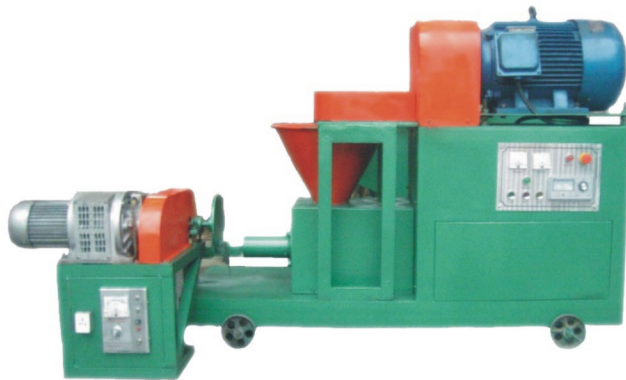
Motor Power: 5.5kw

Diameter of finished charcoal stick: 15-65mm

Overall size of the machine: 1300*800*1600mm

Packing size: 1550*1310*1360mm

Weight: 800KGS



BBQ Charcoal Machine



Charcoal Stick



BBQ Charcoal