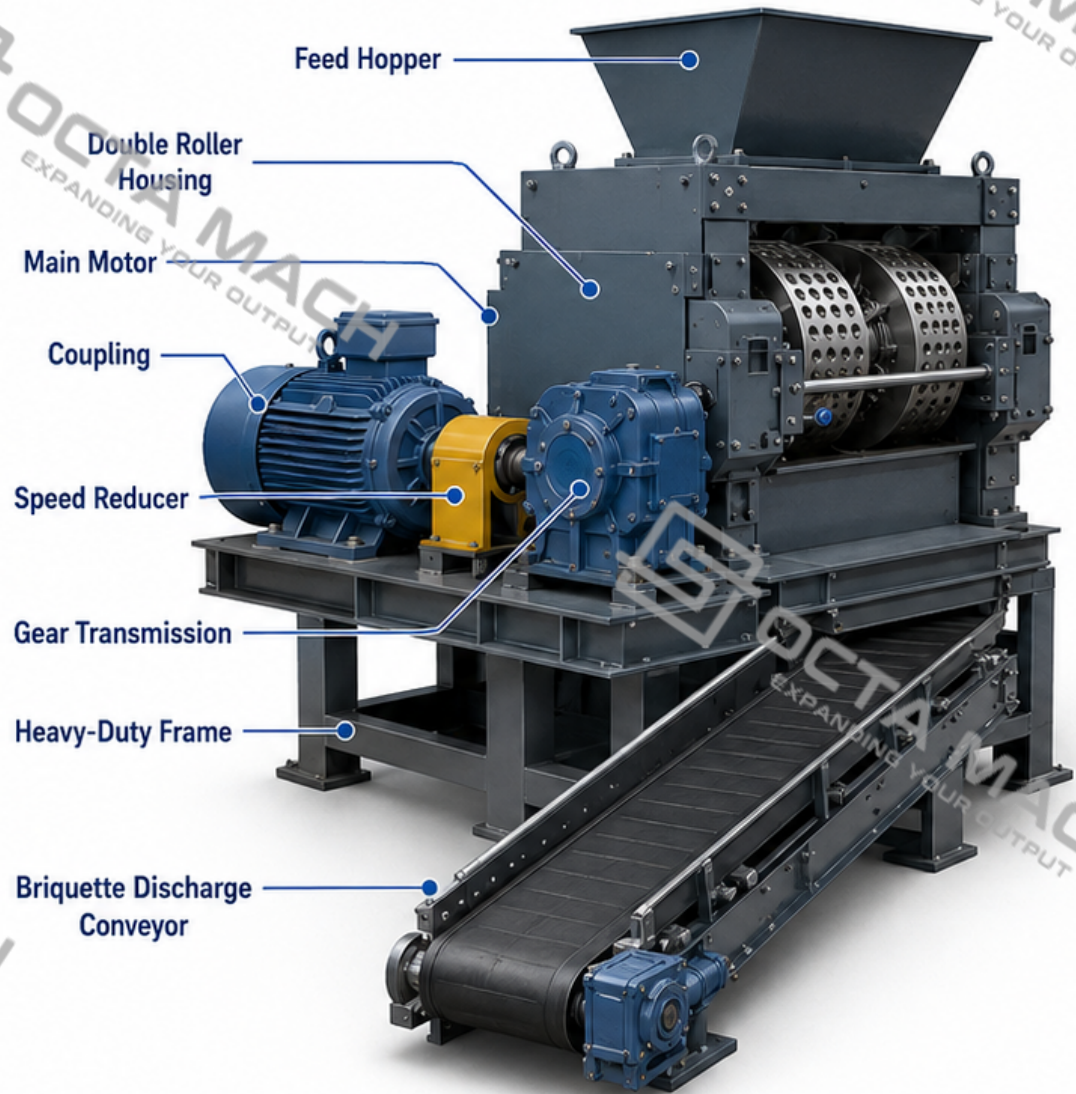


Product Overview and Confirmed Model Range



1. Models

YHQ290 to YHY1000



2. Published Capacity

2–45 t/h



3. Roller Size

Φ290 × 220 to
Φ1000 × 530 mm



4. Roller Speed

10–25 r/min



5. Motor Power

5.5–132 kW



6. Typical Feed

Coal fines, mineral powder,
ore fines and metallurgical
residues

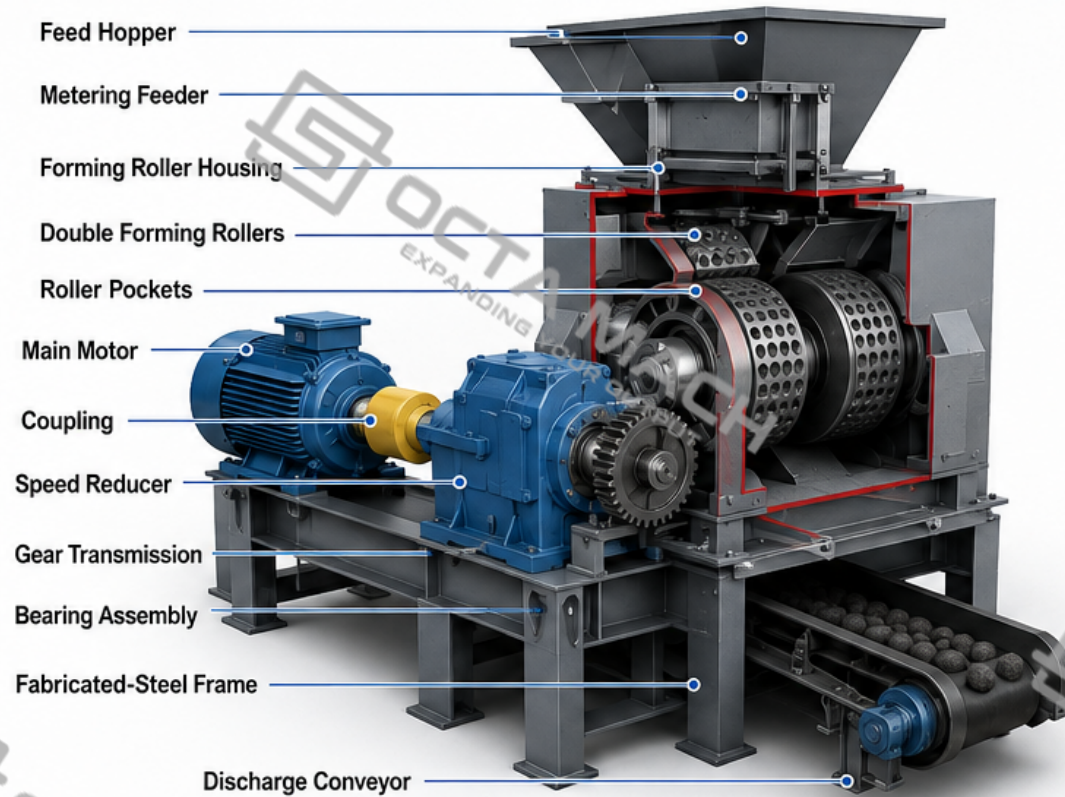
A Briquette Press Ball Machine uses two counter-rotating pocketed rollers to compact prepared industrial powders into uniform briquettes for handling, recycling or downstream processing.



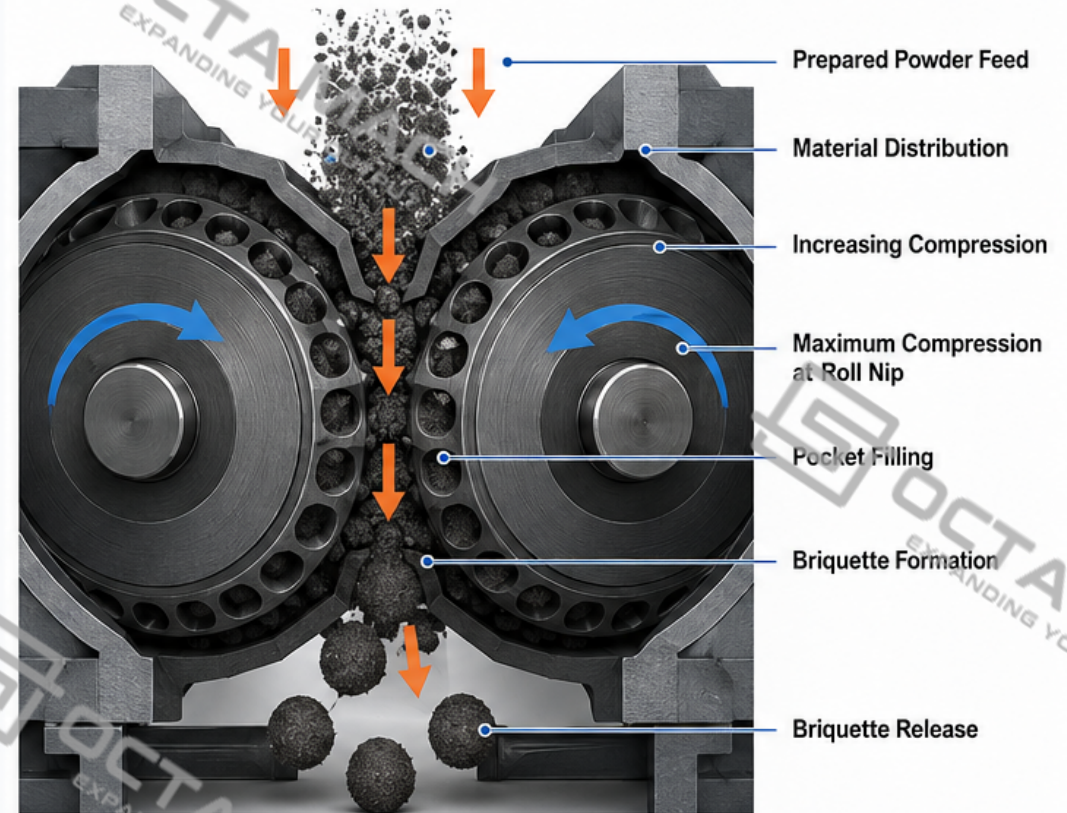
Published capacity is used for preliminary model comparison. Actual output depends on feed properties, moisture, binder, roller-pocket design and operating stability.

Machine Structure and Roller Pressing Principle

1. MACHINE STRUCTURE



2. ROLLER PRESSING PRINCIPLE



MOTOR



COUPLING



SPEED REDUCER



GEAR TRANSMISSION



FORMING ROLLERS



NOTE: Stable feeding and synchronized roller rotation are required for consistent briquette formation.

Material Preparation and Briquetting Process



1. FEED CONTROL



- Particle-size distribution
- Removal of oversize and contamination
- Stable feed rate



2. CONDITIONING CONTROL



- Moisture range
- Binder dosage
- Uniform mixing



3. PRODUCT CONTROL



- Shape consistency
- Green handling strength
- Fines generation
- Product screening



NOTE:

Drying or curing equipment is required only when specified by the material recipe and downstream process.

Feed Materials and Application Boundaries

1. COAL AND CARBON MATERIALS

- Coal Fines
- Coal Powder
- Coke Fines
- Lignite Fines
- Charcoal Powder



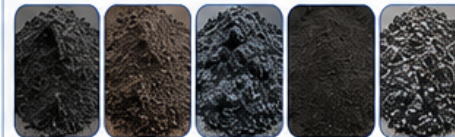
2. MINERAL AND ORE FINES

- Iron Ore Fines
- Manganese Ore Powder
- Fluorite Powder
- Chrome Ore Fines
- Selected Limestone Fines



3. METALLURGICAL RESIDUES

- Mill Scale
- Steel Plant Dust
- Furnace Dust
- Converter Dust
- Iron-Bearing Residues



4. FEED PREPARATION REQUIREMENTS

- Controlled Particle Size
- Stable Moisture
- Uniform Binder Distribution
- No Oversize Rocks
- No Metal Contamination



Particle Size
Control



Moisture
Control



Binder
Uniformity



No Oversize
Rocks



No Metal
Contamination



SUITABLE DIRECT FEED

Prepared Powders

Concentrates

Fine Industrial Residues

Controlled Material Blends



VS



NOT SUITABLE AS DIRECT FEED

River Pebbles

Granite Rocks

Basalt Rocks

Quartzite Lumps

Untreated Ore Lumps



WARNING: Large rock must be crushed or ground before briquetting.

Briquette Press Ball Machine Technical Parameters

Model	Speed Reducer	Ratio	Roller Size	Roller Speed	Motor Model	Motor Power	Capacity	Dimension
YHQ290	ZQ350	1:23.24	Φ290 × 220 mm	20–25 r/min	Y132M-4	5.5 kW	2–3 t/h	1.2 × 1.0 × 1.4 m
YHQ360	ZQ350	1:31.5	Φ360 × 250 mm	15–17 r/min	Y132M-4	7.5 kW	3–5 t/h	2.26 × 1.53 × 1.98 m
YHQ400	ZQ400	1:31.5	Φ400 × 250 mm	15–17 r/min	Y160M-4	11 kW	4–7 t/h	2.3 × 1.38 × 1.96 m
YHQ500	ZQ500	1:31.5	Φ500 × 300 mm	15–17 r/min	Y180L-4	22 kW	8–10 t/h	2.61 × 1.75 × 2.35 m
YHQ650	ZQ650	1:31.5	Φ650 × 300 mm	12–16 r/min	Y200L-4	30 kW	12–20 t/h	3.42 × 2.0 × 2.4 m
YHY750	ZQ750	1:31.5	Φ750 × 380 mm	12–15 r/min	Y225M-4 / Y250M-4	45–55 kW	25–30 t/h	3.7 × 2.55 × 2.6 m
YHY850	ZQ850	1:31.5	Φ850 × 380 mm	10–15 r/min	Y250M-4 / Y280S-4	55–75 kW	35–40 t/h	3.9 × 2.6 × 2.7 m
YHY1000	ZQ1000	1:31.5	Φ1000 × 530 mm	10–13 r/min	Y315S-4 / Y315M-4	110–132 kW	40–45 t/h	4.0 × 2.8 × 2.8 m


NOTE:

Catalogue values are used for preliminary comparison. Final motor, reducer, roller configuration and installation data must be confirmed in the project-specific technical agreement.

Briquette Shape, Binder and Product Quality

1 Roller Pocket and Briquette Shape

1. Pillow

Upper
Roller Pocket



Lower
Roller Pocket



Finished
Briquette



2. Oval

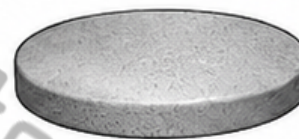
Upper
Roller Pocket



Lower
Roller Pocket



Finished
Briquette



3. Round

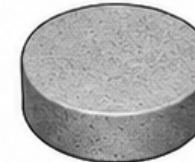
Upper
Roller Pocket



Lower
Roller Pocket



Finished
Briquette



4. Rectangular

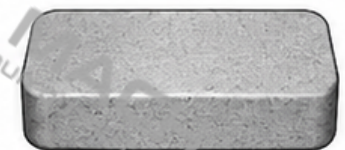
Upper
Roller Pocket



Lower
Roller Pocket



Finished
Briquette



2 Binder Selection



Binder-Free Briquetting

- Used only when the powder develops sufficient bonding under pressure
- Requires stable feed moisture and material properties



Binder-Assisted Briquetting

- Requires controlled binder dosing and uniform mixing
- Binder must suit handling and downstream process requirements

3 Product Evaluation

- | | |
|--|--|
| ☐ Shape Consistency | ☐ Product Density |
| ☐ Briquette Dimensions | ☐ Tumble or Abrasion Resistance |
| ☐ Green Handling Strength | ☐ Fines Generation |
| ☐ Cured Strength, When Applicable | ☐ Usable Briquette Yield |



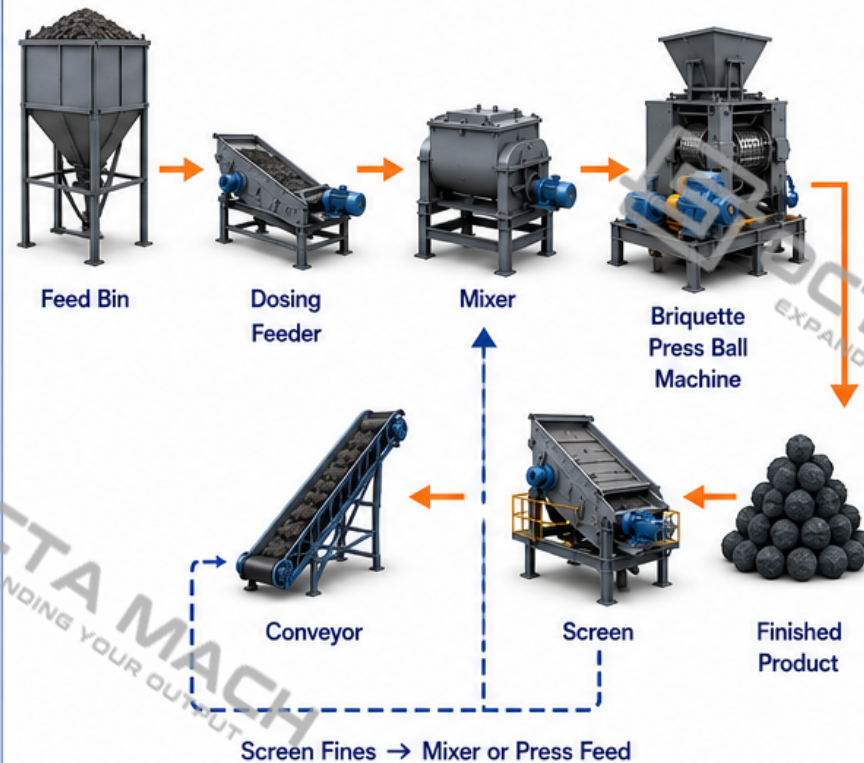
A binder that improves handling strength may still be unsuitable if it introduces unwanted elements into the downstream process.

Model Selection and Operating Checklist

1 SELECTION INPUTS

-  Feed Material ☐
-  Particle-Size Distribution ☐
-  Bulk Density ☐
-  Moisture Range ☐
-  Binder Type and Dosage ☐
-  Required Normal Capacity ☐
-  Required Peak Capacity ☐
-  Briquette Shape and Size ☐
-  Required Product Strength ☐
-  Feed Abrasiveness ☐
-  Voltage and Frequency ☐
-  Foundation and Maintenance Space ☐

2 PLANT INTERFACES



3 OPERATING AND MAINTENANCE CHECKS

-  Uniform Feed Across Roller Width ☐
-  Roller Synchronization ☐
-  Roller Pocket Wear ☐
-  Bearing Condition ☐
-  Reducer Lubrication ☐
-  Discharge Clearance ☐
-  Guarding ☐
-  Dust Collection ☐
-  Screening Efficiency ☐
-  Controlled Fines Return ☐



Representative
Material
Evaluation



Required
Capacity



Briquette
Specification



Roller
Configuration



Plant
Interfaces



Recommended
YHQ or YHY
Model



NOTE:

The machine model should not be selected from nominal capacity alone.
Representative feed testing is recommended for new materials or binder recipes.