

Biomass Pellet Press Machine

Biomass pellet press machine is a kind of ring die pellet press to make biofuel pellets from wood timber, tree branches, sawdust, wood chips, wasted wood, wood shavings, rice husk, EFB, sugarcane bagasse, coffee husk, coconut shell, sunflower husk, peanut shell, straw, agricultural stalk, corn cob., etc biomass material.

By the high compress between rollers and ring die to press these raw material to biomass fuel pellets, thus to increase the hardness, density and calorific value.

Our biomass pellet press machine applied ring die type design, which is easy to maintenance and have high performance to make EN and DIN standards high quality pellets.

The raw material put into our biomass pellet press machine, the best moisture of raw material is 12-15%, the best size is around 5mm.

The final pellets diameter can be 6mm, 8mm, 10mm or 12mm in diameter, the length is adjustable from the cutter, the bulk density is around 650kg/m³ varies from different kind of raw materials. The final pellets can be good fuel for boiler, home heating, pellet furnace and power plants, the pellets can be also use for animal bedding.

Technical data for biomass pellet press machine

Model	MZLH420B	MZLH420	MZLH508
Output	700-800kg/h	1000-1200kg/h	1500-2000kg/h
Main Motor Power	75Kw	90Kw	132Kw
Feeder Auger Motor Power	2.2Kw	3Kw	4Kw
Fore Feeder Power	1.1Kw	1.5Kw	2.2Kw
Ring Die Diameter	420mm	420mm	508mm
Ring Die Speed	150 RPM	150 RPM	150 RPM
Ring Die Material	20 CrMnTi	20 CrMnTi	20 CrMnTi
Ring Die Working Temperature	≤ 80℃	≤ 80℃	≤ 80℃
Feeder Auger rotating Speed	12-120RPM	12-120RPM	12-120RPM
Roller Number	2	2	2
Feeding material moisture	12-15%	12-15%	12-15%
Pellet Size	6mm, 8mm, 10mm	6mm, 8mm, 10mm	6mm, 8mm, 10mm

Noise	≤90dB(A)	≤90dB(A)	≤90dB(A)
Dimension	2780*1400*2210mm	2780*1400*2210mm	3050*1550*2250mm
Weight	2900Kg	3100Kg	4150Kg

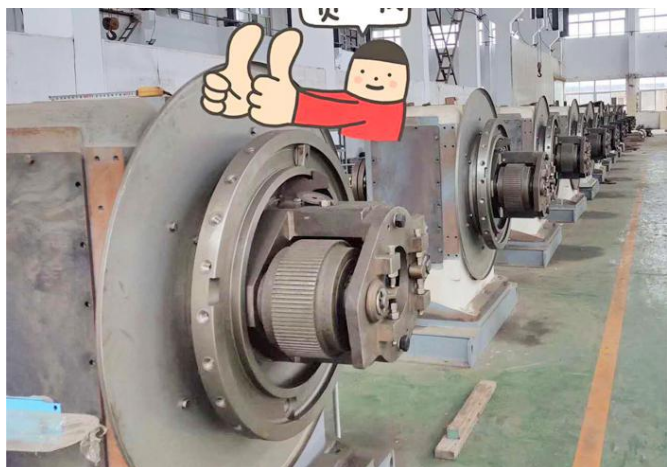
Biomass pellet press machine applied ring die type, equipped with feeder auger and force feeding system to improve the feeding efficiency. Raw material feed into the feeder auger on top of biomass pellet press, this feeder auger rotating speed is VFD adjustable to change the feeding speed thus to prevent raw materials block inside of pelletizing chamber due to over feed. From feeder auger raw material go to force feeder, which press the raw materials into pelletizing chamber, which greatly increase feeding efficiency of feeding low bulk density raw materials.

Inside the pelletizing chamber is ring die and rollers, the ring die rotating by the transmission from main motor, and the rollers rotating by friction between the raw material and ring die, under the rotating and force, the rollers pressing raw material into the holes of ring die to compress pellets. The cutter is on the size of ring die to cut the pellets, thus the length is adjustable from the cutter.

Biomass pellet press machine adopt gearbox type transmission system, with the big gear and small gear inside gearbox to reduce rotating speed of hollow shaft. Due to this design we use eight poles main motor to improve the stability of biomass pellet machine, after reducing speed, the ring die rotating speed is 150 rpm, which greatly improve the pellet machine performance.

Designed with greasing holes at back side of main shaft, workers can inject high temperature lithium complex grease to bearing of main shaft and bearings of rollers from back side of main shaft, benefit from this design when inject the grease no need to stop the pellet press machine, for bearing of rollers each two hours inject 30 grams grease, for the bearing of main shaft each four hours inject 50 grams grease.

A automatic grease lubricating pump is optional to this biomass pellet machine to inject grease automatically.



Pelletizing chamber of biomass pellet press machine



Ring die of biomass pellet press machine



Roller of biomass pellet press machine



Pellets from biomass pellet press machine