



Wood Pellet Making Machine

Wood pellets is a kind of biomass fuel energy and clean energy, which is more and more popular in developed countries and developing countries used as fuel for boiler, home heating, furnace and power plants. Due to the high compression in pelletizing process, the density of wood pellets is higher than wood, the heating value is much higher than wood, so the transportation of wood pellets is easier compared transportation of wood. The most important is when burn wood pellets there is much less pollutant emission compared with burn wood directly, nowadays environmental protection is a significant issue all over the world, so we designed the wood pellet making machine to make wood pellets from wood material, thus can help to reduce pollutant emission and protect environment.

Our wood pellet machine is ring die type pellet machine designed with horizontal structure, which can make wood pellets from wood logs, tree branches, timber, root of tree, wood chips, wood shavings, sawdust, wasted wood, wood residues and other biomass material.

Before put the wood material to our wood pellet machine, firstly have to turn the size to about 5mm, the moisture to 12-15%. If the size too big it can not go into the pellet machine and if the moisture is too high or too low it will influence the density, hardness and quality of final wood pellets. That is why control the size and moisture of raw material before make pellets is important. If the moisture and size of wood can be controlled as required, this wood pellet making machine can make pellets with diameter 6mm, 8mm, 10mm or 12mm, the length can be adjusted by the cutter, so the wood pellets produced from our wood pellet machine can match EN and DIN plus A+ standard.

Our ring die wood pellet making machine is made up of base frame, gearbox, pelletizing chamber, cutter, force feeder, feeder auger on top and matrix lifter.

Raw material go to pellet machine from the feeder auger on top of machine, the rotating speed of this auger is VFD adjustable, so that user can control the feeding speed. From feeder auger the material go to force feeder, the rotating vane press material into pelletizing chamber, benefit from this force feeder, material can not block in front of the ring die.

Inside pelletizing chamber, there is hollow shaft, main shaft, rollers and ring die, our pellet making machine is ring die rotating type, rollers press wood material into holes of ring die to

compress pellets.

The cutter aside of ring die can cut the pellets when it come out from holes of ring die, the length of final pellets is adjustable.

The motor and gearbox composed the transmission system for this pellet machine, due to the big gear and small gear reduced the rotation speed of ring die to 150 rpm, thus greatly improve the stability of this pellet machine.

On back side of main shaft there is grease nozzles to inject grease for bearing of main shaft and bearings of rollers. Also there is limited switch, safety pins to protect the main shaft and hollow shaft from overload.

Technical data for wood pellet making 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



Pelletizing chamber of wood pellet making machine



Ring die (matrix) of wood pellet making machine

Rollers of wood pellet making machine



Wood pellets from wood pellet making machine