Wood pellet line is made up of different machines according to the features of different kind of raw material. Before pellet mill need machines to process the size of raw material <5mm, process the moisture of raw material 12-15%. Usually use wood chipper and hammer mill to process the size, use dryer to reduce the moisture. After pellet mill a cooler is needed to cooling down the pellets, a packing machine is usually needed to pack the pellets into bags. Aport from these main machines, the needed accessory machines is conveyor, blower, cyclone, airlock, de-duster and electric panel.



The following is an main machine assemble for a 1t/h wood pellet line consider the raw material is wood log diameter <15cm, moisture 40-50%, for this pellet line first need a wood chipper to chipping the wood logs, then need a rotary drum dryer to dry the wood chips, following that a water drop hammer mill is best choice to turn the chips to sawdust, after this preparation of raw material, pellet mill will use this processed material to make pellets and a cooler to cooling down the pellets, final pack the pellets into bags by pellet packing machine.

If make DIN or EN+A standard pellets, the barks of wood can not go to pellets, so at beginning of pellet line a <u>wood debarking machine</u> is needed.

Details please refer to below explanation:

1. Disc wood chipper

For 1t/h small capacity pellet line a disc wood chipper is much more economical, takes less area to install and easy to operate, the wood chipper will turn wood logs or other wood material into wood chips. The final chips size is around 20mm.

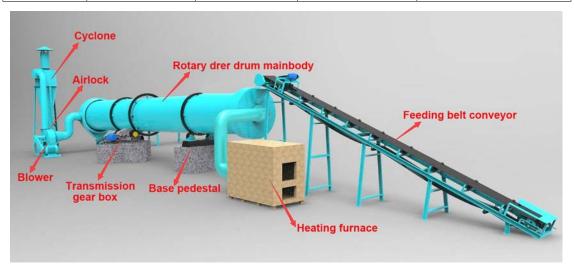
Model	Motor power	Capacity	Max feed wood diameter	Weight
BX680	22Kw	2-3t/h	13cm	1370Kg



2. Rotary drum dryer

Rotary drum dryer is best drying machine to dry wood chips, it can reduce the moisture to 12-15%. The system is simple, safe, and easy to operate, both heating source and electricity saving. The heating source for rotary drum dryer is wood waste, wood logs, tree branches.

Model	Motor power	Capacity	Drum diameter	Drum length
HJ1200	11Kw	1-1.2t/h	1.2 m	12m



3. Water drop hammer mill

Water drop hammer mill is widely used in wood pellet line to crush wood chips into sawdust, because the quality and stability of this kind of hammer mill is better. The control system use chain reaction technology, it is a good thing for production line control.

We usually suggest dryer before hammer mill in pellet line, because after drying the chips is easier to crush, and it will save electricity in crushing step. Also for hammer mill if raw material moisture is too high it is not easy to crush, cause the wet material will stick on the sieve and block the holes.

Model	Motor power	Capacity	Rotating speed	Hammer quantity
ZW40A	37Kw	1-1.5t/h	2980rpm	56 pcs



4. Ring die wood pellet mill

Ring die pellet mill MZLH420 model is the most popular machine to assemble pellet line, since the technology is mature, easy operate, stable running, and good quality final pellets.

Model	Motor power	Capacity	Dimension	Weight
MZLH420	90Kw	1-1.2t/h	2900x1100x2150mm	3000Kg



5. Pellet cooler

The contraflow cooler is best cooling machine in wood pellet line, it can cooling the wood pellets from 70-80 Celsius to room temperature. The cooler is also together with a vibration sieve to pick out the small size from pellets.

Model	Motor power	Capacity	Blower motor	Airlock model
SKLN1.5	1.5Kw	1-1.5t/h	5.5Kw	GTD2.8



6. Pellet packing machine

It is a quantitive weighing machine together with bag sealers, it can weight the pellets, fill the bags and seal the bags, we equip two kinds of sealer suit both plastic bags and woven bags.

Model	Motor power	Weight range	Packing speed	Tolerance
100A	0.37Kw	10-100kg/bag	≤300 bags/h	0.2%F.S

