Rotary drum dryer introduction

Rotary drum dryer is one kind of the drying machine, one of the basic machine in wood pellet line. The drum dryer is made up of heating furnace, dryer drum main body, feeding chute, discharge chute, blower, cyclone, airlock, gear, rolling ring, gearbox, transmission system, electric panel and connect pipelines. The raw material feed into the dryer by conveyor, material come into drum main body from feeding chute, by the transmission of motor, gearbox and rolling ring, the drum main body running and raw material move forward in the drum, at same time heating furnace send hot air into the drum, the blower give attraction to the raw material and hot air, they move to end of the dryer, during the moving time the raw material will be dried. Final dried material will discharge from the discharge chute and use conveyor to move away, the waste air will go to pipe from blower and send out, the dust will be collected by the cyclone.

From the electric panel, the rotating speed of drum dryer main body can be adjusted, thus to make the dryer suitable for different kind of raw material with different initial moisture contain.

Rotary drum dryer application

The rotary dryer is used to dry wood chips, sawdust, rice husk, and any crushed biomass material which size <30mm.

For different initial moisture contain and final dried material moisture contain, can adjust the drum rotating speed to find the best solution.

Usually to make pellets, the moisture contain of final dried biomass material is 12-15%, to make charcoal briquettes, the final moisture contain after drying is 8-12%.

If you want to dry sawdust or wood powder with initial moisture <35%, have low drying capacity requirement, you can choose our flash dryer.

Rotary drum dryer advantages

1. Simple structure, the whole system controlled by electric panel, easy to install, operate and maintain.
2. By adjust rotating speed can suit different initial moisture contain biomass material, and can get different moisture contain after drying according to different usage and requirement.
3. Equipped with blower, cyclone and airlock, can control the dust to make the user’s factory clean, if want better dust control effect, we suggest to add pulse duster collector.
4. Conveyor system feeding and discharge, labor saving



Rotary drum dryer technical data

Model:	HG1000	HG1200	HG1500	HJ1800	HJ2000	HJ2200
Capacity	0.6-0.8t/h	1-1.2t/h	1.8-2.2t/h	2.5-3.5t/h	3.5-4.5t/h	4.5-5.5t/h
Feeding material	Sawdust/wood chips/bagasse/husk and any biomass material size <50mm					
Inlet hot air temperature	150-300 Celsius					
Max initial material moisture	50%					
After drying moisture	Adjustable as your need, usually make pellets 12-15%, make charcoal briquettes 8-12%					
Drum diameter	1m	1.2m	1.5m	1.8m	2m	2.2m
Drum length	10m	12m	12m	16m	18m	18m
Transmission motor power	7.5Kw	11kw	15Kw	22Kw	30Kw	37Kw

Blower motor power	7.5Kw	11Kw	18.5 Kw	22Kw	30Kw	37Kw
Airlock motor power	0.75Kw	1.1Kw	1.5Kw	1.5Kw	2.2Kw	3Kw
Airlock model	GTD-5	GTD-7	GTD-9	GTD-16	GTD-25	GTD-40
Cyclone diameter	800mm	1000mm	1200 mm	1400mm	1600mm	1800mm
Reducer model	ZQ350	ZQ400	ZQ500	ZQ650	ZQ750	ZQ850