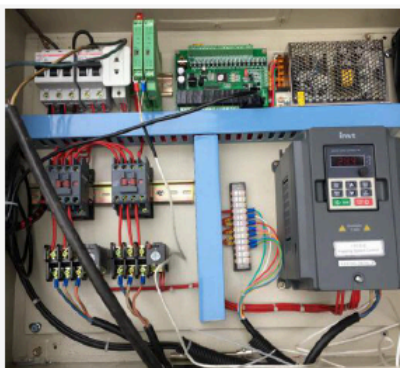
Sunnytek Solar Sweden Wood chip burner for steam boilers

Synnytek & partners is happy to offer a new solution generate heat in boilers at tea factories. This is a wood chip burner that operates on wood chips and pellets / briquettes of biomass. It can increase efficiency when Eucalyptus wood is used. We have better combustion and we also do not need to open the door to add logs so boiler is not cooled dow by the cold air flow. The log loading with open door is painful for efficiency of the the boiler
The burner is automatic and have a storage silo for fuel that can be loaded by a tractor in a simple way. There is an automatic ash removal system so all works with reduced staff to earlier.

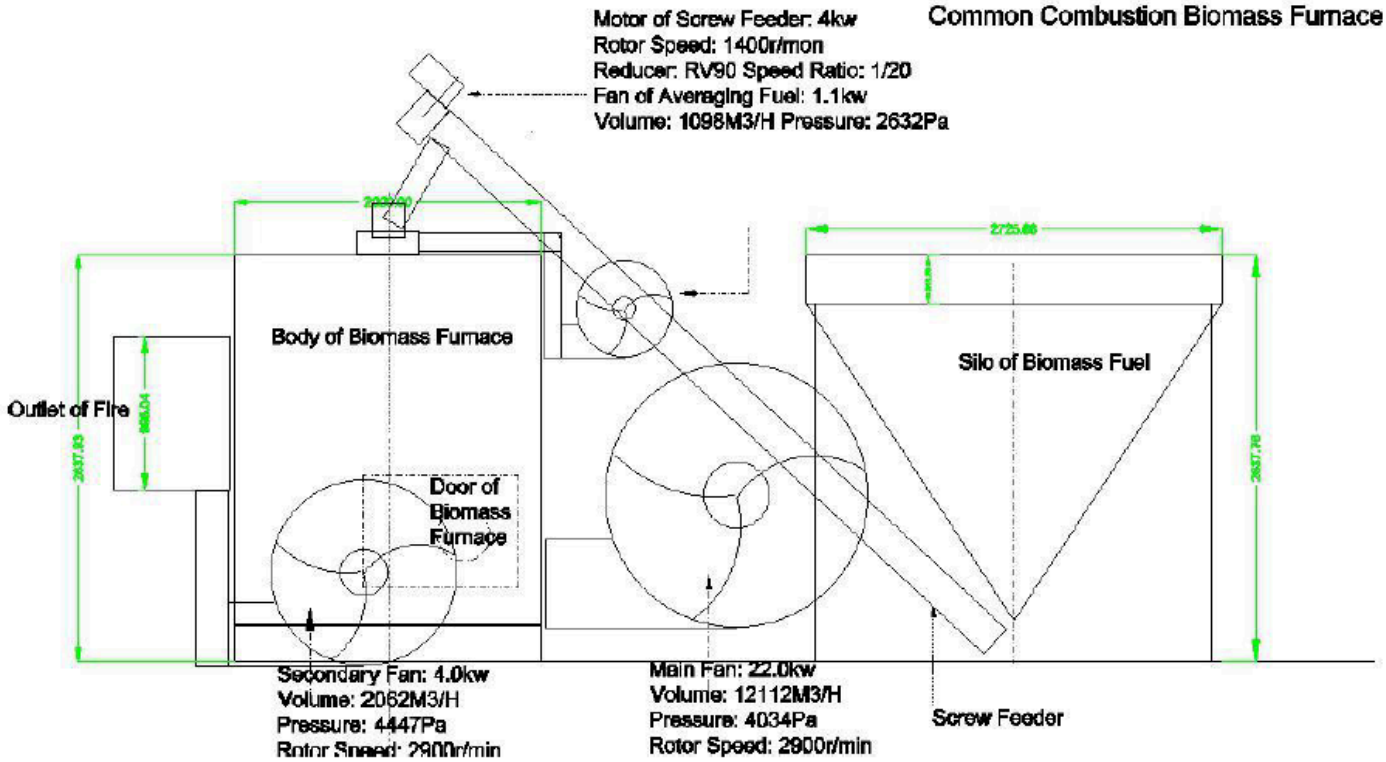
Wood chips are much easier to dry and then we avoid water in fuel and reduced output as water is a very bad fuel. We have chippers and dryers if this is of interest.

Characteristics and features of chip burners.

Output power	5 MW system / 4000 000 K Cal at sea level 6 MW system / 4800 000 K Cal at sea level
Chip consumption	5 MW needs 1000 Kg / Hour and 6 MW needs 1200 Kg / hour
Controller	Touch control system with PLC controller.
Combustion	Boiling bed design for best efficient with a moving grating design Horisontal flow design
Preheater	System have preheated air for better fuel consumption
Outlet temperature	800C-1200 C to reduce smoke in flue gases
Ignition time	2 minutes start up time
Slag handling	Automatic discharging system
Fan power	5 and 6 MW needs 24 KW electricity so Fans can be tued down in boiler or stopped
Layout	Biomass Burner with Reciprocating Grate is made up of Fuel Silo, Screw Feeder, Fan, Reciprocated Furnace Chamber, Fire-Dust, Settling Chamber and Anti-Spark Catcher.



Sunnytek Sweden Glimmervägen 8 187 34 Täby, Sweden E-Mail sales@sunnytek.se
Web sites www.sunnytek.se www.sunnytek.nu All Registered companies



Operation at 2000 meters altitude needs more air as atmosphere is thinner. Power loss is about 20% to a system operated at sea level so it is smart to take one step larger system to compensate for this effect.

Higher output heat better so after service stop boiler get hotter faster so here we have an advantage. In operation the power regulation keeps it at correct output so this is not an issue in operation.

Dynamic range is far better with a chip burner than manual feeders with log fuel. This would give a better stability in output from the boiler in operation.
The Door issues make lots of problems with logs as fuel.