

ABSTRAK

Teh tayu merupakan teh tradisional yang berasal dari kabupaten Bangka Barat, tepatnya di Dusun Tayu masyarakat setempat masih mengolah daun teh dengan disangrai tanpa minyak sebelumnya pernah dibuat mesin tapi dalam proses pengeringan penyangraian belum optimal mesin sebelumnya daun teh tidak terdorong keluar ke depan dan daun teh yang mengalami proses penyusutan keluar melalui pori pori tabung pengering, mesin sebelumnya dalam memasukan daun teh mesin dimatikan terlebih dulu dan mengeluarkan daun teh yang telah diproses mesin dimatikan juga jadi proses pengerjaan tidak efisien. Berdasarkan kebutuhan tersebut maka dibuat rancangan modifikasi mesin pengering penyangrai daun teh tayu. Perancangan modifikasi mesin pengering penyangrai daun teh tayu tersebut mengacu pada metode perancangan VDI 2222 dimana memiliki 4 (empat) tahapan yaitu merencana, mengkonsep, merancang dan penyelesaian. Dari tahap mengkonsep dihasilkan 3 (tiga) variasi konsep rancangan yang kemudian dinilai berdasarkan aspek teknis dan ekonomis. Konsep yang telah dipilih kemudian dilakukan perhitungan pada bagian-bagian kritis . Selanjutnya dibuatkan simulasi pergerakan menggunakan software inventor untuk melihat gambaran fungsi mesin pengering penyangrai daun teh tayu. Modifikasi mesin pengering dan penyangrai dapat mendorong daun teh keluar ke wadah output dan dalam proses pengeringan dan penyangraian secara terus menerus .

Kata kunci: *daun teh ,pengeringan ,rotary dryer ,VDI222, simulasi CAD*

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Tayu tea is a traditional tea originating from West Bangka Regency, Tayu Village to be precise. The local people still process tea leaves by roasting them without oil. They have previously made a machine but in the drying process the roasting is not optimal. The previous machine, the tea leaves were not pushed outwards and shrinkage of the leaves came out through the pores of the dryer. the machine before entering the tea leaves the machine is turned off first and take out the tea leaves that have been processed, the machine is also turned off so the processing is inefficient. based on these needs, a modified design of the tayu leaf roasting dryer was made. the modified design of the tayu leaf roaster dryer refers to the VDI 2222 design method which has 4 (four) stages of planning, conceptualizing, designing, and finishing. from the conceptual stage, 3 (three) variations of the design concept are generated which are then assessed based on technical and economic aspects. The selected concept is then calculated on the critical parts. then a movement simulation was made using the inventor software to see an overview of the function of the tayu tea leaf roasting dryer machine. modification of the dryer and roaster can push the tea leaves out into output container and in the process of drying and roasting continuously

Kata kunci: *tea leaves ,drying ,rotary dryer ,VDI222, simulasi CAD*