

Tobacco Bale Pressing Machine

1. Flue cured Virginia (FCV) tobacco is an important commercial crop cultivated in an area of ~ 1,38,000 ha in Andhra Pradesh and Karnataka states. Green leaf of FCV tobacco harvested from the field is cured in a specialised structure called 'Barns'.
2. The cured leaf will be bulked for 30 days, graded and packed in wooden boxes manually before selling in auction floors of Tobacco Board which are called 'Bales'. Generally 2-3 people will be engaged for making 3-4 bales (110 -150kg) in a day using the wooden boxes.
3. It is a labour consuming process and involves drudgery while packing. More over pressing the leaves in wooden boxes manually by legs is unhygienic, and bales will not be uniform also due to human variation in packing. This requires a mechanical intervention in baling
4. The bale pressing machine designed and developed by ICAR-CTRU consists of an Steel plate (A) of size (30x30") fixed on cement platform. An adjustable manually operated iron plate (B) of size 29 x 29" with the help of a screw handle is fixed to the Iron frame (C) of 43" size fixed over the steel plate (A) on the ground.
5. A weighing scale (D) is attached to the machine to monitor the weight of the bale.
6. The wooden box is placed on the steel plate (A) and the cured leaf is packed periodically in a systematic manner with the help of the adjustable iron plate (B) fixed to the Iron frame.
7. After packing the required cured leaf (110-150kg), the wooden boards of the bale boxes are removed and the bale is packed with gunny bag and ropes.
8. This particular machine is modified to reduce the cost, easy portability and assembling.
9. Baling of graded cured leaf through bale pressing machine reduces the labour, drudgery and improves the efficiency. This machine reduces 25% labour charges apart from improving uniformity in baling.
10. ICAR-CTRI licensed this technology, and generated a revenue of Rs.2,18,250/-

