

Flue cured Virginia (FCV) Tobacco Leaves Stringing Machine (Tray type)

Utility

This FCV tobacco leaf stringing machine was developed by ICAR-CIAE Regional Station, Coimbatore, in collaboration with ICAR-CTRI Rajahmundry and the Tobacco Board Guntur, to mechanize the labor-intensive process of stringing tobacco leaves for curing. This power-operated unit consists of a sewing and conveyor assembly driven by a 0.5 hp electric motor with a chain, drive, and ratchet mechanism. It uses chain stitches to securely hold even dried leaves, preventing leaf drop during curing. The machine accommodates various yarn types (nylon, cotton, viscose, jute) and leaf loads ranging from 3–5 kg. It strings one stick (with 4 kg of fresh leaves) in 20 seconds, offering a capacity of approximately 240 ± 20 kg/h or 60 ± 5 sticks per hour. For faster and continuous operation, it features three loading trays and uses a 3 mm oval needle with specialized viscose yarn (34 counts).



Specification and Performance results		
stringing capacity	:	240 ± 20 kg/h
Energy, labour and time saving.	:	80 %
Efficiency	:	99 %
B:C ratio	:	3:1

Design: ICAR-CIAE (RS), ICAR-CTRI Rajahmundry, Tobacco Board Guntur

Commercialization Status: Ready for Commercialization

Proposed stakeholders: Farmers, Tobacco Board, ITC, GPI etc.

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