

Axial-Flow Thresher for Cropping System Optimization



Reduces cost and drudgery • Gives higher yield and better quality paddy • Increases profits

After being cut, paddy is commonly sun-dried in the field for two weeks or more causing preventable losses, quality deterioration of grains and delays in sowing of next Rabi crop. But, with the Axial-Flow Thresher farmers can thresh paddy right after cutting thus avoiding losses, saving residual soil moisture and creating opportunity for early sowing of Rabi crops by 8–10 days. Not only does the Axial-flow Thresher give farmers higher yield and better quality paddy, it also reduces the drudgery of manual threshing. This freshly threshed paddy can then be directly bagged for immediate sale or for drying and selling at a later date.

HOW DOES THE AXIAL-FLOW THRESHER WORK?

The Axial-Flow Thresher axially moves the paddy several times around the threshing cylinder drum and louvers that cleanly separate the grain from the stalk (Fig 2 & 3). This axial movement with proper clearance between the cylinder and concave (Fig 1) provides for long threshing exposure with adjustable speed. The grain is separated from straw and chaff and is further cleaned by two oscillating sieves. Specifications are described below (may vary for different manufacturers):

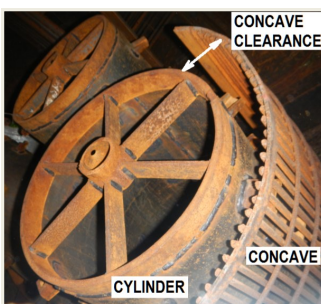


Fig 1: Concave Clearance

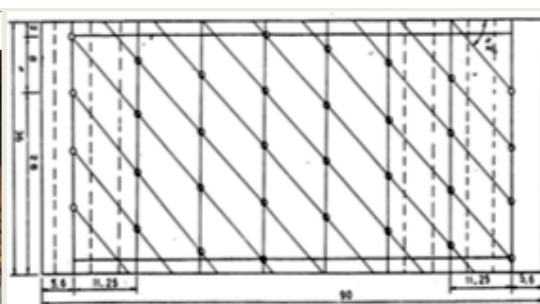


Fig 2: Position of pegs

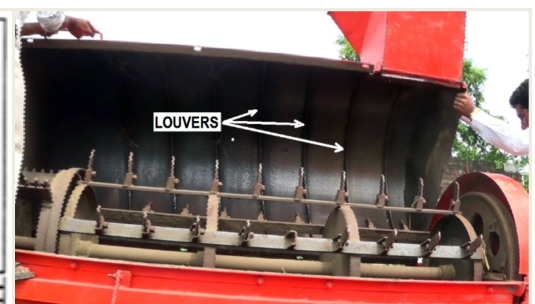


Fig 3: Louvers

Capacity	1.4–1.6 tons/hr (approx.)
Tractor (engine)	25hp or more
Max. R.P.M.	650
Thresher efficiency	>95%

Cleaning efficiency	>95%
Breakage	<2%
Moisture content of crop	22-25%

Farmers can gain also gain additional income by providing custom hiring services