

## **IS 3327 : 1982, Pedal - Operated Paddy Threshers**

Conventional **threshing of paddy** is carried out by **trampling** with a team of bullocks on a specially prepared threshing floor or by beating the bundles of paddy sheaves. However, the pedal-operated paddy threshers are also now being used to some extent for this purpose.

The paddy thresher of the pedal-operated type consists mainly of a **well-balanced cylinder** with series of threshing teeth fixed on slats and it is worked by a **pedal and gear drive mechanism**. While the cylinder is kept in rotary motion at high speed, the paddy sheaves in bundles of suitable size are held in contact with the teeth. The grains are separated by the combing as well as by the beating action of the threshing teeth. The thresher with a smaller **cylinder** is operated by one person and the one with a larger cylinder is operated by two persons. In the unit operated by two persons, the driving mechanism is fitted at both the ends of the cylinder.

This standard covering the requirement of pedal-operated paddy thresher was first published in 1965. Since then considerable development has taken place in design of this type of threshers. A need was felt to revise this standard to make it up to date for better implementability. This standard was last revised in 1982 with a subsequent amendment issued in 1998.

This standard prescribes the material, dimensional and other requirements for the pedal-operated paddy thresher. Emphasis has been given to **constructional** requirements such as **Body Frame** which includes the base, side frames, and grain shields, **Cylinder** which is equipped with slats and threshing teeth, sized to accommodate one or two operators and **Drive Mechanism which uses** an eccentric drive system for efficient operation. Also covers **Safety and Quality** such as ensuring the edges are rounded for operator safety and that threshing teeth strength and stability are tested to withstand pulling force.