

## IS 12337: 1988 SPECIFICATION FOR MANUALLY OPERATED FERTILIZER BROADCASTER

Fertilizer broadcaster refers to an equipment used for **application of fertilizer uniformly** over an entire field or planting area. It is suitable for large and small-scale application, and for various fertilizer types, including **granular**, **coated**, and powdered fertilizers There are primarily two types of fertilizer broadcasters: manually operated and tractor-operated. For large fields, tractor-operated broadcasters are preferred for efficiency, while manually operated broadcasters are ideal for smaller areas, providing flexibility and control for targeted application.

Manually operated fertilizer broadcaster is a simple, hand-powered tool used for uniform broadcasting **fertilizers**, seeds, or other granular materials over a field. It involves a **hopper to hold the material** and a **spreading disc to disperse it**. The user walks across the field, turning the **crank** to spread the **material evenly**. They are commonly used in small-scale farming, gardening, and landscaping to distribute fertilizers.

The Indian standard IS 12337: 1988, prescribes the material requirement, constructional and other requirements of various components of manually operated fertilizer broadcaster including hopper, spreading disc, feed control mechanism, agitator, crank, straps, etc.,. Key specification include shape of hopper as concave or conical at bottom with a slope of 30 to 50° for easy movement of fertilizer to the feed control mechanism (FCM), requirement of lid over the hopper to protect fertilizer from absorbing moisture, requirement of agitator is given near orfice of hopper to avoid the clogging of the aperture, the mass of the empty broadcaster with all its mounting is limited to 5 kg and capacity of the hopper is limited to 12 to 15 litres for easy carriage.