



IS 5135 (Part 1) : 1994 Specification for Hand-Rotary Duster Part 1 Belly Mounter Type

The **Hand-Rotary Dusters** are manually operated and designed to deliver pesticide powder efficiently over crops, helping to protect against pests and diseases in various farming settings. They are typically worn by the operator with a belly-mounted support, allowing the user to distribute dust while maintaining ease of mobility in agricultural fields.

Consumers seek hand-rotary dusters that are durable, safe, and easy to use, ensuring effective pesticide delivery. They expect frequent use without wear, leakage, or clogging, along with adjustable flow control. Given exposure to corrosive chemicals, materials must resist deterioration, providing reliable, long-lasting performance.

The **Hand-Rotary Duster (Belly-Mounted Type)** standard addresses quality and consumer concerns through the following key provisions:

- **Durability and Corrosion Resistance:** The standard mandates corrosion-resistant materials for all components, specifying plating (e.g., zinc, nickel) for metal parts in contact with pesticides, ensuring longevity and reduced wear.
- **Dust Control and Agitation:** An internal agitator prevents clogging by keeping dust in continuous motion, ensuring smooth and consistent delivery and minimizing maintenance needs.
- **Adjustable Flow Control:** Equipped with a locking feed control lever, operators can easily adjust the dust flow without tools, allowing precise and flexible operation.
- **Leakage Prevention:** The fan casing must be leak-proof with optional gaskets to prevent dust escape, enhancing safety and reducing exposure risk for users.
- **Performance Standards:** The duster must meet minimum benchmarks for air delivery, dust rate, and throwing distance, ensuring effective and uninterrupted operation.
- **Ergonomic Design:** Wide, adjustable straps and a cushioned rest plate make the duster comfortable for prolonged use, addressing operator comfort.
- **Comprehensive Manual:** Detailed user guides, including safety, maintenance, and troubleshooting instructions, support safe and efficient use.
- **Testing and Quality Assurance:** The standard prescribes methods for testing components and performance, along with sampling requirements for lot acceptance, ensuring consistent product quality.

Through these provisions, IS 5135 (Part 1): 1994 ensures that hand-rotary dusters meet high standards of quality, safety, and effectiveness for consumer satisfaction in agricultural applications.