

Summary of IS 11313:2007

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Hydraulic Power Sprayers — Specification

The Indian Standard IS 11313:2007, "**Hydraulic Power Sprayers — Specification**," provides essential guidelines for hydraulic power sprayers used in agriculture to disperse pesticides, herbicides, and other liquids over crops. This standard outlines the construction, performance, and safety requirements that ensure sprayers meet quality and efficiency expectations for agricultural applications.

Product Definition and Customer Expectations: Hydraulic power sprayers are devices designed to spray liquid substances onto crops, helping manage pests, diseases, and weeds effectively. Customers expect these sprayers to be efficient, durable, safe, and easy to maintain, with consistent spray coverage and reliable pressure control. The standard addresses these expectations by setting benchmarks for material quality, construction, and performance, ensuring reliable and effective operation under typical agricultural conditions.

Performance and Quality Standards: IS 11313:2007 specifies requirements for key components, including the pump, tank, pressure regulator, spray nozzle, and hose, emphasizing durability and resistance to corrosion, wear, and exposure to chemicals. The standard includes performance tests to verify spray uniformity, droplet size, and pressure stability, which are critical for effective coverage and precise application of chemicals. Noise levels, vibration, and fuel efficiency (where applicable) are also evaluated to ensure user comfort and minimal environmental impact.

Safety and Maintenance Requirements: Safety is a priority in IS 11313:2007, with requirements for secure fittings, pressure release mechanisms, and leak-proof seals to prevent exposure to hazardous substances. Additionally, maintenance guidelines in the standard encourage ease of assembly and disassembly, enabling users to perform routine upkeep without extensive technical knowledge.

Customer Needs and Standardization Compliance: By establishing clear standards for material quality, construction, and performance, IS 11313:2007 ensures hydraulic power sprayers are reliable, safe, and efficient. This not only meets user expectations but also promotes consistency across products, allowing customers to trust the quality and safety of compliant sprayers.

In summary, IS 11313:2007 provides a comprehensive framework for ensuring hydraulic power sprayers are durable, effective, and safe, helping meet the needs of farmers and agricultural professionals. The standard promotes uniformity, encouraging manufacturers to produce high-quality products that enhance agricultural productivity and worker safety.

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