

**Summary of Indian Standard**

**Specification for Air-Screen Seed Cleaners**

The air-screen machine is the basic cleaner in most seed processing plants. Almost all seed must be cleaned by air-screen cleaner before specific specifications can be attempted. Machine size varies from small, two-screen farm models to large industrial cleaners with 7-8 screens. Two-screen models are used on farms, in breeder and foundation seed programs and by experiment stations for processing small quantities of seed. In most machines separations are made on the basis of differences in only one physical characteristic.

The air-screen machine, however, effects separations on the basis of differences in size and weight of seeds. This enables the air-screen machine to use three cleaning elements: aspirator, in which light material is removed from the seed mass; scalper in which good seed are dropped through screen openings; but larger material is carried over the screen into a separate spout; and grader, in which good crop seed ride over screen openings, while smaller particles drop through.

This Indian Standard (IS 11041:1984) specification for air-screen seed cleaners specifies the material, constructional, performance and other requirements of air-screen seed cleaners.. Air-screen seed cleaners remove inert matter like chaff, stems, stones, damaged, and weed seeds from freshly harvested seeds. The standard outlines material requirements (including mild steel, cast iron, and wood), performance specifications, and detailed constructional requirements for various components like the feed hopper, scalping system, grading screens, and aspirating chamber. It specifies safety features, including transmission guards, and mandates proper workmanship, finishing, and marking requirements. The document provides sampling and testing protocols, with type testing required for at least one cleaner of each production model and routine testing for each cleaner. The standard also requires manufacturers to provide an operator's manual and include essential cautionary notices in the vernacular language.