



Summary

IS 15532 : 2004

Plastics Crates for Fruits and Vegetables - Specification.

Plastic crates are used mainly in the **transportation and storage of fruits and vegetables**, meeting the demands of the **agricultural and food logistics sectors**. The plastics crates are intended to be safe, robust, durable and long lasting with high mechanical strength.

Indian Standard IS 15532: 2004 sets the specifications for plastic crates used in the transportation and storage of fruits and vegetables, ensuring their **durability, safety**, and effectiveness in meeting the demands of the agricultural and food logistics sectors. The standard covers critical aspects such as design, material, strength, and hygiene, aiming to provide crates that are both reliable and efficient.

Key to the standard is the emphasis on **strength and durability**. The crates must withstand physical stresses like impact, stacking, and vibrations during transit, ensuring they don't crack or break. This is achieved through tests measuring compressive strength, resistance to drops, and environmental stress cracking.

In terms of **size and stacking**, the standard ensures crates are designed to be stackable, **optimizing storage and transport space**. Standardized dimensions also ensure compatibility with existing handling systems like racks and pallets. This not only enhances efficiency but also reduces the risk of damage to the produce during transport.

The **hygiene factor** is another critical concern, as the crates are in direct contact with food. The standard mandates that only food-grade plastic materials, such as polyethylene or polypropylene, be used. These materials are chosen for their durability, **resistance to wear, and non-toxicity**, ensuring they are safe for food handling and can be easily cleaned to prevent contamination.

In addition to functional aspects, **safety** is also addressed. The standard requires crates to be designed with **smooth edges** to minimize the risk of injury to workers during handling. There are also stringent guidelines to ensure the materials used do not contain harmful additives, which could pose health risks to consumers.

Overall, IS 15532: 2004 is an essential standard for plastic crates used in the agricultural and food industries, aiming to enhance the safety, quality, and **efficiency of food logistics**. By adhering to these specifications, manufacturers can produce crates that meet customers expectations for **durability, hygiene, and performance**.