





COMPANY OVERVIEW

Salvin Industries is a leading engineering, technology and consulting conglomerate, working closely with diversified industries spanning across food processing, agriculture, plastics, chemicals, metals healthcare, packaging, Dealer, distributor, super stocks, marketing plan, product analysis and other industries and business sectors offering complete turn-key solutions including advanced engineering, Industry 4.0 solutions, digital transformation and expert technical and management consultancy. With 10+ years of experience and global presence in 8+ countries, Salvin Industries is serving from the most demanding to the most distant customers across the globe. We empower them for rewriting their future with our depths of knowledge, unique ideas, technical expertise, creative solutions and enduring results, all at the most optimal costs, right at their doorsteps.

Armed with the eminence in technological expertise, global capabilities and a process driven approach, we have the ability to take on any challenging project. Crossing the geographical borders & cultures and living up to our core values Excellence, Respect, Care & Joy, we propel innovation to engineer solutions that build & foster equality. Working together as one team with all our business partners & associates, we are transforming industries, fueling economies, developing sustainable solutions and thereby elevating societies, globally. We realize the need to respond to the dynamism & speed with which the world is changing all around us and understand the need to anticipate

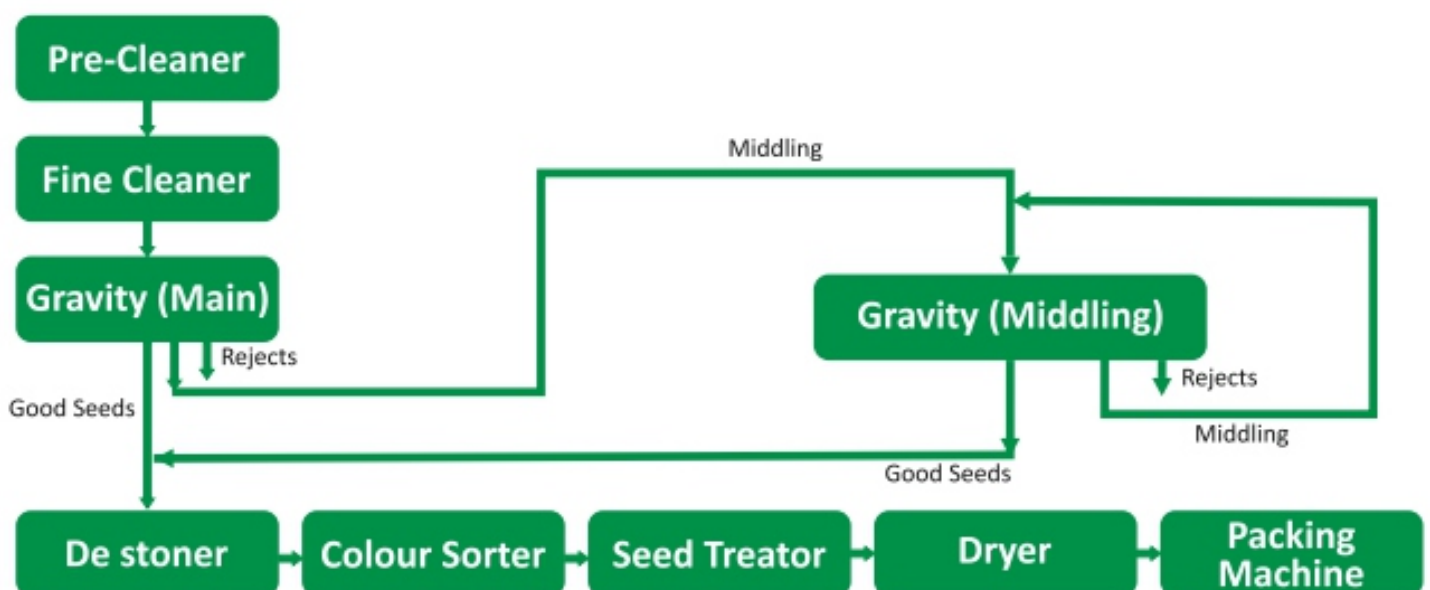
SEED SPICES

CLEANING PLANT

A Seed Spices Cleaning Plant is a comprehensive industrial processing unit engineered specifically for the treatment of raw, farm-gathered spices such as cumin, coriander, fennel, fenugreek, and mustard. This facility is designed to handle bulk agricultural commodities and systematically elevate them from their natural, contaminated state to a purified condition that meets stringent international food safety and quality standards. The plant operates through a synchronized series of mechanical operations that utilize vibration, screening, specific gravity, and airflow to target and eliminate a wide spectrum of foreign materials.

These impurities typically include large contaminants like stones, sticks, and plant stalks, as well as fine materials such as dust, sand, broken seeds, and light chaff. By integrating heavy-duty pre-cleaners, precision graders, specific gravity separators, and aspiration channels, the plant ensures that the final output possesses uniform size, superior appearance, and high purity. Beyond cleaning, these systems are configured to minimize kernel damage and maximize recovery, making the plant an essential foundation for value addition, whether the end goal is packaging, grinding, or further processing into oils and extracts.

PROCESS DIAGRAM OF SEED SPICES CLEANING PLANT



Tomato

Ketchup Making Plant

THE PROCESS

Pre-Cleaning Pre-Cleaning

This is the first stage where raw, farm-harvested spices are received and processed to remove large contaminants. The material passes through a series of coarse screens or sieves that scalp off oversized impurities like sticks, stems, jute threads, large stones, and plant stalks. A preliminary aspiration system may also remove light dust and chaff at this stage to protect downstream equipment.



Fine Cleaning Fine Cleaning

The spices are further processed to achieve precise size grading and removal of finer impurities. The product passes through vibrating screens with multiple decks of specific mesh sizes. This separates the spices into fractions: oversize (retained), desired size (middlings), and undersize (fine dust, sand, and broken seeds). Integrated pre- and post-aspiration systems use controlled airflow to lift and remove lightweight particles like chaff and husk, ensuring a dust-free operation.

Destoner Destoner

This machine removes high-density impurities that are similar in size to the spices but heavier. The destoner utilizes a vibrating deck with an oscillating motion and a controlled air stream. This creates a fluidized bed where lighter spices float to the top and migrate downhill, while heavier stones, mud balls, and metal fragments remain on the deck and are conveyed uphill for separate discharge.



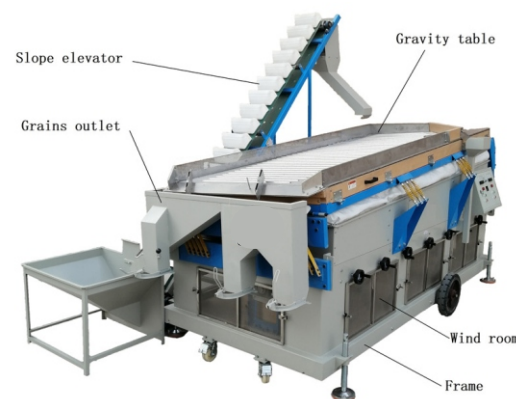
Tomato

Ketchup Making Plant

THE PROCESS

Gravity Separation

This step separates materials based on differences in their specific gravity or density, which is particularly useful for removing hollow, immature, or insect-damaged seeds that have the same size as good product. The gravity separator uses a porous deck, an air supply from below, and a combination of oscillations and tilt. The lighter, less dense seeds are lifted and flow to one side, while the heavier, sound seeds are conveyed to a different outlet.



Color Sorter



This is an optical sorting stage that removes foreign material and defective seeds based on color. The spices pass through a series of channels where high-resolution cameras (CCD sensors) and lasers scan each seed. Advanced systems use AI and multi-spectrum technology to identify discolored seeds, moldy kernels, mouse droppings, and other off-color impurities with high precision. Once detected, a high-speed blast of compressed air from precisely timed ejectors (e.g., Maglev ejectors) deflects the impurity into a reject chute.

Seed Treater

This stage involves applying a protective coating to the seeds. The cleaned seeds enter a treatment chamber where they are dosed with precise amounts of liquid solutions (such as fungicides, pesticides, or inoculants) or powders. The machine uses load cells to weigh the incoming seed flow and automatically adjusts the chemical dosing rate for accuracy. A mixing mechanism ensures the treatment is applied uniformly to every seed, and the system is often built with stainless steel components to resist corrosion from the chemicals.



THE PROCESS

Dryer Dryer

If the seeds have been treated with a liquid solution or if the raw material has higher-than-acceptable moisture content, a dryer is used to reduce it to safe storage levels. The dryer gently circulates warm, conditioned air through the seed mass to remove surface moisture without damaging the seed. Advanced systems may use radio frequency or microwave technology for more uniform and rapid drying, especially for heat-sensitive spices, ensuring the product's organoleptic quality is preserved.



Packing Packing

The final stage involves weighing and enclosing the finished, high-purity spices into containers for storage or dispatch. The processed spices are transferred to holding bins or hoppers. From there, they are fed into an automated packing system, which typically includes a multi-head weigher for precise weight control. The machine then fills the product into bags (paper, poly, or jute) and seals them, ready for labeling and shipment. The system ensures high efficiency and accuracy in the final output.



LET'S WORK TOGETHER



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