Coating + Seasoning Systems
Spray Dynamics is a leading innovator of equipment for the controlled application of liquid and dry ingredients on a wide range of food products. The company has built equipment since 1952 and served the snack food industry since 1970.
Applicators for powdered seasonings, oil and water-based coatings, slurries, chocolate, yogurt, release agents and many other coatings are designed to optimize the efficiency and quality of the process and finished products.

- Snack foods
- Bakery
- Ready-to-eat cereal
- Chocolate
- Coffee
- Meat, poultry + seafood
- Cheese products
- Pet foods
SOFT FLIGHT® COATING DRUM

Every coating drum manufactured is designed and engineered specifically to your product requirements. Our shell-in-shell drum provides sanitary operation and simple cleaning for snack, meat, dairy and other process-specific applications.

Variable tilt frame assembly and product flight design exposes each piece of product to the application of liquid and dry coatings. Custom product flight configuration reduces breakage.
Quickly and uniformly apply chocolate, yogurt and sugar solutions to nuts, fruits, candy cores, cereals and other products. Eliminate the labor, inconsistency and long batch times of conventional pan coating.

This fully automated Belt Coater does the work of multiple pan systems in a fraction of the time. Adding the optional chocolate spray system will significantly increase coating speed and production output. Large access doors, removable drip pans and easy access design minimize the time and cost of sanitation.
Unique centrifugal coating action is ideal for products such as dough-coated peanuts, flavored coffees, nuts, and sunflower seeds.

The base product supply hopper with pneumatically controlled slide gate delivers product to the PLC controlled weigh scale. Accurately measured batches of base product are fed to the coating chamber. Rotation carries the base product out to the coating chamber wall.

Solution is introduced to the high-speed spinning disc liquid applicator via a positive displacement pump. Powders are delivered in alternating cycles via a Uni-Spense Dry Ingredient Distributor.

Precise control of the batch size and delivery of the liquid and powder maintains consistency of the finished coated product.
SIDE VENTED COATER

Designed for continuous high volume application of water and solvent based coatings to a variety of products that include food, snacks, cereals and confections with easy adaptation from one type of product to another.

- Film, glaze + color coating
- Multi-layered coatings
- Powder + sugar applications
- Enrobing
- Chemical + industrial treatments
CLOG FREE™ SPRAY COATING
Engineered for cereal, snack and pet food applications to maximize coverage and minimize waste. Spray virtually any pumpable slurry, including sugar, syrup, chocolate, oil or emulsion. The Clog-Free spray station design prevents nozzle plugging. Available for use in coating drum and conveyor belt applications.
The Two-Stage Coating System provides consistent, uniform application of liquid and dry coatings on extruded, baked, frozen and fried products.

This complete and easy to operate coating system is engineered for proper dwell time and product-appropriate flight configuration. Made up of a Soft Flight® coating drum, a Master Series I™ airless liquid applicator and a Uni-Spense® dry ingredient distributor, the Two-Stage Coating System offers tools-free operation.

The gentle folding action of the Soft Flight coating drum ensures each piece of product is presented for seasoning application. Accurately metered and sprayed liquids and precisely measured dry powders, provide reliable and even seasoning coverage.
SCARF PLATE DISTRIBUTOR

Add simplicity to dry ingredient application and optimal product coverage by providing an expanded, controlled curtain of particulates, either inside a coating drum or across a conveyor or belt.

Used in conjunction with the robust Uni-Spense™ feeders, the Scarf Plate provides even distribution of dry ingredients, nuts, seeds and many other small particulates.
MASTER SERIES I™ AIRLESS IN-DRUM LIQUID APPLICATOR

Meter and spray oils, antioxidants, vitamins, flavors, tack and release agents and other liquid coatings.

The Master Series I is a complete gravity fed, pulse operating spray system designed for accurate and reliable application of liquid coatings inside a coating drum. The 40-Series piston-driven positive displacement pump creates a steady, controlled, atomized spray without the need to mix coatings with the plant’s compressed air supply. This airless pump reduces overspray and waste.

Patented self-adjusting positive shut-off poppet nozzles evenly apply a variety of liquid coatings.
Meter and spray oils, antioxidants, vitamins, flavors, tack and release agents and other liquid coatings.

The Master Series II is designed for accurate and reliable over-the-belt or top-and-bottom delivery of liquid coatings on oven bands, dehydrator belts and in pan and cavity applications. It is a complete gravity fed, pulse operating spray system.

The 40-Series piston-driven positive displacement pump creates a steady, controlled, atomized spray without the need to mix coatings with the plant’s compressed air supply. This airless pump reduces overspray and waste.

Patented self-adjusting positive shut-off poppet nozzles evenly apply a variety of liquid coatings.
MASTER SERIES III-S CONTINUOUS SPRAY SYSTEM

An “airless” system designed for high throughput lines using pure or flavored oil applications where finer droplet size is needed. Achieve a perfect spray pattern with less misting and overspray.

Designed for use inside a coating drum, in a blender or across a belt, the system provides a continuous oil spray with a cone-shaped spray pattern at each nozzle. The sanitary design has all liquid and air lines (nozzle shutoff air, atomization air and liquid supply) located inside the stainless steel spray bar.

Positive nozzle shutoff valves ensure that oil does not drip after the spray stops. Optional shutoffs for individual nozzles operate on the fly, without affecting the cone style spray pattern.
UNI-SPENSE™ DRY INGREDIENT DISTRIBUTOR

Distribute powders, granules and other products inside a coating drum, a blender or over a conveyor belt.

Uni-Spense can feed or distribute a variety of dry powders, granules, chopped and shredded products. Its positive displacement auger and unique adjustable teardrop openings deliver a consistent metered supply of product.

“Tools-free” design greatly simplifies operation and changeover. Standard and high volume models available.
Dispense powdered and granulated salt over product on a moving belt with consistent and repeatable accuracy. Metermaster evenly applies topical salt coatings without caking and clogging.

A simple reciprocating distribution bar uniformly meters salt onto product passing beneath it. Metermaster requires no readjustment after cleaning, so coverage remains uniform from one production run to the next. It has no brushes, rollers or other rotating mechanisms. Tools-free construction makes the applicator reliable and simple to operate and clean.
TECHNICAL SUPPORT

Pre- and post-sale support includes rapid-response service and parts shipment, applications assistance, engineering, installation and operator training. With more factory-trained service technicians in more locations, Heat and Control provides the industry’s most responsive and experienced technical support.

DEMONSTRATION + TESTING

Comprehensive Spray Dynamics test systems are available to test-run new product and evaluate speed, accuracy and product quality.

ST. CLAIR, (MO) USA
Over 60 Years of innovation and world-class service.

- Snack Systems
- Process Prepared Systems
- French Fry Systems
- Seasoning + Coating Systems
- Conveying
- Weighing + Packaging Systems
- Inspection Systems
- Control + Information Systems

With manufacturing facilities and sales offices worldwide, Heat and Control supports manufacturers with experience, expertise and resources to develop the most efficient solutions for any production challenge.
Processing + Packaging Systems