# **Aeroglide**°

### PRODUCTS AND SERVICES



CUSTOM-ENGINEERED DRYING SOLUTIONS

RTE CEREAL . GRAIN . CHARGOAL . TOBACGO

DOFFEE BEANS . VEGETABLES . FEED PELLETS

GRANULAR CHEMICALS . FRUITS . SNACK FOODS

DIL SEEDS . SOUP MIXES . BEVERAGES

At Aeroglide, we have spent more

AQUACULTURE

PET FOODS

FRENCH FRIES

BREWERS' GR

FORARE GRAS

than 50 years in the process environment, learning and applying solutions to your drying needs. We approach every project as a unique opportunity. We use our knowledge and experience to design, build and install the most efficient and cost effective solution to your specific process. And then we back it up with the very best in ongoing customer support.

JUTS . SAWDUST

ECOCKED BEANS

AGASSE . BREAD

STILLERS' GRAIN

GLASS BEADS

HOGGED BARK \* VEGETABLE WASTE \* SEAFOOD

WASTE . CATFISH FEED . MINERALS . CANDY

CITRUS PULP . CRACKERS . CROUTONS

EXPANDED GEREAL . DOG TREATS . STARCH

BREAD CRUMBS . CHEMICALS . PLASTICS

## WE MAKE THE EQUIPMENT THAT MAKES YOUR PRODUCTS BETTER.

From New York to New Delhi, China to Chile, Aeroglide equipment is currently used on every continent with the exception of Antarctica.

AEROGLIDE EQUIPMENT is used...



by the top 5 Pet Food processors worldwide...



... by 3 of the world's top 5 Cereal manufacturers...



... by the largest Snack Nut processors in Europe and Asia...



... by the world's leading makers of antibiotics, antacids, and other powder type medications...



... by global leaders in a wide range of polymers, synthetic and natural rubber...



... to dry 80% of the world's briquettes.

#### OUR COMPANY

Since our inception in 1940, and continuing through our acquisition of C.G. Sargent in 1990, Aeroglide has become firmly established as the worldwide leader in moisture removal and thermal conditioning technology. Today Aeroglide equipment is used for process drying and other applications across a wide spectrum of product categories and holds a leadership position in virtually all of them.

#### **OUR PRODUCTS**

There are no 'stock' Aeroglide products. Each installation is a custom-engineered solution, resulting from a thorough and precise analysis of the customer's process variables, capacities, and objectives. We design and manufacture conveyor, tower and rotary drum units which are used for drying, roasting, baking, toasting, curing, pasteurizing, chilling and many other applications.

#### OUR COMMITMENT

Aeroglide is driven by a singularly-focused commitment to providing our customers with the best equipment and highest level of service. Our ability to meet this commitment is supported by a century and a half of industry experience; sustained by the knowledge and expertise of our team; and evidenced by our customers' loyalty. Today, more than two-thirds of our business is derived from repeat customers.

### CONVEYOR DRIERS

## FOR PRODUCTS THAT REQUIRE PRECISE CONTROL OVER DRYING PARAMETERS.

Aeroglide Conveyor Driers are available in single and multiple pass configurations. Field reversible airflow, and zoned temperature and humidity controls promote uniform drying. If the product can tolerate repositioning, multiple pass drying will provide maximum results within the smallest footprint.







#### DESIGN SPECIFICATIONS

#### Drier Types:

Single-pass; single-pass multiple stage; and multiple pass. Available with in-line, single plenum, or dual plenum airflows.

#### Construction Materials:

Stainless steel, carbon steel, aluminized steel, and combinations of above.

#### Bed Sizes:

Available in a variety of widths and lengths depending on process requirements and space availability.

#### Heat Sources:

Natural and propane gas burners, oil burners, biomass burners; steem coils, electric elements, direct or indirect fired, remote hot gas and hot water coils.

#### Product Feeders and Spreaders:

Oscillating belt or spout, bias cut or oscillating vibratory, rotary paddle and gravity hopper.

#### Controls:

Zone temperatures, airflows, humidities, bed speeds, optionally PLC-based, graphic interface, data-logging, recipe control.

### CONVEYOR DRIERS

#### FEATURES AND BENEFITS

Available in Pre-Assembled Or "Knock Down" Modules: Pre-assembled modules reduce installation time and cost. "Knock down" configurations reduce if shipping expense.

Custom, Flexible Airflow Design:
Provides most uniform product drying possible.

Access Doors Around The Perimeter: Allow for faster and easier cleaning.

Individual Zone Temperature And Humidity Controls: Promote consistent, uniform drying by controlling critical drying parameters.

#### Continuous Fines Removal:

Recovered fines can be recycled, minimizing waste; reduces downtime and manpower required for cleanup.

#### Modular Design:

Allows easier, more cost-efficient expansion.

#### TYPICAL APPLICATIONS

FOODS
Bread Products
Coffee Beans
Dairy Products
French Fries
Fresh Fruits
Nuts

RTE Cereals Snack Foods Vegetables

ANIMAL FEED
Aquaculture Feed
Bird Seed
Feed Pellets
Pet Food



INDUSTRIAL
Briquettes
Chemicals
Coal ...
Minerals

Pigments Rubber

TOBACCO

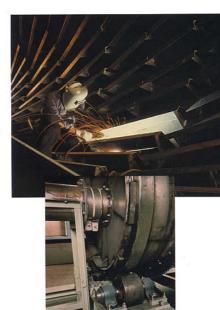


### ROTARY DRIERS

# FOR PRODUCTS WITH HIGH MOISTURE CONTENT THAT WILL TOLERATE VIGOROUS AGITATION.

Materials with a moisture content up to 85% (wet weight basis) can normally withstand high initial temperatures and can be dried with maximum efficiency in a rotary drier. A rotating drum and strategically positioned flights combine to lift and shower product evenly through the air stream. Thermostatically controlled discharge temperature assures precise final moistures and great sensitivity to varying product conditions.





#### DESIGN SPECIFICATIONS

#### Drier Types:

Single-pass, co-current or counter-current airflow; triple-pass, co-current airflow.

#### Construction Materials:

Stainless steel, carbon steel, and combinations of the two.

#### Heat Sources:

Multiple sources include (but are not limited to) gas burners, oil burners, biomass burners, steam coils, electric elements, flue gas, direct or indirect fired.

#### Options:

Skid-mounted systems available; mixback system for extremely wet materials and air recirculation.

#### Major Components:

Combustion chamber and burner, rotary drum with flights, drum drive, settling chamber, cyclone, exhaust fan, feed and discharge airlocks, and interconnecting ductwork.

#### Controls:

Burner supervisory, drier control panel, PLC.



### ROTARY DRIERS

#### FEATURES AND BENEFITS

#### Custom Designed Flighting:

Strategically oriented to accommodate special product conditions; ensures efficient product exposure.

Double Wall Combustion Chamber With Flexible Heat Source Capability:

Provides greater energy efficiency; reduces maintenance costs.

Induced Draft Fan With Variable Damper Adjustment:

Affords greater control of process air volume.

#### Optional Skid:

Provides installation cost savings, ease of transportation and system rigidity.

Heavy-Duty Drum Drive Package With Rotation Speed Adjustment:

Provides durability and flexibility in process parameters.

Hardened Tires And Trunnions With Heavy-Duty Thrust Roller Bearings:

Minimize wear and maintenance.

Unique Settling Chamber With Bottom Discharge: Separates dried product from air stream; reduces cyclone requirement.

#### TYPICAL APPLICATIONS

#### FOODS

Alfalfa

Brewers' Grain

Distillers' Grain Forage Grasses

Grains

Parbolled Rice

Sesame Seeds

Teas and Herbs

#### INDUSTRIAL

Chemicals

Recycled Plastic and Rubber Wood Products

#### WASTE & BY-PRODUCTS

Animal Manure

Bakery By-products

Extruder Scrap

Fruit Pomace

Industrial Sludge

Paper Waste

Vegetable Waste

Wood Waste





### TOWER DRIERS

#### FOR FREE-FLOWING PRODUCTS THAT WILL TOLERATE MIXING AND AGITATION.

Well suited for handling durable products, the Aeroglide Tower Drier utilizes crossed baffles to maximize drying exposure, and automatically adjusts drying and cooling based on weather conditions. Together, these features result in exceedingly uniform drying and precise moisture content of the product.

#### DESIGN SPECIFICATIONS

#### Drier Types:

Pre-assembled modules, or "knock down" for site assembly.

#### Construction Materials:

Carbon steel or stainless steel.

#### Heat Sources:

Natural gas, propane, fuel oil, biomass burners, steam or induced heat.

#### Options:

Fines cleaning system and dual fuel source capability.

#### Major Components:

Garner, level controls, drying/cooling tower, climate compensator, power discharge, discharge hopper, heat source with ducting and exhaust system ducting.

Burner supervisory, drier control panel, PLC, humidity and airflow controls.

#### FEATURES AND BENEFITS

#### Crossed Baffles:

Provide constant product mixing and maximum drying exposure.

#### Power Discharge:

Provides accurately regulated, adjustable product flow.

#### High Volume Of Air Recirculated:

Reduces fuel costs and exhaust emissions.



#### TYPICAL APPLICATIONS

FOODS

Black Walnuts Cocoa Beans

Coffee Beans

Macadamia Nuts Nuts

Parboiled Rice

Pop Corn

Pre-cooked Beans

Sovbeans Wheat

SEEDS

Coal

Plastics

ANIMAL FEED

Feed Pellets

INDUSTRIAL

Granular Chemicals

#### Climate Compensator:

Adjusts ratio of drying and cooling air to optimize efficiency.

#### Few Moving Parts:

Minimize repair and maintenance cost.

#### Larger Capacity Permits Slower Drying:

Saves fuel costs and improves product quality.

### TRUCK DRIERS

# FOR VARIED VOLUME APPLICATIONS, OR PROCESSES THAT OPERATE IN A BATCH MODE.

Product trays are stacked on carts or "trucks" and wheeled or conveyed into the drying area. Bone dry output can be achieved from product moisture input levels as high as 95% wwb. Drying cycles are extremely flexible — time, temperature, and air volumes can be adjusted within a given cycle to meet precise product specifications.

#### FEATURES AND BENEFITS

Reversing Crossflow Air Available:

Provides evenly dried product throughout the drier.

Adjustable Diffuser Plate Openings: Ensure maximum air uniformity.

Systems Can Be Modified To Include Conveyors: Allows flexibility as your business grows and changes.

Variety Of Heat Sources Available: Accommodates site utilities.

Control Systems Provide Timed Drying Cycles: Minimal supervision required.

Automatic Humidity Control:

More control over drying cycle and product quality.





#### ANIMAL FEED Bird Seed

Pet Cookies/Snacks

Rawhide Treats

#### INDUSTRIAL Chemicals

Pharmaceuticals

Pigments

### SPIN COOKERS / COOLERS

# FOR UNIFORM, EFFICIENT PROCESSING OF CANNED PRODUCTS.

Aeroglide Spin Cookers/Coolers feature a substantially increased heat transfer by imparting a gentle spinning action to the containers. This continual, controlled product agitation results in more uniform cooking and cooling, in considerably less time than static or rotary systems.



#### FEATURES AND BENEFITS

#### Spinning During Processing:

Lowers time required to heat or cool product to desired temperature by over 50% in most cases.

#### Tiered Track Assembly:

Reduces plant floor space required; provides four times the cooling or cooking area for given plant floor footprint.

#### Direct Drive Feeder:

Container feeder is timed exactly with internal track system; containers enter smoothly without interruption.

#### All Stainless Steel Construction:

Increased durability and sanitation; food & beverage industry standard.



#### Access Doors Around The Perimeter:

Allow full access to the inside of the unit for easier sanitation and maintenance.

#### Ships In One Piece:

Assembled and tested in our facility, the unit is installed quickly at a reduced installation cost.

#### Controlled Airflow and Thermal Zones:

Improve thermal efficiency of system, reducing steam or water requirements.

#### TYPICAL APPLICATIONS

Applesauce
Cherries
Fruit Juices
Olives
Peaches
Peppers
Pickles
Pineapples
Plums
Salsa
Sauces
Sauerkraut
Soup

Tomatoes Tomato Sauces Vegetables



## **AUXILIARY EQUIPMENT**

#### A FULL RANGE OF ACCESSORY COMPONENTS FOR YOUR AEROGLIDE DRIER AND/OR COOLER.

#### Feeders/Spreading Devices:

- · Oscillating spout feeder
- · Oscillating belt feeder
- · Oscillating vibratory feeder
- · Infeed hopper
- · Reciprocating paddle spreader
- · Rotary paddle spreader
- · Roller extruders
- · Spin cooker/cooler feeder

#### Breaking/Mixing Devices:

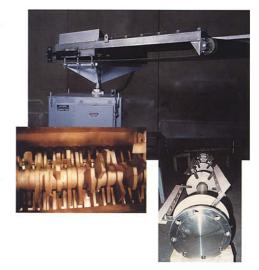
- · Lump breaker
- Fixed and adjustable rotary pickers and rakes with straight or spiral tines
- · Product breaker
- · Pin breaker

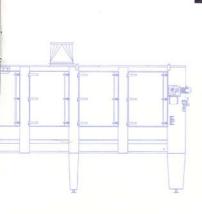
#### Cleaning Devices:

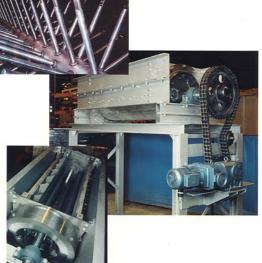
- · Rotary bed brush
- Low or high pressure clean-in-place (CIP) systems
- Apron doffer
- Air knife
- · Fines removal systems

#### Other Options:

- · Control panel upgrades and conversions
- Heat source conversion packages
- · Burner/steam boxes







### SERVICES

#### SUPPORT SERVICES

Aeroglide provides the highest level of service in the industry. Our ability to maintain this commitment is fostered by more than 150 years of experience in process drying and cooling. A dedicated technical support team located around the world, with a depth of application and process knowledge, is available 24 hours a day. Following are descriptions of some of the services Aeroglide provides.



#### Installation Assistance:

Aeroglide provides on-site supervision in every aspect of the installation to ensure that your equipment is properly assembled and operational. We also provide pre-installation consultation for our customers and their contractors.

#### Start-up Assistance:

We will support you in inspecting all drier interfaces, including control calibration, safety interlocks, air balancing, gas and steam connections, burner adjustment, and PLC control system interfaces.



Aeroglide conducts both initial and refresher training programs to promote a better understanding of the drier and assist operators and maintenance personnel in optimizing drier performance and minimizing downtime.

#### Comprehensive Parts Program:

Our customer service department provides a recommended parts inventory, which is sensitive to your requirements, recognizing lead times for custom fabricated parts. 24-hour delivery of in-stock spare parts from our location helps avoid costly downtime.

#### 24 Hour Technical Assistance:

To support equipment, Aeroglide maintains a help line that is operated 24 hours a day, all over the world.







### **EQUIPMENT AND PROCESS EVALUATIONS**

Aeroglide's Equipment and Process Evaluation Program is intended to optimize the performance of existing driers. Improved product quality, increased throughput, better moisture uniformity and energy efficiency are often achievable on existing installations, particularly in cases where products, operators, process or up- and downstream equipment have changed since the drier was originally installed.

Our worldwide field service engineers have extensive experience in evaluating both immediate problems and longer-term improvement opportunities in drying operations. Our expertise extends to all makes, models and vintages of driers across a wide variety of products and processes.

As a result of our experience in evaluating hundreds of drying operations, we have designed a thorough evaluation program that focuses not only on equipment issues but also drying processes. Our evaluations result in clear, concise identification of problems and opportunities for improvement. Recommendations include estimated costs and the potential benefits.









# **Aeroglide**°

#### Aeroglide Headquarters

Aeroglide Corporation 100 Aeroglide Drive Cary, NC 27511 U.S.A.

Mailing Address: PO Box 29505 Raleigh, NC 27626-0505 U.S.A.

Tel: +1 919 851 2000 Fax: +1 919 851 6029

E-mail: sales@aeroglide.com

#### Aeroglide Europe

Aeroglide Sheraton House Castle Park, Cambridge CB3 OAX England

Tel: +44 1223 37 00 37 Fax: +44 1223 35 56 55

E-mail: eurosales@aeroglide.com

24-hour Hotline:

+1 919 851 2000 +1 800 722 7483 (USA)

http://www.aeroglide.com