

Auger Filling Technology

nalbach

ENGINEERED FOR PERFORMANCE™

Non Free Flowing Powders

Free Flowing Powders

Granules

Flakes

Abrasives

Pastes

Creams

Greases

Lotions

Thin Liquids



Nalbach Engineering's Line of Auger Fillers provides the features to meet your needs.

For more than 60 years Nalbach has earned its reputation for quality and performance in the design and manufacture of low maintenance and highly reliable powder filling equipment.

Built on state-of-the-art technologies, the head design of the model NAF-1000 auger filler is the fundamental basis of our auger filling product line. Nalbach servo driven auger technology virtually eliminates down time by removing components found on competitive equipment such as clutch, brakes, encoders, drive belts and pulleys.

Nalbach auger fillers can fill any product from free flow, non-free flow powders, granulars, flakes, abrasives, pastes, creams, grease, lotion or thin liquids into nearly any container from metal, plastic, chip board cartons, glass, flexible paper or plastic bags.

Standard Features:

- Direct Servo Drive
- PLC Controlled
- Color HMI
- Ergonomically Designed Control Screens
- Recipe Driven - Stores over 60 SKUs
- Variable Speed Agitation Drive
- Self Centering Auger Tooling
- Large Fill Hopper Access Door Opening
- Safety Interlock on Fill Hopper and Hopper Access Door



Direct Drive Servo Motor



Color Touchscreen Control



Semi-Automatic

The Nalbach model NAF-1000, semi-automatic auger filler provides the latest in filling technology with a computer controlled servo motor drive and operator touchscreen interface. The computer controlled brushless direct drive servo motor system provides superior fill accuracy and reliability. The user friendly menu allows the operator to easily access product memory for fast set-up and accurate control of filling parameters. Downtime from mechanical failure is virtually eliminated due to the fact that Nalbach has done away with most moving parts typically found on competitive equipment. Broken clutches, brakes, encoders, drive belts and pulleys are no longer a concern with the NAF-1000. Fill accuracy is up to +/- 0.25% due to the precision of the servo motor. The servo drive also provides acceleration and deceleration control which results in a continuous cycle rate of up to 120 per minute.



Model NAF-1000

OEM Systems

Utilizing our proven technologies, Nalbach filling heads can easily be integrated in other automated packaging systems. From form-fill-seal to cartoning machines and everything in between, our fillers can be sized to meet your needs. The OEM filling head can come in small to large sizes, from single spindles to multi-spindles on very close centers. Each spindle is independently controlled to maintain the ultimate fill accuracies. The filler is control ready to send or receive a signal from your machine, or we can supply our fillers without controls for cost and space savings, to be integrated in your main control panel.



Model NAF-1000-M4



Model NAF-1000-M2

Specialty Systems

Nalbach has a wide range of specialty filling systems. The Nalbach "X2" model is a compact servo driven dual auger filling system that dispenses precise amounts of two (2) different products into the same container at the same time.

The Nalbach multilane auger fillers dispense a single product from a common hopper with multiple, separate and independently controlled auger / funnels and is ideally suited for most vertical, horizontal, and thermo form-fill-seal machines, as well as many other multiple lane production lines commonly found in the food, pharmaceutical, health and beauty aides, and chemical industries. These systems can be easily integrated into existing conveyor lines.



Model NMAF-1001-X2

Single Head Automatic

Our single head automatic auger fillers are built on the same fundamental principle utilizing high technology to increase packaging throughput and to minimize down time.

The single head automatic system can handle practically any rigid container with fill rates up to 60 containers per minute. The automatic fillers come in two head sizes with standard features of 3 horsepower direct drive servo or our mini featuring a 1 horsepower direct drive servo.

The automatic can be configured in many ways. By combining a twin head we are able to double your speed and still offer a single infeed duct to deliver product to both spindles.

The automatic system can be configured with weigh scales for a true net or gross weight fill for ultimate precision in automatic filling.

Standard Features:

- 8' conveyor with dust trough at the fill station.
- Ergonomically located mechanical jack for raising and lowering the fill head.
- Versatile pneumatic indexing system that can handle almost any rigid container.
- Rigid base frame to support fill head and the conveyor.

Optional Features:

- Container vibration to help with settling product quickly and easily into the container.
- One inch short pneumatic lift for engaging the fill nozzle for a clean fill.
- Eight inch full bottom-up fill for product compaction and / or dust control.



Model NAF-1000-SHA

Everything you want from an Auger Filler is here with the Nalbach Engineering line of Auger Fillers.

Dual Head Automatic

Utilizing two stations, our dual head automatic system can handle a variety of unique filling applications. Two fill heads allow for higher speed while maintaining the simplicity of an inline conveying system. The Dual Head Automatic offers the flexibility for filling more difficult products by using technologies such as bulk and dribble or placing two different products into the same container. An optional weigh scale can be added on the second head to take advantage of the speed of a volumetric and have the accuracies of a gravimetric filler.



Model NAF-1000-DHA

Standard Features:

- 10' conveyor with dust trough at each fill station.
- Ergonomically located mechanical jack for raising and lowering the fill heads.
- Versatile pneumatic indexing system that can handle almost any rigid container.
- Rigid base frame to support fill head and the conveyor.

Optional Features:

- Container vibration to help with settling product quickly and easily into the container.
- One inch short pneumatic lift for engaging the fill nozzle for a clean fill.
- Eight inch full bottom-up fill for product compaction and / or dust control.

Indexing Motion Rotary Auger Filler

Rotary Indexing Auger Filler for moderate speed, high accuracy and low maintenance filling of powders, granulars, and flakes. The *i* - Series has been specifically designed to provide high fill accuracy and a minimum of maintenance for moderate speed applications up to 100 containers per minute. The *i* - Series features a gear base with servo drive motor, a direct infeed indexing starwheel turret, Nalbach's servo driven auger fillers with touchscreen control, Nalbach's advanced seal module and Nalbach's product settling systems.



Model *i*-Series

Continuous Motion Rotary Auger Filler

Continuous motion Rotary Auger Filler for accurate, high speed filling of powders, granulars, and flakes. Gear driven base virtually eliminates backlash and significantly reduces maintenance associated with chain driven systems. Advanced seal module provides faster fills, higher throughput, cleaner operation, improved fill accuracy and improved product settling. Synchronized fill-head / auger height adjustment provides a fast, easy and automated method to make changeovers from one container size to another insuring perfect set-ups with no alignment or guesswork. Speed profiling synchronizes the speed of the rotary base with the servo driven auger filler(s) to insure and maintain fill accuracies during start-up, shut-down and at any speed the system is set to run.



Model NRAF

Accessories

Nalbach Engineering provides a range of accessories to meet the needs of most applications. Cut-off systems prevent product build-up on tooling. Dust shrouds work in conjunction with a vacuum system to remove dust from the filling area. Dividing heads provide a way to fill two or more containers from one filler at the same time. Flapper shut-off systems insure highly flowable products are controlled easily and cleanly.



Cut-off System



Flapper Shut-off



Dust Shroud



Dividing head



3A Dairy



Free Flow Tooling



Large Capacity Hopper

About Nalbach Engineering Company

Founded in 1945, our Company has earned its dominant reputation for quality and performance in the design and manufacture of a complete line of powder filling equipment and plastic bottle unscramblers. In addition, we offer aerosol fillers, turnkey packaging lines, and system integration services. A member of PMMI since 1958, Nalbach Engineering has developed equipment for a widely diverse client roster of Blue Chip companies and has installed systems in 45 countries around the globe.





Product Infeed

Nalbach offers several product feed systems to handle the conveying of your product into the filler.

Flexible Screw Feeders

Nalbach works with many of the main brands in flexible screw conveyor providing our customers the ultimate in flexibility for conveying their product to our fill hopper. Tote unloader, bag dump, drum dumpers and dust collectors just to name a few of the many options. Nalbach can provide complete integration to assure a smooth running filling system.



Incline Flexible Screw System



Overhead Bulk Bin System

Overhead Bulk Bins

A variety of stainless steel overhead bulk bins are available for either flood feeding free flowing product directly into our filler hopper or to our Horizontal Auger Feeder. The surge bins can be configured in a variety of size capacities, to include covers and / or optional vibration to aid in product transfer. We can also supply them fully integrated with our Horizontal Auger Feeder.

Horizontal Auger Feeder

Provides consistent infeed control of most dry products. When combined with our level control, the head pressure is evenly maintained allowing for maximum fill accuracy from a volumetric filler. Sized and integrated with our filler for ease of connection to customer's overhead product surge hopper.



Horizontal Screw System

Container Handling

Nalbach Engineering can provide a complete range of container handling systems for most applications.

Model ICS

The ICS conveying system provides indexing hardware and software to permit reliable positioning of rigid containers under the fill station for automatic operation. It includes table top chain conveyor, product settling system and centralized controls. The control package has the ability to send and receive signals to automate / initiate other line components.



Model ICS



Rotary Table

Rotary Table

The Rotary Table facilitates the manual feeding of containers onto a production conveyor. The containers are easily placed on the stationary tray and are then manually pushed onto a rotating disc. The rotating disc moves the containers against fixed steel guides that directs them to the discharge outlet.

NECOSORT Plastic Bottle Unscrambler

The NECOSORT plastic bottle unscrambler sorts a wide range of rigid container shapes including rounds, ovals, squares and rectangles providing an automated system for feeding containers onto a production conveyor.



Model NECOSORT Unscrambler

Specifications

Electric and Controls

Display:

User-friendly touchscreen

Electrical:

System voltage and frequency configured to meet customer specifications

Electrical Controls:

PLC - Digital Solid State

Enclosure:

NEMA 12 or Optional NEMA 4

Software Features:

- Adjustable Machine Parameters
- Adjustable Agitator Speed
- Adjustable Auger Drive Speed
- Adjustable Acceleration and Deceleration
- Auger Jog
- Hopper Empty
- Recycle Timers
- Trial Fill for Product Setup

Filling Head

Auger Drive:

Brushless Servo Motor, Direct Drive
Rated for 3 HP (2.2 KW)

Auger Speed:

50 to 1,400 RPM

Agitator Motor:

Variable Speed Motor

Construction:

Stainless Steel and other FDA approved Product Contact Parts

Speed and Accuracy

Filling Speed:

Up to 600+ Fills Per Minute

Filling Accuracy:

Up to $\pm 0.25\%$ (.0025)

Optional Accessories

Level Control:

Signals Infeed and Controls Product Level

Conveyors:

Complete range of infeed and discharge conveyors available

Vibration:

Air, Motor, or Magnetic bottom, side or step product settling systems

Infeed:

Product Infeed Machinery, Auger and Vibration Conveyors

Checkweighers:

Checkweighers available for use with Active Weight Control System

PLC:

Various Commercial PLC Controllers are available

Specifications subject to change without notice.

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MEMBER



Auger Family-A